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by

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**Kindergarten Curriculum Enactment in a High-Stakes Public School  
Context: An Actor Network Theory Investigation of the DAP vs.  
Standards Dilemma**

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**by**

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## **Dedication**

I dedicate this dissertation to my wife, Lisa Katherine Mowry, who stood by me with support and love throughout this long journey and process; my father, Dr. James Mowry, whose integrity, wisdom and scholarship I long to emulate; my three brothers, Jimmy, Brent, and Ethan and their wives and children (nephews and nieces); my sister-in-law, Cecilia Jones; my cats, Wylie and Jack and those who have since passed (Pete and Melvin); and, finally, to my dear mother (now deceased), Clara Mowry, who started her career as a first-grade teacher in Waco, Texas. I love you all.

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**Kindergarten Curriculum Enactment in a High Stakes Public School**  
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The University of Texas at Austin, 2017

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Numerous studies have documented a transformation in many of the nation's kindergarten classrooms where the traditional focus on addressing the needs of the whole child is being undermined by efforts to instantiate a standardized pedagogy predicated on readying young children for the rising academic standards of elementary school. This dissertation contributes to this body of research through its use of actor network theory (ANT) to understand how such a phenomenon might unfold at the district and individual campus level. First, I use ANT as a lens to trace the development of a large urban school district's standardized instructional planning guide (the IPFs), which was designed to align teachers' instruction to the district's K-12 curriculum. Secondly, I continued to employ ANT to locate the effects of this document on the instructional decision making of kindergarten teachers at two of the district's campuses. I selected ANT as a theoretical framework because it allowed me to follow the effects of the IPFs as they passed through a series of negotiations among various actors (both human and nonhuman) trying to insert their interests and representative identities to procure the document's conceptualization, development, and eventual implementation.

Chapter 1 introduces my research question and important terms, such as Actor Network Theory (ANT). Chapter 2 is a three-part review of the literature that first explores how ANT has been used in educational research to understand the dilemma surrounding the development of standards, prescribed curriculums, and curriculum enactment in kindergarten. Then, the chapter synthesizes relevant literature in the areas of learning and curriculum theory, which can be inscribed into teaching artifacts. The chapter closes with a review of how other empirical studies have approached the standards versus DAP dilemma. Chapter 3 details the methodology that guided this investigation including data collection and analysis. Chapter 4 and 5 presents the findings from this research. Chapter 4 looks at how the IPFs were conceptualized and developed, and Chapter 5 looks at how the document was enacted. Chapter 6 addresses the significance of these findings and concludes with a discussion of implication and suggestions for future research.

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## **Chapter 1: Introduction**

### **THE RESEARCHER**

Kindergarten has been a prominent feature of my identity at various times throughout my life. It has significantly impacted how I experienced and interpreted school and learning as a student, teacher, and curriculum writer. Now acting as a researcher, my positionality in this role beckons me to reflect on how my conceptualization of kindergarten has shifted during each one of these encounters. MacBeth (2001) suggests that when a qualitative researcher engages in this type of self-analysis about his/ her positionality in the world, she/he is practicing reflexivity. To accomplish this, I attempt to situate my epistemological standing on the topic that is the focus of this dissertation, which problematizes kindergarten's continued transformation from its traditional existence as a 'garden' for fostering children's individual development and approaches to learning to a standardized institution focused on preparing children for first grade and beyond.

I begin by describing my first experience in kindergarten. When I was five years-old, my parents enrolled me in a half day kindergarten program in the public schools. Although my recollections of what this experience was like have been blurred by age and the passage of time (nearly 43 years-ago), I do remember that the school day was broken down into time segments designated by an activity, such as snacks, recess, circle time and centers. Also, children in the classroom were assigned to a group, each of which was labeled with the name of an animal. These groups would rotate through centers, which included games (where I have a fond memory of playing Candyland), blocks, easel painting, play dough, and teacher time. During group time with my teacher, I would

complete colorful workbook pages on which I was instructed to circle sight words and match pictures to beginning letter sounds. This was my first memory of reading.

Twelve years later while enrolled in college, I was no longer a student *in* kindergarten but was poised to be a student *of* kindergarten. Since I wanted to be a teacher of young children, I decided to major in Early Childhood Education (ECE). My required course work in this area of study introduced me to learning theorists, such as Jean Piaget and Erik Erickson, who framed development as a linear progression through which children's cognitive, linguistic, social emotional, and physical growth would evolve in distinctly incremental stages of higher attainment (Frost, Wortham, Reifel, 2012). My professor and program advisor, who was a former kindergarten teacher, preached the importance of following developmentally appropriate practices (DAP) (Copple & Bredekamp, 1987). Consequently, throughout my methodology classes, this professor advocated for and introduced us to pedagogy that would respect the child as an individual learner. She discouraged the use of worksheets and required that we develop integrated units of study with a thematic focus. After completing the required course work, I began the final semester of student teaching, which would entail putting this theory into practice.

Six weeks of my preservice teaching experience were spent in a kindergarten classroom. Like the kindergarten program I attended, this classroom was also half day. Although the schedule was also similar--a designated group time for story, 'show and tell' on Fridays, snacks, recess, and centers--the learning was more structured and objective focused. The activities at each center had an end-goal, which focused on accomplishing a task that would allow the child to demonstrate her skill attainment. At the beginning of each unit, my cooperating teacher would model the expectations for

completing each center activity before the children could rotate through them. Overall, this classroom felt very controlled, yet fluid, safe and happy for children.

A year later, my experiences as a certified classroom teacher contrasted considerably from my short apprenticeship as a student teacher. I was hired right out of college as a bilingual preschool teacher for which there was little curricular guidance. I did not have access to a teacher guide other than a district developed notebook that contained a scope and sequence of thematic units and integrated learning activities. The districts' early childhood office recommended that centers focus on play-based learning rather than highly didactic and structured academic content. Moreover, the district's policy was to allow the children to freely select which activity area/ center they wanted to explore. The children did not rotate through centers as there was an emphasis on making accommodations for the individual interests of the child. I found this management style to be more effective and appealing than what I had experienced in student teaching since it allowed me to spend less time redirecting every movement of the children and more moments connecting with them.

Consequently, I adopted this less structured approach to managing the curriculum when I moved on to teaching kindergarten. Although by this time the district did have a prescribed curriculum and a basal reading program, I rarely followed it and continued to maintain play based centers. I still addressed the state standards and taught beginning reading skills, but I did so through authentic literature and thematic based instruction. My campus administrator and the district early childhood department officials trusted my professional judgement and thereby supported my instructional decision making.

When stepping out of my role as a classroom teacher and into the position of a district level instructional specialist, I subsequently continued to support the use of play based centers as a venue for supporting children's academic and social emotional

development. However, as I supported teachers in the classroom, I realized that not everyone maintained the same ideals that I did with respect to children's autonomy and engagement in learning. Some teachers incorporated centers and play but lacked intentionality on how to connect their students' explorations and interests to learning outcomes. On the other extreme were those teachers who prescribed a daily dosage of worksheets and maintained a highly-regimented schedule with no time allocated for children to play or visit free choice centers. While there were some exceptions to this trend, it was also becoming more difficult to support teachers who wanted to incorporate an appropriate balance of teacher-directed and child-initiated learning into their instructional day due to the district's increasing surveillance and regulation of its prescribed curriculum. In fact, the year I stepped into my new position was when the district began to develop a common Pre-K-12<sup>th</sup> grade curriculum planning guide, which was intended to align all grade levels to the state's mandated academic performance standards as measured by its single end-of-year exam.

My involvement in the development of this planning guide led me to question its effectiveness and efficaciousness on classroom instruction. On one hand, I saw the documents' potential to help teachers who were unfamiliar with best practices (e.g., DAP) to plan instruction accordingly. On the other hand, these documents seemed to inhibit the teachers' autonomy and professional decision making. Ultimately, I developed a more critical stance on these documents when I became a graduate student—a role I assumed four years into my position as an early childhood curriculum specialist—and now as a novice researcher.

The discourses I encountered throughout graduate school led me to ultimately question some of the assumptions I had acquired about teaching and learning during my teaching career. Scholars such as Dewey (1944), Freire (1970), and Ladson-Billings

(1995)—all of whom influenced my thinking in graduate school—have challenged me to re-conceptualize knowledge as a socially and politically situated construct that has historically privileged certain ways of knowing while marginalizing others. As such, I began to frame teaching no longer as a process of transmission and assimilation, but rather a forum for social justice, critique, and transformation as well as a space for building meaningful relationships with students by acknowledging and incorporating their funds of knowledge (Moll, Amanti, Neff & Gonzalez, 1992). Now, as I began to write this dissertation, my newly evolved positionality on curriculum and instruction has caused me to question some of the policies at present impacting kindergarten and the practices they instantiate in the classroom.

## **THE CONTEXT**

The many versions of kindergarten that I have experienced in my lifetime, a few examples of which I described in the previous section, speak to the diversity of its enactment and its varied manifestations throughout its existence. Historically, kindergarten was conceived as a nurturing of children's innate dispositions and sensibilities, which focused on play, exploration, and the cultivation of creativity, curiosity, and imagination through art, music, and manipulation with concrete objects (Frost et al., 2012). While this focus remained relatively stable throughout the nineteenth and twentieth centuries, kindergarten nevertheless became more concerned with preparing children for school as it transitioned from private school settings and became increasingly integrated within the public elementary school system, most notably after World War II to promote the assimilation of immigrant families (Cuban, 1992).

As kindergarten entered the twenty first century, however, it has experienced a more pronounced transformation wherein its traditional focus on the individual child has

shifted to readying five and six-year-olds for the more rigorous academic expectations they will encounter in first grade and beyond (Graue, 2006). This revamping to the kindergarten program and its curriculum is most notably documented in the amount of time teachers now report to allocate for literacy and numeracy skill acquisition, which they conduct through teacher directed instruction, thus leaving less room in their daily schedule for child-initiated learning via play and exploration (Bassok, Latham, & Roram, 2016). While these changes appear to have positive effects on kindergarteners' literacy acquisition, outcomes are inclusive (mostly negative) for the children's math and problem-solving capabilities (Ansari & Purtell, 2017). However, little is known on how the structural transformation of kindergarten and the usage of a standardized curriculum has impacted the instructional decision making and responsiveness of kindergarten teachers working in high-stakes contexts in meeting children's individual, developmental, and socio-cultural needs.

### **THE DILEMMA**

To address these changes that appear to be occurring in the nation's kindergarten classrooms, it is necessary to situate this phenomenon within the current educational landscape. In sum, high-stakes sanctions/ policies (e.g., NCLB) have encouraged many school districts to implement scripted, teacher-proof curriculum that threaten to encroach upon teacher autonomy (Ede, 2006; Au, 2011). Consequently, some scholars contend that educators now teach and enact curriculum under the opacity of performativity (Ball, 2003) and oppressive administrative surveillance aimed at increasing students' academic achievement (Au, 2011; De Lissovoy, 2013). Apple (2004) ascribes these behaviors to what he terms an "*intensification*" of the teaching profession. Although the pressure of high stakes accountability is most intensely experienced in Grades 3-12 in the form of

test anxiety (Hoffman, Assaf, & Paris, 2001), coercion (Noddings, 2001), and ‘educational triage’ (Booher-Jennings, 2005); this ideology/policy also appears to be taking its toll on kindergarten as standardized and scripted curriculum are now becoming an all too common feature in its classrooms as well (Hatch, 2005; Stipek, 2006; Brown, 2007).

The advancement of standards and high stakes accountability into kindergarten poses a threat to the program’s historical linkage and enactment of DAP (Copple & Bredekamp, 2009). At an ideological level, DAP distinguishes young learners from their older school age counterparts as benefiting from instruction that considers the individual, cultural, and developmental variation characteristic of children from birth to age 8. However, despite its historical roots grounded in child development, kindergarten is becoming increasingly normative and academic focused as it merges into the trajectory of the elementary school 1<sup>st</sup>-5<sup>th</sup> grade system (Hatch, 2005; Graue, 2006). Although there is empirical evidence that some early childhood teachers do rigidly adhere to scripted curriculum at the expense of good instruction (e.g., Parks & Rhoades, 2012), other studies reveal that such behavior is not necessarily the norm as some more experienced teachers find creative ways to sidestep components of a prescribed curriculum that do not resonate with their beliefs, expertise, and individual student needs (Goldstein, 2008; Brown & Lee, 2013).

## **THE STUDY**

This study, however, attempts to frame the dilemma I described in the previous section as a juxtaposition of competing interests when kindergarten teachers and the ideological principals underlying DAP are forced to coexist inside a public-school agenda that focuses on attaining academic outcomes to meet high-stakes accountability markers.

To do this, I use Actor Network Theory (ANT) as an analytical lens to understand what happens when diametrically opposed discourses such as DAP in kindergarten and high-stakes accountability in the public school sector, both of which are situated within webs and symmetrical couplings of human and non-human actors (e.g., teachers, administrators, policy agendas, standards, lesson plans, etc.), join together, attach to, or break apart from other alliances to procure a common goal that accommodates the unique interests represented in each network (Callon & Latour, 1981). More specifically, ANT seeks to understand “how some kinds of interactions more or less succeed in stabilizing and reproducing themselves; how it is that they overcome resistance and become ‘macrosocial’; and how they seem to generate the effects such as power, fame, size, scope, or organization” (Law, 1992, p. 380). Hence, social structures (e.g., discourses, ideologies, etc.) that appear to be controlling or bearing down on local and micro contingencies (e.g., the enactment or development of a curriculum) are actually being held together through tenuous associations and assemblages (e.g., policies, grade level departments, etc.) comprised of and created by actors and devices (e.g., teachers, lesson plans, standards, etc.) that have successfully linked the former together through a series of negotiations and compromises.

## **THE DISSERTATION**

In this dissertation, I attempt to present data that will provide a nuanced understanding of how kindergarten teachers and their campus administrators located at two campuses within the Balcones School District (BSD)--a pseudonym I use for the large urban school district in the state of Texas where I conducted the research--are attempting to enact a prescribed curriculum document, which I call the Instructional Planning Frameworks (IPFs). The forthcoming analysis follows different actor networks

situated within BSD through this enactment process. One of those networks is the Office of Curriculum and Instruction, which developed the IPF documents and disseminated them to individual campuses in BSD. The second network identified in this analysis is the Office of School Affairs, which was responsible for monitoring the curriculum's implementation at these campus sites. The additional networks, the two campuses I selected for this study, were comprised of kindergarten teachers and campus specialists/administrators who were expected to use the IPFs for instructional planning and achieving alignment to the state's official standards, which are knowledge and skill statements that specify what students are to learn at each grade level. I also try to follow the material minutiae (objects and devices) that circulate within and among these networks. This materiality has the potential to be ascribed intentionality and agency from other actors with the purpose of establishing linkages between networks to forge a unified, yet precarious assemblage of alliances, which at any time can sustain or fall apart (Latour, 2005). Thus, the questions that guide my inquiry are:

1. How are each of the individual actor networks who are bound together within a tenuous assemblage focused on the implementation of the IPFs conceptualizing this document in relation to their respective beliefs, responsibilities, instructional goals, and practices?
2. In what way does the kindergarten teachers' conceptualization of the IPFs impact their practices and how they frame their role as instructors who are to meet the socio-cultural, individual student needs as expressed in DAP while under the surveillance of their campus administrator or other district level officials and curriculum specialists?

Chapter 2 presents a three-part review of the literature that explores the dilemma I defined in the questions outlined above. First, I discuss how ANT has been used within social research, and more importantly in education, to unpack and trace the formation of networks, such as the implementation of standards, and the effects such alliances produce (e.g., scripted curriculum). Next, I explore the literature that looks at the social historical

and political development of U.S. curriculum and its positioning and enactment in society and the public schools. This review then shifts from theoretical to empirical as I discuss how the work of other scholars exploring controversies related to instructional decision making in the context of the current accountability reforms and high stakes pushdown into ECE can inform the thesis central to my line of inquiry. The review of the literature that follows is organized around four mediators, which I have identified as influencing teacher's enactment of any prescribed or standardized curriculum. Originating from the literature, I discuss these mediators through a theoretical lens that frames pedagogy as a socially situated and participatory act. The mediators include 1) teachers' professional knowledge, 2) the curriculum artifacts that anchor instructional planning, 3) school relationships, and 4) educational policies, particularly the National Association of Young Children's position statement on developmentally appropriate practices (DAP).

Chapter 3 touches more in depth on the epistemological foundations upon which this inquiry operates through the methodological constructs defined within ANT. Also within this chapter, I will elaborate on the selection of participants and their relationship/contribution to the study. Then, I provide a more in depth explanation of the procedures I followed for data collection and the methodology and process I used to analyze the data, which occurred through an interpretivist theoretical lens aligned to a qualitative mode of inquiry and ethics.

In chapters 4 and 5, I present the findings from the analysis. Chapter 4 focuses on the historical and contested development of the IPFs through their conceptualization phase to their eventual deployment. I trace this developmental trajectory using ANT's rendering of a fluid process termed translation, which unfolds through four stages--problematization, interessement, enrollment, and mobilization--whereby actor networks are joined to other networks (Callon, 1986). Additionally, I use document analysis to

unpack the messaging and intentionality inscribed in the documents supported by analysis of transcript interviews from participants who were involved in the development and subsequent enactment of the IPF curriculum and monitoring its implementation at the campuses.

Chapter 5 continues to follow the IPFs as they are utilized by the teams of kindergarten teachers and their administrators at the two campuses. Here, I present data collected from field notes documenting weekly grade level team meetings where the teachers were expected to follow BSD protocols for instructional planning, which included the IPFs. I also analyze transcribed interview data I gathered from the teachers and administrators to understand how they were conceptualizing the IPFs and the documents' positioning of developmentally appropriate practices (DAP) and culturally relevant teaching (CRT) (Ladson-Billings, 1995)--two discourses which are antithetical to standardized enactments of curriculum. The chapter concludes with an analysis of the effects of the IPFs' implementation on the teachers' instructional practices in relation to their students' developmental, individual, and socio-cultural needs.

Chapter 6 summarizes the implications that these findings bear for externally imposed curricular projects, which attempt to control kindergarten teachers' instructional decision-making through standardized devices, such as the IPFs and other prescribed documents. I then go back into the literature to ponder opportunities where the findings from this study can support and possibly inform new ways to explore and research this dilemma. The goal of the chapter is to reimagine a space for DAP and CRT to gain deeper traction and influence within the perennial transformation of kindergarten.

## Chapter 2: Literature Review

### INTRODUCTION

Cuban (1993) conceptualizes curriculum as a tiered, multidimensional entity/process that is manifest at different stages. At one level, there is the *official* curriculum, which is granted an authoritative status that implicates its enactment. One level below is the *taught* curriculum, referring to how it is interpreted and disseminated through the lens of the teacher or those responsible for its delivery. Next, the *learned* curriculum refers to which components of the material students have appropriated into their existing knowledge repertoire. Finally, the *tested* curriculum considers those aspects of what was taught that warrant assessment to ascertain the effectiveness of instruction. While this framework is useful for theorizing about curriculum's varied purposes and possible manifestations, it can also constrain the researcher's understanding of the complexity and fluidity of the enactment process and, thus, essentialize it as a linear progression that originates at one point and uptakes at another.

ANT, on the other hand, works around these distinct boundaries--the official, taught, learned, and tested--by exploring what happens as curriculum emerges through the formation of linkages between humans and the material objects they appropriate, operationalize or become attached to in the process of enactment (Fenwick & Edwards, 2010). Rather than explain a curriculum's performance or realization, ANT intends to trace how it comes to be as "practices are translated, changed in the process of changing" (p. 58). In other words, curriculum enactment is never predictable as it is in a constant state of appropriation/ misappropriation. Actors are actively surmising the interests and needs of other actors who are poised to be candidates for network consolidation (Munro, 2009). In this process, there are possibilities for agreement, treason, or partial

compliance--all of which are outcomes that have the potential to shape the destiny of a network's fulfillment (Callon, 1986).

ANT therefore has the capacity to disrupt or challenge the power attributed to ideological constructs (e.g., DAP) or large scale structural conditions (e.g., high-stakes accountability) that appear to order the subjectivities of others by treating them as contingencies on the brink of stabilization or extinction when networks, which are held together by linkages between human and nonhuman actors, merge or break apart (Fenwick & Edwards, 2010). When framed this way through ANT sensibilities and ontologies, the presence of DAP existing alongside the enactment of a scripted curriculum in a kindergarten teacher's instructional practices is not certain but nevertheless a possibility. This study attempts to unpack the potential for such possibilities to occur when kindergarten teachers situated at two campuses designated as academically low performing and monitored accordingly by administrators are presented with a prescribed curriculum developed by their large urban school district's central office officials whose intent is to align instructional planning to the state's standards of accountability. To understand how this process might unfold, I ask the following questions:

1. How are each of the individual actor networks who are bound together within a tenuous assemblage focused on the implementation of the IPFs conceptualizing this document in relation to their respective beliefs, responsibilities, instructional goals, and practices?
2. In what way does the kindergarten teachers' conceptualization of the IPFs impact their practices and how they frame their role as instructors who are to meet the socio-cultural, individual student needs as expressed in DAP while under the surveillance of their campus administrator or other district level officials and curriculum specialists?

Chapter 2 of this dissertation unpacks the complexity and precarious nature of the dilemma described in the above through a three-part literature review of the relevant

scholarship on what has been accomplished in educational research with respect to curriculum, standards, and ECE. Part two situates how curriculum enactment has evolved historically and developmentally in relation to research on learning, knowledge, curriculum, and policy—four dimensions that inform and feed into the context of kindergarten curriculum enactment. Part 3 reviews empirical studies that have attempted to unpack how the large constituency of actors involved in a curriculum’s enactment (e.g., teachers, administrators, school officials, etc.) have approached the dilemma arising from high-stakes accountability’s encroachment upon the dialogic and democratic principles that underlie the tenets of best practices, including DAP and CRT, within the field of ECE.

## **REVIEW OF THE LITERATURE**

### **PART 1: Actor Network Theory: A Theoretical and Methodological Framework for Contextualizing Kindergarten Curriculum Enactment in a High-Stakes Context**

In this section, I outline specific ways in which ANT has been used to probe the current high-stakes discourses and polemics surrounding curriculum enactment. Despite its popularity in technological studies and growing uptake in sociology, the use of ANT informed methodologies remains relatively sparse in educational research (Fenwick & Edwards, 2011). Those studies that have employed ANT to investigate issues in education have focused on the development of standards, curriculum, and policies and their effects on classroom practices, enactment, and teachers’, students’, and administrators’ subjectivities (Edwards & Fenwick, 2010). According to Latour (2005) such “controversies provide the analyst with an essential resource to render the social connections traceable” (p. 30). Thus, what becomes visible as a researcher traces relationships and discourses (including the ideologies they embody) to their respective

actors—both human and non-human—are tenuous networks that can at one moment appear to operate on a grand scale and, at another point in time, erode or collapse into oblivion (Callon & Latour, 1981; Law, 1992).

Could such a fate await the high stakes testing regime and accountability measures instantiated during No Child Left Behind (NCLB) and now the repurposing of this policy under the Elementary and Secondary Education Act (ESEA)? According to some scholars (e.g., Koyama 2011; Koyama & Varrenne, 2012) who have used ANT to investigate the deployment of the federally mandated implementation of supplementary educational resources in the New York City Public Schools, an answer to this inquiry cannot be crafted within a simple ‘yes’ or ‘no’ response. Apparently, the influence of NCLB is indeed still making an impact, but not in such an inhibitory way that prevents these local enactors—the district officials and affected school administrators in particular—to resist or push back on its regulatory power and therein fulfill their own interests and address their campus’ needs and concerns.

At best, the mechanisms through which policies such as NCLB and ESEA order and govern educational reform appear to play out somewhat unevenly and unpredictably. Although guidelines, mandates, and sanctions for the deployment of these policies originate at the federal level, states and local districts maintain considerable flexibility in orchestrating how these regulations will be implemented (McDermott, 2007; Shaul & Ganson 2013). However, as Sunderman (2010) clarifies, “because these mostly top-down reforms fail to specify the mechanism by which they will transform education, their impact varies widely depending on local conditions and implementation, allowing local districts to retain considerable power within and increasingly bureaucratic system” (p. 226). At the heart of this dilemma are funding mechanisms that privatize the public sector by legitimizing for-profit companies’ and agencies’ participation in competing for

federally approved curricular programs (some of which are scripted) and supplementary educational resources (SER) designed to improve student performance (Sunderman, 2007; Koyama, 2010). Hence, many conflicting and often competing conceptualizations about teaching, learning, and curriculum have infiltrated the educational landscape at the federal, state, and local levels where these educational policies and their curricular ideologies live and play out (Koyama 2011; Koyama & Varrenne, 2012).

Further complicating the enactment and dissemination of federally sponsored education reforms is their encapsulation into neoliberal agendas that seek to regulate public schools through accountability, competition, and market-based strategies, which rely on quantitative measures to evaluate a program's/ curriculum's effectiveness and viability (De Lissoy, 2013; Moss, 2014). Using ANT to investigate how these neoliberal policy structures play out within a single school district in the state of New York, Koyama and Kania (2016) found that local actors, which included school officials, teachers, and parents, found spaces within the accountability mechanisms to enact their own agendas. Apparently, to show compliance to the federally mandated accountability metrics, these actors operated under the auspices of providing transparency of their school district's performance by accessing material devices--e.g., blogs, websites, etc.--to highlight and secure their funding needs while at the same time disguising shortfalls, such as an existing achievement gap occurring along racial lines. Hence, accountability regimes designed to reform educational problems can in turn perpetuate them. When used in this way to interrogate the innerworkings of seemingly impenetrable structures/ systems, ANT can thereby serve as a powerful methodology for unmasking these types of anomalies and inconsistencies.

ANT has also been used in smaller scale studies to understand the complicated and multiple enactments of various curriculum projects (Fenwick & Edwards, 2010).

Edwards (2011), for example, discusses his own research probing the implementation of a prescribed curriculum teaching occupational skills at both the high school and college level in Scotland. His findings showed that the instructors at both levels enacted the standardized objectives designed for the course by the Scottish Qualifications Authority in varied ways by adapting the curriculum to fulfill the needs of the student constituency and the requirements of the respective campus. Edwards therefore argues “that any notion of implementation or diffusion in the enactment of the curriculum is misplaced, given the range and diversity of the interests, identities and artefacts, as tokens are translated and translate, betrayed and betray” (p. 52). This ANT perspective on such polemics might suggest that multiple enactments of a prescribed curriculum are to be expected rather than explained or rectified through external interventions aimed at improving its local alignment and implementation.

Of interest to my study is how a heterogeneous makeup of human/nonhuman actors situated at the macro level (e.g., policy, curriculum developers, standards, etc.) and those positioned at the micro level (e.g., administrators, teachers, lesson plans etc.) forge linkages during the enactment process of a standardized curriculum pushed into kindergarten that is antithetical to best practices in ECE but, nevertheless, aims to ameliorate a district’s achievement gap on the state’s mandated high-stakes exam. It is my contention that this contextual dilemma can serve as a rich data source for a research agenda that uses ANT sensibilities to make sense of these polemics. However, studies that have used ANT to explore these controversies impacting ECE are minimal and limited in their scope.

For example, Heydon (2013) searched for possibilities of acknowledging children’s funds of knowledge within the enactment of a prescribed literacy-focused kindergarten curriculum that gives the individual teacher some autonomy to implement

its standards with resources of her own choosing. While the study, which was conducted in Ontario, did not follow kindergarten teachers situated in a high stakes public school context, it did consider how the enactment process unfolded under the regulatory contingencies of an accountability regime. Despite the teachers having to adhere to the Ministry of Education's standards, their instructional decision-making, which was rooted in child-centered practices, and the open-ended materials available during the free choice literacy centers afforded the children spaces to inject their own inquiries and pursue investigations that were of interest to them. Hence, due to the ANT methodology she employed, Heydon could locate these emerging networks as they connected in time within the context of a classroom's enactment of a prescribed curriculum.

Finally, another way ANT can be useful in educational research is its ability to detect the effects of discourses that emerge and attach to material objects during network formation and in turn subjectify actors (teachers and young children) as a curricular agenda is enacted. To understand how this might happen, Watson, Millei, and Petersen (2015) studied the way devices (a wrist band, lock, and scooter) were used in an inclusion ECE program to manage and control a child who required containment to prevent him from running away. However, while such devices were intended to protect the child by keeping him contained inside the classroom, they nevertheless reified his status and identity as a safety hazard in relation to himself, the teachers who supervised him, and the other children in the classroom. Based on Watson et al.'s findings, I contend a similar ANT sensibility could be used in my study to probe the effects of scripted curriculum's implementation on the practices of kindergarten teachers situated at campuses that are heavily monitored by district officials seeking to improve accountability ratings as measured through academic performance. To accomplish this, however, I look at other

discourses and ideologies that could link to or become part of the material and contextual reality of these classrooms as this enactment process unfolds.

## **PART 2: Learning, Knowledge, Curriculum, and Policy: A historical development and trajectory of discordant and conflicting debates about how and what to teach**

Curriculum enactment occurs in a socially situated space whereby teachers interface with other individuals (students, parents, administrators, etc.) as they perform their roles using artifacts (texts, assessments, etc.) that have been inscribed with the emergent and historical evolution of discourses and educational scholarship on theories about learning and teaching (Schön, 1983; Zeichner & Liston, 1998). Hence, by being connected to those ideas promulgated by educational theorists and scholars within the virtual, socio-historical space of curriculum production and dissemination, classroom teachers are granted the agency to populate the textual resources they use with their own understandings/ interpretations of what good teaching is and what knowledge/ content is most valuable to impart to their students (Muphy, Delli, & Edwards, 2004; Pájaros, 1992). When framed within the purview of ANT, I argue that learning theories and curriculum debates contesting the dissemination of an official cannon of knowledge can be inscribed into artifacts—or metaphorically referring to what Latour (2005) terms *black boxes*—such as textbooks and standards. Although he was referring to technological devices in the following passage, Archer’s (1992) description of how nonhuman entities can carry human intentionality speaks to this argument: “The technical realization of the innovator’s beliefs about the relationship between an object and its surrounding actors is thus an attempt to predetermine the settings that users are asked to imagine” (p. 208). Thus, curriculum theorists can in effect accomplish their intentions through the enactment of such inscribed devices (e.g., textbooks, lesson plans, etc.), which are utilized and

interpreted through the lenses of other actors (e.g., teachers, specialists or campus administrators.)

The goal of this second section of the literature review is to establish an overview of the historical development of theories that have evolved in psychology, curriculum studies, and the dissemination of standards through educational policy. My contention is that each of these areas of theoretical and empirical development in education can influence how the kindergarten teachers and teams of administrators and specialists I interview in this study conceptualize and frame their understanding of curriculum and how to teach young children. Although I present and categorize these theories in relation to the disciplines and research base where they originate and develop, I also try to show how they intersect and influence each other.

### ***The Historical Domain of Educational Psychology***

Schallert and Martin (2003) outline two distinct theoretical threads that have evolved within the field of educational psychology and research over the past 100 years up to the millennium. During the late 1960's and early 70's, a behaviorist agenda dominated the empirical and theoretical landscape at which time researchers and theorists framed the learner as possessing very little agency during the application of external stimuli directed at controlling his responses through modifications on his emotions and motivation. By the 1970's, however, an emphasis on cognitive theory emerged as a core of researchers began to consider how internal mechanisms, such as memory and attention, mediated learning. By the 1980's cognitivism began to incorporate a less mechanistic approach by accounting for how the learner took on a much more participatory role in his/her own learning as he/she constructed meaning through an interplay of experiences and background knowledge. Eventually, during the 1990's and

closer to the millennium, constructivism began to take into consideration sociocultural influences on learning. This shift to social constructivism was brought about by theorists (e.g., Wenger, 1991) who incorporated the views of Vygotsky as they sought to understand the mediating influences of culture, society, and apprenticeship on the internalization of scientific concepts.

While acknowledging that theories and research within educational psychology have shifted and changed over the past century, Schallert and Martin are careful to point out “how [these] ideas grow, transmute, live and die, and how what was once popular a decade or more ago is now viewed so differently” (p. 32). Tenets and constructs that have endured the elapse of time—namely the primacy of emotions and motivation (originating out of behaviorism) and the influence of internal processes like memory and attention (a focus of early cognitivism) — continue to make an impact on how researchers and practitioners understand learning, even as some (e.g., Pintrich, 2003) begin to consider the role of culture. More importantly, however, in relation to the focus of this study is evidence that suggests how behaviorism in its purest form, which ignores the active role of the learner as well as the impact of socio cultural factors, still influences the instructional decision-making of practitioners and their conceptualization of how children learn (Voss, Kleickmann, Kunter, & Hacheld, 2013).

## ***2). The Historical Evolution of Theories Related to Curriculum and Knowledge***

Although behaviorism was well entrenched in the scholarship of the early twentieth century, theories advancing what would be called progressive education were emerging concurrently during this period, albeit making their impact in only a small percentage of the nation’s classrooms (Cuban, 1996). Inspiring the student-centered approaches to curriculum that were emerging during this era was the thinking of John

Dewey (Baldacchino, 2014). A cornerstone of Dewey’s philosophy of learning is the “primacy of activity, experimentation, and an open-endedness that cannot be left to the child or the teacher, but which is realized from beyond the closed walls of schooling” (p. 81). Thus, while supporting student-centeredness, Dewey did not contend that children—that is if they were left to their own impulses and exploration—would intrinsically develop a capacity for participating in a diverse, dialogic democracy. Instead, Dewey emphasized the importance of cultivating and incorporating child interest and disposition toward inquiry within the confines of meaningful activity and experiences guided by goals as defined by the society and orchestrated through the reflective, purposeful direction of the teacher. In this way, rather than exclusively advocating for child-centeredness, Dewey’s theories on curriculum emphasized balance, continuity, and teacher responsibility (Dewey, 1944).

That said, although Dewey’s positionality on the philosophies expounded by his contemporaries during the early and mid-twentieth century were indeed progressive, they nevertheless failed to question and interrogate the legitimacy surrounding *what* and *whose* knowledge should be imparted in school (Young, 2008). Perhaps most representative of the pragmatism circulating the debates and development of curriculum before the advent of critical curriculum studies in the 1970s was the work of Franklin Bobbitt and Ralph Tyler (Flinders & Thorton, 2004). Both men were preoccupied with the establishment of a prescribed curriculum that was organized around specific subject matter goals as conceptualized and developed by content area and learning specialists. This scientific method of curriculum development—which attempts to predetermine what knowledge should be taught, how it should be organized before its dissemination, and then how it is subsequently measured once it is assimilated—significantly departs from Dewey’s progressive sensibilities. That is, Dewey believed the teacher should take

responsibility to design instruction that attended to both the child's interests and proclivities as well as a nuanced understanding of the structure and ontology of various content (e.g., mathematics, science, etc.) and knowledge domains.

Nevertheless, despite the contemporary availability of alternative perspectives that do champion the critical and reflective role of the individual teacher in the instructional decision-making process (e.g., Zeichner & Liston, 1996; Ballinger, 1999); Kleibard (2004) argues that the focus on standardization and prescribed curriculum objectives continues to exert its influence in the present era of high-stakes accountability. Specifically, what Kleibard contests in the current climate of standardization “are the precipitous efforts to convert highly tentative and limited research findings into immediate prescriptions”—a phenomenon which he goes on to contend is “a function of the large constituency of teachers and school administrators who want immediate and concrete answers to such global questions as What is a good teacher? and What is a good curriculum?” (p. 45). Still, even as the contemporary standards movement continues to promulgate the implementation of predetermined curriculum (as I briefly alluded to in the above), there are paradigms of curriculum design that account for the individual, social cultural, and maturational needs of the students with equal attention devoted to meeting content standards and performance outcomes (Bransford, Derry, Berliner, Hammerness, & Beckett, 2005; Copple & Bredekamp, 2009).

By the 1970's, as educational psychology was making its shift from behaviorism to cognitivism, curriculum studies would also experience a significant development within its theoretical scholarship. At that time, the focus on scientific structuring and design of curriculum that occupied much of the early and mid-twentieth century witnessed the emergence of a critical interrogation of the official knowledge being deployed in schools, focusing on whose way of knowing and understanding the world it

privileged and which groups it marginalized (Young, 2008). The acknowledgement of meritocracy, racial bias and hegemony implicit within the hidden curriculum (Apple, 2006) would usher in new ideas for conceptualizing teaching—e.g. Freire’s (1970) avocation for social justice and liberation through reflection, educational empowerment, and praxis (Freire, 1970)—and innovations for structuring curriculum—e.g., encouraging student choice in curricular decision-making (Flinders & Thorton, 2004). Nevertheless, although experiments such as open classrooms, learning centers, and project-based learning began to appear in some schools during the 1970’s and early 1980’s, their implementation was minimal and short lived (Cuban, 1996).

Michael Young (2008), one among those scholars (e.g., Apple) who questioned the authority of knowledge and the implication of schools in the perpetuation of unjust social structures, now argues that such criticism has done very little to effect change due to its failure to offer an alternative. While participating in the development of a set of national vocational goals for postgraduates in England during the 1990s, Young reports the difficulty he experienced in trying to “provide answers to how the integration of college-based and work-based knowledge should be approached without a theory of knowledge that distinguishes different types of knowledge and their different purposes and conditions for acquisition” (p. 7). Rather than debate the legitimacy of what counts as knowledge, Young contends that scholars in critical studies run the risk of perpetuating hegemony in curriculum deployment by not acknowledging the differentiation inherent within the variety of knowledge structures.

Specifically, he distinguishes between what he calls *knowledge of the powerful* and *powerful knowledge*. The former pertains to the unquestioned authority and dissemination of an official knowledge regime, whereas the latter “refers to what the knowledge can do or what intellectual power it gives to those who have access to it” (p.

14). Hence, although Young continues to agree with critical scholars that knowledge is indeed a socially constructed (and in that sense contested) entity, what he is suggesting here is that it can also serve as capital and empowerment for those who it has historically eluded and oppressed. This departure from *social constructivism*—what Young calls *social realism*—is also echoed by other scholars, such as Lisa Delpit (1998), who assert that while attending to cultural differences is critical to any aspect of teaching, it is also important to explicitly teach the knowledge and skills promulgated by the dominate culture to those whose ways of knowing are not recognized as legitimate.

So, what is the status of consensus in terms of the emergence of new theoretical frameworks and paradigms for learning and best teaching practices that have evolved within the two areas of scholarship (educational psychology and curriculum studies), which I have reviewed up to this point? In educational psychology, some scholars (e.g., Alexander, Schallert & Reynolds, 2009) are conceptualizing more intricate theoretical models by taking into consideration all aspects—biological, environmental, individual, and socio-cultural—of human development as it occurs within various learning contexts that range from spontaneous and informal to rigorous and complex. Furthermore, in terms of curriculum, enactment of the more progressive ideologies—that is, social constructivism (e.g., culturally relevant teaching) versus a pure mechanistic, behaviorist model—is visible but nevertheless minimal in terms of fidelity and authenticity (Cuban, 1996; Ball, 2003; Kleibard, 2004; Morrison, Robinson & Rose, 2008). Again, my purpose for reviewing and outlining this scope of the development within learning and curriculum research and theory is to be able to trace the beliefs and understandings by which the kindergarten teachers and their respective administrators I interview in this study frame their approach to enacting the curriculum their district deems as official. Specifically, it is regarding the enactment of a prescribed, official curriculum like the one

specified in my district's IPFs where kindergarten, as opposed to other grade levels, becomes a contentious arena for juxtaposing differing outlooks on teaching and learning.

Kindergarten's uniqueness stems from its early roots as a preparatory project conceptualized to bridge young children's experiences from home to school. As Graue (2006) explains, kindergarten's eventual emergence into the 1<sup>st</sup> through 5<sup>th</sup> grade public school system "has made [it's] functions and relationships to schooling and preschool a wonderful, but sometimes troubled, hybrid of early childhood and elementary education" (p. 6). Principles and standards governing policies and practices in ECE (as opposed to elementary school) have been traditionally vetted through DAP, which privileges the developmental, individual, and sociocultural dimensions of young children's learning

DAP has itself undergone shifts and transformations that closely mirror the paradigmatic development in educational psychology and curriculum studies. In its earliest conception, DAP was heavily influenced by the "ages and stages" research generated from developmental psychologists such as Piaget and Erickson (Copple & Bredekamp, 1987). Children's emotional and cognitive development were purported to be restricted by maturational limitations that progressed linearly through a continuum of increasingly robust and sophisticated levels of amenability to direct instruction (Willingham, 2008). However, stemming from a growing line of critical inquiry, researchers (e.g., Rogoff, 2003; Cannella, 1997) concerned with sociocultural influences on children's development began to call into question the universal assumptions undergirding these developmental benchmarks considered to be generalizable to all populations. In response to this critique, subsequent modifications and revisions to the original 1987 DAP doctrine lead to the publication of a new position statement that would eventually acknowledge the cultural variation that influences children's development (Copple & Bredekamp, 2009).

Despite kindergarten's unique categorization as a transitional grade level, it is becoming increasingly subject to the normative expectations promulgated in the high stakes accountability movement (Hatch, 2005). Due to this new development within the educational landscape encompassing and affecting the kindergarten classroom, I now make one final historical review that pertains to the evolution of the standards movement—the development of which tells the story of how divergent ideologies and theories related to learning and curriculum enactment were contested, leaving mainly one of them to predominate in exerting its influence in what is now inscribed in federal policy, mandates, and reform measures like NCLB.

### ***3) The Historical Development of Standards and Accountability***

Wixson, Dutro, and Athan (2003) explain how the emergence and development of standards, which were created to specify how and what students should learn, began as a deliberative process that ultimately turned tumultuous in its continuation. Beginning with the release of 1983's *A Nation at Risk* report, which criticized the nation's public schools for mediocre academic performance and expectations, the federal government made an unprecedented foray into the inspection of public education—a task traditionally relegated to the states and local districts. However, the policies and programs directed toward ameliorating this perceived deficit in the nation's educational standing among its global competition failed to materialize due to their lack of coherence and specificity at prescribing how this work should be done. Efforts to rectify these deficiencies at the national level were apparent in the passage of the *Goals 2000: Educate America Act of 1994*, which set forth measures and resources to provide depth and focus in the nation's curriculum through the creation and dissemination of common standards developed by individual states. Hoping to replicate the success and deliberative processes exemplified

in the development of the National Council of Teachers of Mathematics' (NCTM) 1989 Content and Process Standards, federal and state lawmakers encouraged educational experts, specialists, and business leaders to craft a similar corpus of standards for English Language Arts (ELA) and social studies. According to Wixson et al., despite the general consensus among both the business and education representatives about the purpose of these standards—namely that goals for excellence in teaching and academic performance should be commensurate with global expectations—many of the educators serving on these committees worked toward an additional objective, which was to “move away from the traditionally behavioristic thinking about teaching and learning characterized by skill-based, mastery learning curricula and minimum competency tests toward a more cognitive or sociocognitive view of teaching and learning” (p. 70).

The product of this collaboration, although representative of constituency consensus and progressive ideals, set forth a contentious debate among federal lawmakers who were critical of the social studies standards' negative portrayal of Whites and the United States' foreign policies. A subsequent debate ensued about the lack of phonics-based instruction in the ELA standards, resulting in the passage of 1998's Reading Excellence Act, which dictated stringent guidelines requiring states to adopt curricula that adhered to rigorous, scientifically based research on literacy acquisition. The skills-driven focus implicit within this piece of legislation provided the framework by which future laws such as NCLB and President George W. Bush's Reading First initiative would promulgate mostly scripted curricula that departed significantly from the social constructivist intentions of the designers who crafted the first round of ELA standards. Thus, with the passage of NCLB, the nation witnessed an unprecedented shift in the federal government's relationship with the public schools—from one of minimal interference to heavy handed regulation that hinged on students' assessment performance

and districts' responses to these measures, which required they adopt prescribed, scientifically tested supplemental resources (Sunderman, 2007; Shaul & Ganson, 2013).

Although this part of the literature review has examined the emergence and development of alternative paradigms (e.g., student-centered instruction, culturally responsive teaching, etc.) that circulate within the domains of learning and curriculum scholarship and yet contradict the neo-liberal agenda implicit in the standards-based reform movement—namely NCLB—questions remain: First, what access do educators have to these theories; and if so, how much freedom do they have to practice them? Second, how much of the theoretical content within curricula consumed by teachers is modified as they populate these artifacts with their own intentionality? What follows in Part 3 of this literature review is an attempt to address these questions by examining mostly empirical, qualitative studies that look at how practitioners—teachers, administrators, district level curriculum specialists—are responding and dealing with these issues at the local level.

### **PART 3: Local Responses to High-Stakes Accountability: What the Literature Reveals and What Remains to Be Explored**

Michael Apple's (1986) uses the term *intensification* to describe the constrictive effects derived from a neoliberal agenda exerted on teacher's pedagogical freedoms as policy makers use a free market approach to reform public education. Although they concur with Apple's observation of the effects of standards-based reform on teaching, Ballet, Kelchtermans, and Loughran (2006) attempt to reframe this terminology, arguing that defining the parameters and variables impacting professional autonomy in this way is perhaps too simplistic and somewhat deterministic. In other words, although punitive measures and sanctions (such as allowing student achievement to regulate school funding) might in fact constrict teacher's professional decision making abilities, the

degree in which this process happens is relative to the context where, when, and among whom such policies are enacted. As Ballet et al. argue, “[t]eachers do not work in a vacuum, but in a particular school or schools, with specific cultures and structures...[which] also mediate the impact of intensification, because they determine the organizational ‘space’ for interpretation and negotiation” (p. 214). Hence, governing ideas and regulations like NCLB and high stakes testing are not passed down from the top and taken up ‘as is’ by schools and teachers (Koyama 2011; Koyama & Varrenne, 2012). Instead, as scripted as some curricula may be, they take on a distinctive translation as they filter through the idiosyncrasies of a situated community and into the hands of their end users—the teachers and students.

In short, Ballet et al.’s interpretation and modification of Apple’s intensification theory offers a multidimensional approach to the analysis of curriculum enactment. I have deliberately defined the unit of analysis as *curriculum enactment* rather than *practitioners’ enactment of curriculum* to accentuate the socially situated nature of the phenomenon under investigation. Additionally, rather than define a singular or bifurcated set of constructs to explain how curriculum is accomplished in the socially embedded context of its performance, I allude to what Ballet et al. identify as mediators—e.g., teacher knowledge, artifacts, school culture, and social political policies—all of which are involved in the act of intensification and, thus, give shape and structure to its end outcome as it becomes manifest through the cycle of planning, teaching, learning, and evaluation. Considering the messiness involved in trying to make sense of a dynamic and socially situated phenomenon like curriculum enactment, I attempt to dismantle each mediator listed in the above from its location within the tapestry of pedagogy where they play out interactively and analyze them individually to explore how they function independent of each other. To this end, what follows is an

attempt to unpack each of these mediators through the literature that examines them with respect to how they constrain, support, or accentuate the official, taught, learned, and tested curriculum.

*1): Curriculum as a mediator*

Hoffman et al.'s (2001) survey data of 200 experienced Texas reading teachers, specialists, and supervisors reveals that the source of the intensifying stress on these educators' work lives is the attention and time dedicated to test preparation and administration (and to a certain degree the standards), both of which may be necessary components within the learning cycle, but nevertheless become problematic when they have 'at risk' markers attached to them. In other words, when teachers and students are penalized through various types of sanctions—pay reduction, job loss, grade level retention, etc.—for failing to meet specified outcome measures, a certain level of anxiety ensues. Although some researchers are cautious not to dismiss the positive effects that accountability reform can leverage upon low performing schools (Bowman, 2005, Mintrop & Sunderman, 2009), many scholars criticize the high stakes and accountability sanctions as being deleterious to and undermining of the pedagogical integrity of the educational system (Berliner & Biddle, 1995; Au, 2010).

Another perceived barrier to teacher autonomy is the use of scripted curricula and prescriptive lesson guides to keep instruction focused on what is specified in the official canon of learning standards and subsequently tested (Ede, 2006). Parks and Rhoades (2011) mapped one preschool teacher's informal conversations with students and her instructional talk related to mathematics directly to her rigid implementation of a highly scripted and pedantic literacy curricula. Apparently, the rote way the prompts and questions were worded in the lesson scripts began to transfer over to the teacher's on-

going discursive habits as she interacted with her preschoolers. What is more, the structure of the literacy program left little time for the teacher to meaningfully address important math concepts and precluded her ability to see opportunities to build on children's natural interests as they encountered mathematical ideas during their free play.

Apparently, not all curricula—e.g., textbooks, resource materials, teacher guides, etc.—are as prescriptive as others, particularly those that do not reduce the role of the teacher to a mere technician, but instead encourage and support her strategic thinking and planning. Valencia, Place, Martin, and Grossman's (2006) longitudinal study following four beginning teachers from their initial year in the classroom up until their third year of teaching focused on how these novices' understanding of curriculum materials factored into their development of best practices in literacy instruction, which they learned during their university pre-service preparation courses. The findings from this study revealed that the degree of flexibility offered by the official curriculum available to the novice teachers played a critical role in either constraining or enhancing their instructional competencies and effectiveness. By the third year of teaching, two of the teachers who were expected to rigidly adhere to their school or districts' curriculum—one of which was a commercially prepared program and the other a basal—showed the least amount of growth in developing strong pedagogical skills recommended by the university literacy teacher preparation program. The other two teachers, who were given more instructional leeway and utilized a range of resources—e.g., authentic literature books—adopted habits of planning and instructional responsiveness closely resembling the best practices utilized by teaching experts. Hence, the focus of the study—how the teachers used the materials and resources available or prescribed to them—revealed mixed results, namely that background knowledge (in the form of college course work) can interact either negatively or positively with curricula.

Rather than dismiss the prescriptive affordances offered by curriculum programs or teacher guides, Valencia et al. were careful to point out that these novice teachers “wanted the benefit of the scaffolding that teaching suggestions would provide as long as they [the teachers] could have the option of what they called ‘jumping off’ when they were ready” (p. 116). Thus, curriculum guides can indeed be helpful to a novice teacher by lifting some of the burden inherent in planning and implementing a lesson off his shoulders so that he can direct his full attention to mediating and differentiating the learning that happens on the spot during the course of instruction. Nevertheless, there should also be on-going mentoring and professional support provided to the beginning teacher so that she can develop the pedagogical skills she needs to acquire expertise (Feldon, 2007). To that end, my study seeks to investigate the availability of resources provided to the kindergarten teachers by their local school district (BSD) or home campus—a piece of contextual evidence central to understanding the socially situated contingencies of curriculum enactment. In this next section, I explore how teacher knowledge mediates curriculum enactment.

## ***2): Teacher knowledge as a mediator***

Teachers’ pedagogical and content knowledge—including how they experienced learning as a student—as well as their values and beliefs, converge to influence their instruction and curricular decision making ((Pájares, 1992; Murphy, Delli & Edwards, 2004). Analyzing the survey data collected from 25 first year elementary school teachers who had completed the same college course work on McTighe and Wiggins’s (1998) Backward Design model for lesson planning, Brand and Triplett (2012) found that the knowledge and convictions these novices had developed from their participation in this class did indeed make a difference in their willingness to implement cross-curricular

integration projects into their teaching in spite of the time they had to devote to testing. Although most respondents to the survey could integrate only two content areas at any given time in their classroom, these teachers felt strongly enough about the importance of integrating curriculum to make whatever accommodations they could within their restricted schedules to dedicate time for such project based work. Hence, teacher convictions appear to impact how teachers decide to navigate externally imposed regulations.

Camp and Oesterreich's (2010) case study analysis of one renegade teacher provides another example of how personal convictions grounded deeply by the philosophical and pedagogical training received in pre-service training and apprenticeship can foster agency in the face of opposition or coercion. The teacher who was the focus of this study could successfully resist her administrator's and team members' insistence that she narrowly focus on the tested curriculum. Through the interview data and transcripts, the researchers showed how rather than conform to these pressures; the teacher crafted and implemented a curriculum uniquely tailored to her fifth graders' socio political and cultural background and interests. The limitation to this study lies in its exclusive focus on the teachers' belief structures, which overshadowed the unexplored socio political climate of the school community where she taught. The reader is left to speculate, for instance, if and how strong parental involvement at the school might have supported the teachers' autonomy and self-efficacy to help her to push back against the administrator and her colleagues.

Teachers not only draw upon their background knowledge and convictions when making decisions about curriculum, but they also rely on their personal preferences, which they utilize as they make on-the-spot decisions during the act of teaching (Pájares, 1992; Murphy, Delli & Edwards, 2004). For example, through the triangulation of

multiple data sources (e.g., interviews, document analysis, and observation), Öztürk (2012) was able to show how even though a group of high school history teachers were invited to participate in the creation of their department's annual instruction plan, they chose to simply take the textbook and the official curriculum guide provided by their district and integrate those materials 'as is' without making significant changes to the content and scope and sequence of units in a way that could reflect the interests or needs of their students. When observing these teachers in action, however, what Öztürk saw as the lessons unfolded in the classroom deviated significantly from what they had written down in their annual plans. Unfortunately, as was the case during the initial planning process, the whimsical adjustments that occurred in the enactment of the content during the teaching phase were made with little consideration or accommodation for the instructional needs of the students. Hence, teachers' personal preferences for what to teach are not always in the best interest of the students (Goldstein, 2007), which only complicates the dilemma of how to mitigate poor pedagogical expertise without also infringing upon professional autonomy. According to Öztürk (2012) professional development must accompany efforts to include teachers in their analysis of and planning from the official curriculum. He reports that the curriculum document these history teachers referred to during the planning process was far too dense in both content and format, which perhaps explains why they chose to only cursorily review it and then merely transfer it 'whole cloth' to their annual plan.

With respect to this final caveat, dialogue between the developers of the official curriculum (district officials) and the authors of the taught curriculum (the teachers) might serve as a source for the requisite pedagogical expertise to enact a curriculum that is responsive to the social cultural needs of the end users (the students). Instead of insisting on an either/or approach to accountability—e.g., standardization versus

autonomy—perhaps an alternative to this dilemma is one that understands “learning occurs as individuals and the contexts in which those individuals act become familiar with (i.e., attuned to) the constraints and affordances that simultaneously [bind] and scaffold participation” (Hickey, 2003, p. 408). Hence, effective professional development does not occur through a transmission model, but instead within the confines of dialogic feedback and cognitive coaching (Ballinger, 1999; Hammerness et al., 2005).

If participation in a language mediated event does indeed shape and advance understanding (Vygotsky, 1978) in this way, perhaps teachers engaged in a dialogic discourse through professional development (PD) could be a rich source for data collection within an investigation that explores how such knowledge is generated. For example, Brown and Weber (2016) selected a group of ECE teachers (preschool and kindergarten) located in a large urban school district for whom they provided on-going PD that focused on how to incorporate CRT strategies with their mostly culturally and linguistically diverse students. Despite the dialogic support the group received during the PD from the researchers, the teachers experienced constraints from their district’s aligned curriculum, which afforded little room for instructional deviation in its prescribed pacing. What is more, at the end of the PD, the teachers continued to see little academic or enrichment value of the CRT content they were addressing with their students. Brown and Weber speculated from these findings that the teachers might have had more positive experiences with implementation and a deeper appreciation for CRT had they received campus level support and buy-in from their administration. Thus, in the section that follows, I probe more closely within the literature to understand how the constituency at the campus/ school level can impact the individual classroom teacher’s enactment of curriculum and best practices.

### ***3): The school community as a mediator***

The role of those who are farther removed from the actual classroom in the enactment of curriculum should not be overlooked as a source of support or constraint in the face of standardization and accountability measures. Principals and campus administrators (including instructional specialists) make a significant impact on the degree of autonomy exercised by classroom teachers (Grissom, Loeb, & Master, 2013). In a qualitative case study closely documenting the instructional practices and decision making of a seasoned teacher working in a high needs elementary school, Wills and Sandholtz (2009) pointed to the instrumental role of the administrator in buffering the district level performance demands directed at the campus so that the teachers under his supervision could maintain some degree of instructional flexibility. Because of the principal's intervention, the teacher who was the focus of the study succeeded in addressing the social studies content that was not included on the state accountability test.

When positioned as an intermediary—someone who buffers teachers and students from external pressures like high stakes testing—the school administrator is working in relation to actors situated in networks operating outside the individual campus. The actors residing within these external networks include district officials (e.g., superintendents, supervisors, curriculum specialists, etc.) who are typically charged with the responsibility to enforce and monitor the state and federally imposed mandates placed on the schools. For example, Bantwini and King-McKenzie's (2011) study looking at the impact of district officials' role on the implementation of curricular reform in a South African community revealed that resistance there was partially constructed by the assumptions of the curriculum support specialists who viewed the teachers' lack of implementation as their unwillingness or inability to utilize the new curriculum as it was intended. Interview data, however, revealed that the teachers were experiencing frustration because

there were components to the curriculum they did not understand well enough to incorporate into their teaching. These teachers attributed their lack of understanding to what they considered only cursory training from their district support specialists. Bantwini and King-McKenzie speculated that had there been stronger lines of communication between the specialists and the teachers, the enactment of the reform measures might have become less contentious.

In addition to poor communication, another source of resistance within an organization is disagreement (Sarker, Sarker & Sidorva, 2006; Wong and Cheung, 2009). Wong and Cheung contend that when there is a mutual alignment between district administrators' and teachers' beliefs and attitudes toward curriculum reform, change becomes less of an obstacle. Using t-tests to compare the degree of various stakeholders' (e.g., supervisors', specialists', campus administrators', and teachers') agreement with the goals and objectives of Hong Kong's curriculum reform, Wong and Cheung detected significant differences between who the researchers identified as the heads of the schools and the classroom teachers—those implementing the changes on the ground level. Without qualitative data to unpack the source of those differences, however, resolution of the conflict is not a probable outcome and the enactment process will likely continue down a bumpy road.

According to Wenger (2000), the dialogue that occurs within a community of practice should be one that is symbiotic—each stakeholder participating as equals and doing his or her fair share of the listening and ceding as well as the talking and insisting. A top-down enforcement of curriculum is likely to intensify the resistance from teachers if they are not respected as professionals who understand the academic and cultural needs of their students (Grissom et al., 2013). Likewise, specialists might have knowledge related to content and pedagogy that can enhance the existing knowledge base and

expertise held by the teachers. However, such an assumption is only speculative, thus necessitating more research to understand how actors who work outside of the classroom and the materials they use to work with or monitor teachers (e.g., checklists for classroom walkthroughs, observations, etc.) impact the enactment of the official curriculum. What is more, the social political milieu that governs these conversations (the focus of the next and final section) is also worthy of inspection.

#### ***4): Educational policy as a mediator***

Policies like NCLB are informed by ideologies (e.g., high-stakes accountability) that circulate at both macro (e.g., within the media) and micro (teacher to teacher) levels (Cameron, 2001). In this way, policy not only directly impacts instructional decision making but is also susceptible to change and resistance as actors push back with counter narratives (Erickson, 2004). One example of such resistance is the instantiation of the NAEYC's DAP position statement, which was a response to the push down of rigorous academic standards into kindergarten and preschool (Hatch, 2005). When juxtaposed with policies advocating high stakes testing and standardized curricula, the child centered philosophies that undergird DAP have a polarizing effect on the instructional practices of public school preschool and kindergarten teachers who feel pulled in both directions (Goldstein, 2008b; Brown & Lee, 2012). Early childhood educators whose practices and pedagogical epistemologies have been informed by DAP philosophy are accustomed to following the lead of the child as they plan curriculum that addresses the individual, socio emotional, physical, and social cultural needs of their students (Copple & Bredekamp, 2009). Hence, the dilemmas experienced by teachers who attempt to maintain a child-centered approach to their teaching in the wake of accountability reforms are perhaps amplified for early childhood educators who have traditionally followed DAP.

The literature that has examined how those who teach in public school early childhood settings cope with the demands of academic pushdown, high stakes testing, and standards has focused mostly on highly skilled, experienced teachers. Brown and Lee (2012) noted that the three teachers they interviewed were quick to point out how the work of a preschool teacher requires a disposition and preparedness for complexity and hard work to address the cultural needs of the students, particularly when there is pressure from administrators to focus on academic content. Observational data from the study confirmed that these teachers were indeed skilled at being able to accomplish this work as they interacted with their students. Each of them came highly recommended from their campus and district administrators. The four kindergarten teachers in Goldstein's (2008b) study were also adept at being able to find creative ways to meet the developmental needs of the students and still address the academic standards mandated by the state. Goldstein suggested, however, that since each of these teachers were experienced and enjoyed more autonomy in their classrooms due to their administrators' flexibility and their schools' exemplary ranking on the state's accountability ratings, additional research is necessary to explore how early childhood educators monitored more extensively for academic performance indicators might respond to the juxtaposition of standardization and DAP.

Brown's (2009) case study examining how stakeholders within a district conceptualized an assessment tool designed to align its preschool program to the K-12<sup>th</sup> grade accountability system is perhaps best exemplary (in both its scope and analysis) of the type of methodology necessary to capture the interplay between social actors (e.g., teachers and administrators) and the enactment of a curriculum document bounded by high stakes policies. What Brown discovered was that the implementation of the tool varied and became somewhat problematic since each stakeholder—the teachers who

developed the assessment, principals, and district level specialists—had divergent and at times conflicting ideas about its purpose and how it framed the child in normative ways. A similar study that looks at teachers', administrators', and district officials' participation in both the enactment and supervision of a standardized curriculum planning guide for kindergarten can perhaps add to the existing literature base by providing new insights into the high stakes versus DAP dilemma.

## CONCLUSION

At present, high-stakes accountability continues to have a formidable presence in the educational sphere (Mintrop & Sunderman, 2009). As testing expands and efforts intensify to elevate student achievement at low performing schools, those who teach at those campuses will likely undergo increased monitoring and evaluation of their classroom instruction and enactment of the official curriculum (Murphy, Hallinger, & Heck, 2013). The numerous studies reviewed in this part of the literature review point to the varied responses among teachers to the encroachment upon their autonomy as the press to align curricula to national and state standards and assessments has resulted in the development of planning documents, frameworks, and scripted programs that restrict instructional deviation. Of interest to early childhood educators is how to manage the dilemma that arises when the accountability and standardization movement curtails efforts to maintain a developmentally appropriate focus that respects the individual, developmental, cultural variation of young children (Hatch, 2005).

To address this issue, I have situated it within an ANT informed framework, which seeks to explore the mediating role of various actors—teachers, principals, and district officials—as they attempt to populate the official curriculum with various material representations and inscriptions-- e.g., textbooks, lesson plans, assessments etc.--

that contain others' and their pedagogical frameworks, knowledge base, and values. Borrowing Ballet et al.'s (2006) modification of Michael Apple's (1986) intensification theory, I developed four themes framed as mediators in the enactment of curriculum—the curriculum artifacts themselves, teacher knowledge, the school community, and policy—to guide and inform my search of the existing scholarship that has studied teacher autonomy as it is situated in professional decision-making within a high-stakes context, which I argue departs ideologically and pedagogically from the principles underlying DAP. I contend, however, that these mediators work in tandem with (rather than independently from) each other as the enactors of the official curriculum (teachers, principals, parents, and district officials) perform their identities through the material milieu of school activity, which includes planning, teaching, advising, and monitoring. In the next chapter, I outline how a qualitative case study framed by ANT can methodologically analyze what happens when teams of kindergarten teachers and their respective administrators situated at two campuses within a large urban school district interact with the material devices they use to enact a prescribed curriculum.

## Chapter 3: Methodology

### RESEARCH QUESTIONS:

The empirical literature that I have reviewed in the previous chapter shows variation in how teachers of young children manage the high stakes push down into the earlier grades. Whereas some teachers concede outright to the pressure or willingly comply at the detriment of meaningful and responsive instruction (Ede, 2006; Parks & Bridges-Rhoads, 2012); others find spaces to maintain a developmentally appropriate focus in their classrooms (Goldstein, 2008; Brown & Lee, 2012). I argue, however, that there is a gap within this scholarship, which has yet to use ANT to look at how kindergarten teachers' uptake of a prescribed curriculum occurs as these human actors attach or detach themselves to the materiality of the political, school, and classroom context to form and perform networks of multiple (and possibly contradictory) enactments. Moreover, in addition to a curricular framework articulated within an official document like the IPFs, there are a variety of resources (e.g., lesson plans and ancillary materials conceptualized through the lenses of various learning and teaching theories) that are available for teachers to use on their campus where administrative and support personnel are working along with them in either supportive or supervisory roles to maintain compliance with state imposed performance standards.

The contextually contingent nature of this enactment process therefore requires analysis and methodology that can capture its complexity without essentializing its performance with a priori categories or attribute its persistence or collapse to human intentionality and abstract social forces (Fenwick & Edwards, 2010). To accomplish this objective, I have selected a case study design which, as Yin (2009) suggests, is best suited to understand “a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly

evident” (p. 18). Moreover, by conceptualizing the school district and the kindergarten teachers and their administrators at two of its borderline underachieving campuses as a bounded unit of analysis, I have chosen to frame the investigation in a case study design to understand the diversity of possible enactments of the official curriculum as it is circumspect to varying degrees of administrative surveillance and/ or district imposed sanctions. With respect to this goal, I ask the following questions to unpack the complexity surrounding the enactment process I have outlined in the above:

1. How are each of the individual actor networks who are bound together within a tenuous assemblage focused on the implementation of the IPFs conceptualizing this document in relation to their respective beliefs, responsibilities, instructional goals, and practices?
2. In what way does the kindergarten teachers’ conceptualization of the IPFs impact their practices and how they frame their role as instructors who are to meet the socio-cultural, individual student needs as expressed in DAP while under the surveillance of their campus administrator or other district level officials and curriculum specialists?

This chapter, which focuses on methods of inquiry, is organized into five sections. The first section explains the theoretical framework that underlies the epistemological basis of the assumptions and decisions I make as I plan and interpret the findings from the study. Section two outlines the rationale for participant selection and the phases of entry into the field, which I have structured to mirror the four-part translation process outlined in ANT whereby, first, a focal actor locates other network actors who might align to its interests (the *problematization* stage); second, makes efforts to secure those interests (the *interessement* stage); third, achieves alignment (the *enrollment* stage); and, finally, secures representatives from each new network to accomplish the specified outcome (the *mobilization* stage). The third section focuses on the processes and artifacts associated with data collection. Section four explains the various methods I will use to analyze the data. The final section, section five, details the issues related to the rigor and

quality of the study as measured through trustworthiness/ credibility, transferability, dependability, confirmability, ethics and positionality.

## **THEORETICAL FRAMEWORK**

According to Merriam (2009), qualitative research is guided by the assumption “that individuals construct reality in interaction with their social worlds” (p. 22). To that end, I situate this inquiry within an epistemological framework that embraces the tenets of social constructionism to understand the contextual and relational components involved in the enactment of curriculum as it occurs among teams of kindergarten teachers supported and supervised by administrators and district officials who are bound to the regulations of high-stakes accountability. Crotty (1998) explains that constructionism operates under the assumption that reality is neither entirely objective nor subjective as humans interact in a world that is populated with objects. Unlike positivism, which suggests that reality is inherent within the object; constructionism assumes that due “to the essential relationship that human experience bears to its object, no object can be adequately described in isolation from the conscious being experiencing it, nor can any experience be described in isolation to its object” (p. 45). Therefore, meaning making is an emergent, participatory process rather than a fixed, predetermined phenomenon through which reality can be ascertained with certainty. In addition, Crotty goes on to stress that meaning is always situated within the social historical context where it develops as human actors make sense of and represent this reality through their interactions with other actors, which includes materiality. Thus, the meaning that humans attribute to their world is ultimately a socially constructed phenomenon.

Both epistemologically and methodologically speaking, I contend that ANT is aptly suited to explore how humans make sense of their world through the lens of social

constructivism. Latour (2005) defines the construct “social” in two dimensions: “it’s at once a *substance*, a kind of stuff, and a *movement* between non-social elements” (p. 159). Here, Latour echoes Crotty’s (1999) assertion that man and objects are inextricably interrelated. To this end, I suggest that ANT can provide an organizational template for tracing and identifying discordant intentions among an assemblage of heterogeneous actors like teachers and their administrators as well as non-human devices, such as the district-created curriculum frameworks (IPFs)—all of which are brought together by a seed of controversy (e.g., high-stakes accountability) that could potentially—albeit tentatively—bind them within a unified network. I propose that without this template, researchers have no method for piecing together potential data sources for making sense of this dilemma (the focus of investigation) within an observable unit of analysis. Otherwise, tracing the formation or collapse of these possible yet contingent network enactments becomes elusive. The following section provides more information with regards to the social demographics that represent the district under investigation as well as the participants who I identified as actors within the network of curriculum enactment

## **THE SCHOOL DISTRICT**

Balcones School District (BSD), a pseudonym for the district where I worked and conducted this study, is in the state of Texas. BSD is a large urban school district with 84 elementary schools, which are organized within high school vertical teams subdivided into 3 regions. Each one of these regions is managed within the district’s Office of School Affairs and is assigned an associate superintendent who leads a team of administrative assistants and curriculum specialists to oversee campus affairs and monitor academic performance in that area. As of the 2014-2015 school-year, the district reported an enrollment of approximately 85,000 students. (For a complete list of

demographics and student characteristics by district and individual campus, see Tables 3.2 and 3.3 respectively). According to the Texas Educational Agency’s (TEA) 2013 state accountability system, 110 campuses were designated as *Meeting Standards* and 10 as *Requiring Improvement*. Due to a federal NCLB waiver, all school districts in the state of Texas (including BSD) no longer must comply with AYP regulations. However, 5 campuses are designated as Priority Schools and 7 as Focus Schools.

### CAMPUSES

The two campuses I selected for this study, Hernandez and Wylie Elementary Schools (both pseudonyms), were among those schools designated as a focus priority in BISD due to their performance on the state’s end-of-year exam (STARR). (See Table 3.4 for each school’s academic rating performance). Although both campuses were designated as *Meeting Standards*, the Associate Superintendent of the district region they belonged to (Region B) made them a focus priority due to how close they were to slipping into the state’s *Requiring Improvement* status. While Hernandez Elementary did have scores that were closer to the district’s average, the campus’s performance on the 5<sup>th</sup> grade end-of-year science placed the school at risk and therefore requiring intensified monitoring from the district’s Region B Office of SA campus advisory team. Enrollment figures for both campuses and BISD are listed in Table 3.1.

Table 3.1: District and Selected Elementary Campus Enrollment for the 2014-2015 School Year

Enrollment	<i>BISD</i>	<i>Hernandez</i>	<i>Wylie</i>
All Students	84,191	512	545
Kindergarten	7,350	69	77
Average Class Size (Kindergarten)	18.3	19.5	19.8

Table 3.2: District and Selected Elementary Campus Demographics for the 2014-2015 School Year

Race	<i>BISD</i>	<i>Hernandez</i>	<i>Wylie</i>
African American	8.0%	4.9%	13.0%
Hispanic	59.6%	77.5%	82.8%
White	25.8%	11.0%	2.2%
American Indian	0.2%	0.0%	0.0%
Asian	3.7%	3.3%	3.3%
Pacific Islander	0.1%	0.0%	0.0%
Two or More Races	2.7%	2.5%	0.0%

Table 3.3: Student Characteristics at the District and Campus Level (2014-2015 School Year)

Characteristics	<i>BISD</i>	<i>Hernandez</i>	<i>Wylie</i>
Economically Disadvantaged	59.9%	83.8%	91.0%
Non-Educationally Disadvantage	40.1%	16.2%	9.0%
English Language Learners (ELL)	27.7%	25.0%	36.5%
At-Risk	52.6%	55.6%	72.3%

Table 3.4: Academic Performance at the District and Campus Level (2013-2014 School Year)

Subject Areas	% Meeting Phase-In Satisfactory Standard on STARR		
	<i>BISD</i>	<i>Hernandez</i>	<i>Wylie</i>
Reading	78%	79%	65%
Mathematics	79%	74%	68%
All Subjects	78%	75%	64%

## **PARTICIPANTS**

Employed as a district specialist in BSD at the time of this study, I have an emic understanding of the hierarchical organization of curriculum development, deployment, monitoring and implementation. The IPFs and other instructional documents are conceptualized and created within the Office of Curriculum and Instruction (C&I), which is supervised under an associate superintendent who reports to the district’s chief superintendent. Commensurate in ranking with the Office of C&I is the Office of School Affairs (SA), which is subdivided into three areas, each supervised by a representative associate superintendent to whom individual campus administrators report and are accountable. Each area associate superintendent manages a campus advisory team, which consists of administrative assistants and curriculum specialists who monitor campus performance and curriculum/ testing implementation. Although curriculum specialists from the Office of C&I do interact with and offer support to campuses for IPF implementation through professional development, instructional/ content coaching, and classroom observations; they must procure contact through the Office of SA before establishing contact with the individual campus administrators.

I selected participants who would represent actors from established networks (identified by name inside the boxes in Illustration 3.A) within the district. I should mention that the networks I have identified in the above are not necessarily commensurate with the those described in ANT since they are formed through pre-established categories designated by BSD. The construct referred to as ‘network’ in ANT is a precarious and always emergent web of relations, which is established through the work of actors (human and non-human) attaching/ detaching themselves to other assemblages (Latour, 2005). Hence, the predetermined networks from which I selected my participants include 1) the Office of C&I, which produced the IPFs; 2) the Office of SA headed by an associate superintendent and his/her administrative staff who monitor implementation and campus affairs; 3) and, finally, the individual campus comprised of the school administrator and team of kindergarten teachers. The individual boxes outlined in bold as shown in Appendix A each represent a network. The shaded boxes enclosed within each of these larger networks represent human actors, some of whom are bound within smaller networks—e.g., the teams of kindergarten teachers.

To be clear, the delineation of these networks was assumed prior to the analysis to probe how they might or might not (or even partially) assemble as a larger network to enact BSD’s prescribed curriculum as imagined through the IPFs. Hence, Illustration 3.A functions merely as a diagram to speculate how the translation process might occur through the stages of *problematization*, *interessement*, *enrollment*, and *mobilization*. The study itself attempted to trace and explain instances of resistance, compromise, or compliance that occur within and among the networks as manifested through team planning, teacher implementation/ decision-making, individual classroom instruction, and monitoring/ surveillance of the campus administrator. The blue solid arrows on Illustration 3.A indicate the processes of *problematization* and *interessement* (efforts to

secure CRM fidelity and implementation). The red dotted arrows represent the tenuous process of *enrollment* as all actors bound through the *obligatory passage point* respond to *problematization* and *interessement* through acts of compliance, compromise, or resistance.

## **Office of C&I**

### ***Dr. Diane Williams***

Dr. Diane Williams was a white female Caucasian and served as the Superintendent of the Office of C&I at the time of the study. During her 25-year tenure in teaching, she taught preschool for 4 years. She has also served as a district level curriculum coordinator for a school district neighboring BISD. As of the 2014-2015 school year, she had been in her current capacity in BISD since July of 2010.

### ***Dr. Rena Hudson***

Dr. Rena Hudson was the Director of the Department of Early Childhood Education. At the time of the study, she had 27 years of experience in education, 17 of which were in the classroom teaching Pre-K through 1<sup>st</sup> grade. She taught kindergarten for 5 years. She has also been an English Language Arts specialist and was in her position as the director for 6 years as of the 2014-2015 school year. She identified as African American.

### ***Kelly Ruffalo***

Kelly Ruffalo was a Hispanic female. She worked under Dr. Hudson as an Early Childhood specialist, a position which allowed her to write curriculum, provide staff development, and support classroom instruction. She had completed 22 years of teaching experience at the time I conducted the study. In addition to teaching 5<sup>th</sup> grade, she was a

Kindergarten teacher for 10 years and a campus instructional coach for 2 years. She had been in her current position for 4 years as of 2014.

## **Office of SA**

### ***Dr. Margaret Ochoa***

Dr. Margaret Ochoa was in her 32<sup>nd</sup> year of education as of 2014-15. She was a classroom teacher for 10 years in both kindergarten and 1<sup>st</sup> grade. She had been in her current position since the 2007 school year. Before that, she was a campus principal and a district-level administrative assistant in the Office of SA. She identified as bilingual White Caucasian.

### ***Tina Miller***

Tina Miller was a Mathematics Specialist who worked on BSD's Region 2 Campus Advisory Team under Dr. Ochoa. She supported campuses in her region with mathematics implementation, conferencing with principals, campus level instructional coaches, and teachers. As of 2014, she had been in education for 24 years, 12 of which were spent in the classroom. During that time, she did teach preschool in a private school but spent most of her teaching experience in 5<sup>th</sup> grade in another district. She had also been a campus and district-level math specialist in the Office of C & I. She identified as White Caucasian.

## **Hernandez Elementary**

### ***Mary Ann Oxford***

Mary Ann Oxford was the principal of Hernandez Elementary School, a position she occupied for 6 years since 2014-2015. She was an assistant principal for 5 years in another district and before that, an instructional campus coach for 1 year in BSD. She

also taught as a bilingual teacher in BSD at various grade levels 3-5<sup>th</sup> grade (multi-age), 4<sup>th</sup> grade self-contained, and 2 years in Pre-K. She spent 2 years in higher education as a GED and English as a Second Language (ESL) instructor. Altogether, she had been in education for 30 years. She identified as bilingual and as a White Caucasian.

***Patricia Caldwell***

Patricia Caldwell was a veteran kindergarten teacher with 33 years of experience. She had a Montessori background and worked in other school districts, including private schools. As of 2014, she had been at Hernandez teaching kindergarten for 16 years. She identified as bi-racial Native American and White Caucasian.

***Madalyn Mathers***

Madalyn Mathers began her career in education as a substitute teacher. She had been a classroom teacher for 8 years, all at Hernandez Elementary. She taught 4<sup>th</sup> grade for one year but had been in kindergarten for 7 at the time of the study. She earned a master's degree in Special Education, for which she was also certified. She identified as White Caucasian

**Wylie Elementary**

***Andrea Russo***

Andrea Russo was the principal of Wylie Elementary School, a position she had held for 10 years. She was an assistant principal at another BSD campus for 4 years and before that was an art teacher for 16 years. As of 2014-2015, she had been in education for 30 years. She identified as White Caucasian.

***Nora Velazquez***

Nora Velazquez was a 27-year teaching veteran, all of which have been in early childhood. For the first 20 years of her career, she was a bilingual special education inclusion teacher for children with disabilities. She had been teaching self-contained bilingual kindergarten for 7 years, 3 of which were at Wylie Elementary School. She was a native of Mexico, but identified as Mexican American. Half of her class was Spanish Speaking, ESL.

***Luisa Villarreal***

Luisa Villarreal was a Hispanic female. As of 2014-2015, she had been teaching for 2 years, all in kindergarten at Wylie Elementary. She was bilingual certified. All the students in her class were identified as Spanish Speakers and ELLs.

***Lisa Wilson***

Lisa Wilson identified as a White Caucasian female and had been teaching for 7 years. The 2014-2015 school year was her first year at Wylie and BSD. It was also her first year to teach Kindergarten. Before coming to BSD, she taught 2<sup>nd</sup> grade for 6 years in a neighboring school district.

***Pricilla Harris***

Pricilla Harris had been teaching for 2 years since 2014-2015. She taught 1<sup>st</sup> grade for one year at Wylie before moving to Kindergarten. She identified as White Caucasian.

## **FIELD ENTRY AND PHASES OF INQUIRY:**

### **Networks 1 and 2:**

After securing IRB approval from the university in at the beginning of June, I applied for permission to conduct research through BSDs Department of Research and Evaluation. I received permission to conduct research from the district from June 16, 2014 to July 1, 2015. I began to solicit interviews with the central office staff at the end of August. I conducted my first semi-structured interviews at the end of August and the beginning of September with Kelly Russo and Dr. Rena Hudson, respectively, from the Early Childhood Department. I secured an interview with Dr. Williams through her secretary in mid-November. Trying to find a time to schedule an interview with her in August and September was difficult because of her numerous meetings and responsibilities at the beginning of the school year.

I encountered the same difficulty in trying to schedule interviews with the participants I selected from the Office of SA, Dr. Ochoa and Tina Miller. I was not able to get an interview with them until the Spring semester. It was difficult to track down Tina because she was always on campuses Mondays through Thursdays, and Fridays she was in meetings. I was not able to find time on Dr. Ochoa's calendar until June of 2015. However, although I wanted to conduct these interviews before entering the campuses, the data I needed from the participants in both central office networks did not hinge on any decisive deadline. Again, my goal for interviewing these subjects was to understand how the IPFs were developed, their conceptualizations of the document's purpose, and how the district intended the campuses and teachers to use it. Ultimately, this information had no bearing in helping me see how the teachers were using the documents other than comparing the district's central office data to what I had collected from the campuses.

I also collected data during a district-wide curriculum writing event, which I did not use in the analysis since the information I gathered did not add any meaningful and additional insight for answering the research questions. Since I was an employee of the district, I acted as a *participant as observer*, meaning my “activities, which [were] known to the group, [were] subordinate to the researcher’s role as a participant” (Merriam, 2009, p. 124). Although my job within the district granted me considerable access and entry into the field (more so than would be accessible to an outsider), issues related to bias and attentiveness to the research agenda could have been compromised as my focus was directed to my role as a participant (Yin, 2009). However, since I was a part-time employee, I could negotiate going back and forth between the two roles. This flexibility also allowed me to interview key participants—kindergarten teachers serving as curriculum writers—upon their identification and subsequent consent.

Again, I did not use any of the data I collected during this three-week district-wide curriculum development event. I only mention this occasion in the findings (Chapter 4) to make note of how the district was distributing and messaging the IPFs for district wide implementation. In relation to ANT, I framed the event as an example of *mobilization* (a process that can occur during translation) instigated through the Office of C&I—here functioning in the role of a focal actor. According to Callon (1986) mobilization occurs when “actors [designees from other networks] are first displaced [from their respective networks] and then reassembled at a certain place at a particular time” (p. 218). The intention of the focal actor is to procure alliances favorable for the forging of the new network, which in this study would be the consensual implementation of the IPFs at the campus level. Representatives from the three networks I identified in Illustration 3.A (except for the Office of SA) were present and invited to participate. Exemplary BSD teachers were selected for each content area and grade level to write

exemplary lessons, which were inserted into various units outlined in the IPFs. Principals were also invited to observe these writing cadres as well as attend informative sessions pertaining to the curriculum's development. However, none of the teachers or administrators from the campuses I selected for this study attended the event and, thus, did not have any connection or insight into its goals or purposes.

### **Networks 3a, 3b (Campus Visits):**

The data collection and analysis at each campus occurred within three distinct phases of inquiry: 1) *entry*, 2) *engagement*, and 3) *closure/ analysis*. Phase 1 of entry into the campuses took place after I received IRB approval from the university and permission from BSD. As part of my role as an instructional specialist in BSD, I was assigned campuses to support, all of which belonged to Region 1. So, to minimize the effects of intimidation that my presence as an authoritative figure in the campuses I selected for this study might cause on the teacher participants, I decided to restrict my selection exclusively to schools located in Region 2. First, I contacted Tina Miller from the Office of SA in August to determine which campuses in Region 2 were considered focus or priority because of academic performance on the state's end-of-year exam. After reviewing the list with Tina, she advised me which of these academic focus campuses would likely be most cooperative and willing to do the study. I narrowed the choices down from 7 to 4. Then, I contacted each of these campus's administrators by email at the end of August and September. I only received responses from 2 of the campuses I contacted. Both administrators were interested in participating and gave me permission to contact their kindergarten teachers.

Mary Ann Oxford, the principal at Hernandez, was the first to respond and requested that I come meet the kindergarten team to discuss their interest and willingness

to participate in the study. I met with the Hernandez kindergarten team, which was comprised of four teachers, in mid-September, but the principal chose not to attend. After discussing the purpose and requirements of the study, I distributed consent forms to each teacher. Only two teachers from the team consented to full participation, which included allowing me to conduct classroom observations and semi-structured interviews. While the two other teachers chose not to participate fully, they did grant me permission to audiotape their participation in the team planning meetings.

I did not receive a response from Wylie Elementary until October. After receiving permission from the principal, Andrea Russo, I met with the school's team of four kindergarten teachers to discuss and explain the content of the study and what their participation would entail. All the members from the Wylie kindergarten team signed consent for full participation.

Phase 2, engagement, began at different times at each campus. Since I secured approval with Hernandez as early as September, I begin engagement in October. Phase 2 at Wylie did not begin until mid-November. During the engagement phase, I conducted three different types of data collection. First, at both campuses, I observed and audio taped a team planning meeting with all the kindergarten teachers in attendance. After each meeting and leaving the campus, I began to write reflective notes about what I observed and recorded. Secondly, after the first team planning meeting at both campuses, I set up times to conduct semi-structured interviews with each teacher who gave consent, including the campus administrator. The purpose of the semi-structured interview, which was audio recorded and later transcribed, was to understand the teachers' and the principal's conceptualizations about the IPFs and how it should be used for planning and in relation to concepts and principles pertaining to DAP and CRT. Thirdly, I conducted classroom observations of the teachers practices to document evidence of any teaching

strategies or artifacts that appeared to be effects of the IPFs or the content discussed and shared during the planning meetings. The classroom observations were recorded through field notes since gaining permission to video tape at these campuses was hard to secure from BSD officials.

For each campus, I conducted three observations of team planning meetings interspersed throughout the year--e.g., fall, winter, and spring. I then conducted observations of the teachers' classroom instruction the following week. In addition to these meetings, I also got permission from the campus administrator and the teachers to attend and observe what each campus called a data meeting. During these meetings, the teachers met with their administrators and campus support specialist to discuss where their students were academically and plan interventions. However, since the data I collected from these meetings (which were audio taped and transcribed) was not salient to the usage of the IPFs or the research questions for this study, I did not use this information in the analysis of my findings.

Phase 3, closure and analysis, occurred during the month of May. After reviewing and comparing field notes and analytic memos from the team meeting observations, semi-structured interviews, and classroom observations, I searched for gaps, inconsistencies, or omissions in the data that might require follow-up or further investigation and questioning. Then, I conducted follow-up unstructured interviews with the participants to verify my interpretations and to discuss any questions I or the teacher had about the observations and the IPFs. During this phase, I also conducted member checking to confirm or disconfirm my interpretations (Lincoln & Guba, 1985). The only participant who did not go through a debriefing was Andrea Russo, the principal of Wylie Elementary. She decided to retire after the first semester, and the campus did not have a permanent administrator until April, at which time the study was ending.

## **DATA COLLECTION:**

To strengthen the trustworthiness of the findings in this study, I gathered multiple sources of data (Yin, 2009)—a criterion for ensuring rigor, which I will address at the close of this chapter. Data sources included curriculum artifacts and documents, interviews, and observations (both direct and participatory), which were corroborated and supported by extensive field notes that I took during and immediately after their occurrence. In this section, I will outline how each of these data sources were used to support evidence to address the questions central my study.

### **Curriculum artifacts and documents**

Documents—that is, evidence that has been written down or recorded—are a useful source of data in that they can “provide insights into the processes and workings of the social structures of the modern age” (McCulloch, 2004, p. 12). To understand the enactment of BSDs curriculum, I collected documents that were used for teacher planning and instruction. In addition to the IPFs, this documentation included teachers’ lesson plan templates, supplemental resources used to teach an objective, and administrative memos to teaching staff outlining protocols for compliance and implementation of the campus’s expectations for implementing a curriculum program. McCulloch suggests that such artifacts are inscribed with the intentionality of its author/s and, therefore, are a powerful source for tracing pedagogical beliefs and practices that might not surface in interviews or face-to-face interactions. For scholars using an ANT framework for analysis, these artifacts can be conceptualized as non-human actors that allow their human users to forge an alignment with other actors working within an outside network (Fenwick & Edwards, 2010). Hence the reasoning for gathering the documents is to trace the intentions and values implicit within them, which can

subsequently become more apparent when comparing them with the pedagogical tenets inscribed within the IPFs—the official curriculum framework prescribed by the district.

## **Interviews**

Although it is indeed a rich source of qualitative data, observation can be obscured by the researcher’s bias or be limited to what the subject chooses to disclose. Important clues might not be evident, particularly when “we cannot observe behavior, feelings, or how people interpret the world around them” (Merriam, 2009, p. 88). To mediate this effect, the interview is a useful strategy for making explicit what either seems implicit or not evident at all. For this study, I used a variety of interviewing techniques, which hinged on the context of the type of information that I was trying to solicit. One of these techniques included the semi-structured format, which was useful for understanding the participants’ conceptualizations about the IPFs and other curriculum artifacts. Merriam (2009) suggests that a semi-structured format is appropriate for situations requiring specific information that needs to be collected from all participants yet be flexible enough to allow for everyone’s own perspective to emerge within the data. Table 3.5 highlights questions that I asked of all interviewees—that is, district officials and specialists, campus administrators and specialists, and individual teachers. All participants agreed to have their responses to the interviews audiotaped.

Table 3.5 Core Questions for All Interviewees:

<p>How would you explain the purpose of the IPFs to an outside observer who is not an expert in education?</p> <p>How should you use the IPFs to address the content standards and knowledge and skills that kindergarten students need to be successful in school?</p> <p>How should teachers address the individual and socio-cultural needs of kindergartener students? How would you use the IPFs to address those needs?</p>
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In addition to these anchor questions that pertain to all participants' relationship to the enactment of the IPFs, there are specific interests, responsibilities, and concerns unique to each individual actor or group of actors working within networks highlighted in Illustration 3.A. These questions are categorized in Table 3.6 by the actor for whom they are most appropriate. Each interview was audiotaped and subsequently transcribed for future analysis.

Table 3.6: Questions for Specific Actors or Networks of Actors:

District Officials and Specialists from the Office of C&I (Network 1)
How do you anticipate teachers might use the IPFs as they plan with their respective teams? How do you anticipate the campus principal might interpret the IPFs as they use them to monitor teachers' enactment of the curriculum? What advice would you give teachers and administrators as they use the IPFs? What is the role of the Office of Academics and curriculum content specialists in relation to the enactment of the CRMs at the campus and classroom level?
District Officials and Specialists from the Office of SA (Network 2)
How do teachers in your region use the IPFs? How would you recommend a focus campus utilize the IPFs? Would you give the same recommendation to a high achieving campus? Why?
Campus Administrator or Curriculum Specialist (Networks 3a & b)
How do the kindergarten teachers at your campus use the IPFs to plan instruction? How do you use the IPFs in your role as a campus administrator? Which aspects/ features of the IPFs do you find most helpful in guiding teachers as they plan? Why? If you could design/ incorporate additional features in the IPFs, what would you include? Why?
Kindergarten Teacher (Networks 3a & 3b)
How do you use the IPFs to plan instruction in your classroom? Which aspects/ features of the IPFs do you find most helpful? Why? If you could incorporate additional features in the IPFs, what would you include? Why? Do you think that the topics and objectives addressed in the IPFs effectively explore issues that the children might encounter in their home life or neighborhood? How do you see issues relevant to the lives of the children fitting within the IPFs? How do you try to fit in issues relevant to the lives of the children in your teaching? What are the important understandings that children should glean from the content outlined in the IPFs?

The alternative technique, the unstructured interview, was useful in that it allowed me to deviate into topics that appeared to be salient to both the participant as well as the research questions. Upon observing individual classroom implementation of the IPFs, other questions or wonderings arose, which required additional follow-up with those specific teachers. For example, when the children seemed to have an interesting reaction to the content that was presented during instruction, I could ask the teacher to consider or explain why she thought the class (or an individual child) responded as they did. I also wanted to be able to question the teacher about her instructional decision making and how what she did/ said might have affected/ solicited certain responses. For these type of inquiries, the unstructured interview format proved to be most useful. These interviews were also audiotaped and subsequently transcribed.

### **Observations**

Much of what occurs during teaching or the planning of instruction is contextually bound, warranting careful observation and making note of details through thick description (Yin 2009; Merriam, 2009). Yin (2009) describes two distinct roles that are appropriate for the researcher observer to assume, depending upon the context of the situation at hand. Direct observation requires that the researcher act as detached observer, whereas occasions that necessitate her to assume a hands-on role might require her to be a participant observer. For those events when I needed to be fully engaged in paying attention to participants' interactions, such as during the initial team planning session as the teachers were accessing district and campus generated planning documents, I engaged in direct observation as a method of data collection. At other times, however, I needed to act as a participant observer during which time my role as an insider within the

district required me to interact with participants, such as when I was present at the district-wide summer curriculum planning event.

Field notes—what is written down at the time of observation—are what Merriam (2009) considers “analogous to the interview transcript” (p. 128). Immediately following each observation, I dedicated time away from the field to expand the field notes with more details, leaving space within the margins for analytic memos and personal reflections for when I needed to revisit the data on an on-going basis during and after the collection phase of the study. My goal during the data collection process was that the notes and memos I recorded capture as much detail from the observations as possible—mood, setting, quotes, etc.—so that the reader could recreate the event vicariously through words written down on paper.

## **DATA ANALYSIS**

Merriam (2009) suggests that data analysis occur in tandem with the collection process. Upon reviewing the collection of field notes, interview transcriptions, and observational notes of audio recordings, I applied a constant-comparative methodology (Strauss & Corbin, 1998) in which “[e]ach incident is compared to other incidents at the property or dimensional level for similarities and differences and is grouped or placed into a category” (p.79). I continued with this comparison method throughout the analysis process to uncover any disconfirming evidence that did not fit within already established categories. After an exhaustive review of the data, new categories did emerge and needed to be refined and collapsed into others or eliminated altogether. Merriam (1998) cautions that analysis is not complete until the final categories meet the following criteria: 1) they answer the research question; 2) they are extensive and comprehensive; 3) they are “mutually exclusive” in that each data unit does not fit inside other categories;

4) they are inclusive of the entire data set; and 5) they are “conceptually congruent,” meaning that no category is actually a subset of another—e.g. high stakes accountability and testing are not of equal semantic value; the latter being a characteristic of or subcategory within the former (pp. 183-184).

To manage the copious volumes of field notes that I had gathered during the collection phase, I used a set of *external codes* (Graue & Walsh, 1998) to categorize the various features and nuances of curriculum enactment that I anticipated might appear or emerge in the data. I then used these external codes in tandem with a set of internal codes, “which are issues that come up within [the] reading of the data” (Graue & Walsh, 1998, p. 163). Table 3.7 lists a set of initial external codes related to the constructs identified in the research questions.

Table 3.7: External/Internal Codes

Constructs	External Codes	Internal Codes
<b>High-stakes accountability</b> (Au, 2011)	1. standards 2. testing 3. administrative monitoring 4. standardized	A. bottom-line thinking B. academic rigor/complexity
<b>Curriculum Enactment</b> (Cuban, 1996; Piñar, 2004)	1. prescribed 2. official 3. taught 4. learned 5. tested	C. intimidation D. novice teacher E. experienced teacher F. teacher-centered G. student-centered
<b>Pedagogy</b> (Alexander, Schallert, & Reynolds, 2009) (Bredenkamp & Copple, 2009) (Ladson-Billings, 1994)	1. behaviorism 2. socio-cultural 3. constructivism 4. DAP 5. CRT	H. silo teaching I. integration J. dialogic K. didactic L. time constraints

<b>Actor Networks</b> (Fenwick and Edwards, 2010)	1. translation 2. problematization 3. intersement 4. enrollment 5. mobilization 6. dissent 7. obligatory passage point 8. immutable mobile 9. actor (human) 10. actor (device/ non-human)	
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### **QUALITY AND RIGOR**

Qualitative studies are subjective by nature in that the researcher attempts to make sense of phenomenon as it transpires within the context of real time, uninterrupted by experiments or attempts to control for environmental variables that threaten to interfere (Chilisa, 2012). Despite its deviation from objectivity, qualitative research can nonetheless adhere to criteria of quality, albeit distinct from the measures of validity and reliability. Lincoln and Guba (1985) provide parameters commensurate in rigor to those used in quantitative research, but which are nonetheless appropriate for ascertaining the quality of a qualitative study. These criteria—which include trustworthiness, transferability, dependability, and confirmability—are relevant to the investigation I presented in this dissertation.

### **TRUSTWORTHINESS**

Trustworthiness is achieved through credibility, which can occur through processes such as triangulation of data sources and cross member checking (Chilisa, 2012). The sources of data that informed this study include field notes to corroborate observations, transcriptions of audiotaped interviews, and artifacts, such as memos, the IPFs, and any additional supplementary documents or templates that teachers used to plan their instruction. Triangulation occurred during the analysis stage as I looked for

evidence to confirm matching themes across each of these data sources. To search for disconfirming evidence of the themes and categories that I derived from my on-going, reflexive analysis of the data, I employed a *pattern matching strategy* (Yin, 2009), which involves a case-by-case comparison of my field notes and transcriptions of the observations, interviews and documents gathered throughout the collection process. This strategy is designed to account for any inconsistencies that emerged in the data documenting the teachers' enactment of the district's official curriculum or their administrators' monitoring of their instruction. In addition to triangulation, I also conducted cross member checking whereby participants and interviewees read through the data to confirm or challenge my interpretations of their intentions and conceptualizations. For example, I received the following email correspondence on April, 18, 2015 from Lisa Wilson after she read through my interpretations of her transcripts from the semi-structured interview: "I just read through the excerpt and I think you did a great job verbalizing how I felt my first year in [BSD]."

#### **TRANSFERABILITY**

The extent to which the data generated from a qualitative study can be generalized to other populations and contexts is questionable due to the small sample sizes that characterize this methodology. Large sample sizes are not appropriate in qualitative research, which attempts to understand the contingencies of a socially situated phenomenon rather than generalize those experiences to other contexts that are equally variable and unique. Chilisa (2012) suggests that a reasonable yet alternative solution to this dilemma is to ensure that sampling be purposeful—relevant to the context and events under examination—and that the researcher provide detailed information that describes the context so that the reader can consider how well these findings transfer to a

comparable situation affecting a closely similar sample of participants. The participants who I selected for the study were representatives of a distinct network. One of those networks was the central office staff who designed the IPFs and monitored their enactment. The other networks were individual campuses that were highly subject to surveillance due to their academic performance. Thus, their experiences might have some salience to kindergarten teachers working in similar high-stakes, heavily monitored contexts.

### **DEPENDABILITY**

Criterion related to empirical reliability is yet another measure of quality that is applicable to rigorous quantitative studies yet is primarily elusive within qualitative inquiry. Instead, Lincoln and Guba (1985) suggest qualitative researchers strive for dependability, which hinges on the depth of analysis, such as the use of a constant comparative strategy (Strauss & Corbin, 1998) whereby codes are examined and reexamined on an on-going basis against disconfirming evidence. In short, as Chilisa (2012) explains, “the important question is whether the results are consistent with the data collected” (p. 170). In addition to the constant comparative strategy I referenced in the analysis section of this chapter, I incorporated thick description within the final report that paints a vivid picture of the context of the study through salient details and provides access to participants’ voices and experiences via direct quotes extracted from the transcripts.

### **CONFIRMABILITY**

Considering that qualitative findings hinge on the interpretation of events as observed and reported by the researcher, objectivity can be problematic, particularly in terms of bias. Nevertheless, qualitative researchers are obligated to show confirmability

by keeping track of and providing access to how and when data was collected as well as being transparent with regards to how findings were established. This this process, which Yin (2009) likens to a chain of evidence, is achievable if the researcher has made provisions to be as organized, accurate, and explicit as possible before conducting the study. I acted with this criterion in mind by dating all transcripts, documents, field notes and analytic memos I collected during field work and kept them systematized chronologically within a spiral folder with pockets. Finally, to address bias, I allowed participants to review my interpretations and findings so that they could determine if what I reported accurately depicted their conceptualization of the curriculum enactment process under investigation.

## **ETHICS AND POSITIONALITY**

Ultimately, this study is not just about the enactment of curriculum among various teams of kindergarten teachers undergoing surveillance and monitoring by their administrators who are acutely aware their respective campus's achievement status in a high-stakes accountability system. Although my intent is to understand this dilemma through the lens of ANT, this study is nonetheless about the lives of people committed to educating young children and, therefore, must adhere to the most stringent criteria with respect to ethics and confidentiality. To protect the identity of those educators who consent to take part in this study, each participant was assigned a pseudonym to use in place of their actual name.

Moreover, in terms of my positionality as the researcher for this study, two additional dilemmas emerge that compromise ethics and the trustworthiness of the findings. First, in relation to my authoritative status as a curriculum specialist within the district, the teachers may have been reluctant to share their opinions and perspectives on

the districts IPFs. Second, my social-constructivist philosophy of teaching might have potentially biased me in favor of student-centered instruction. Nevertheless, since I did not want to portray any of the participants in a negative light, I encouraged them to read through the edited transcripts and passages selected for inclusion within the finished study to locate any data they did not wish for me to include, or to at least make necessary changes that would more accurately voice their true intentionality. Finally, with respect to all records and data—e.g., transcripts, audiotapes, video footage, memos, field notes—I procured a lockable briefcase (and a thumb drive for computer files) to store in a lock and key filing cabinet where these files were protected when they were not being accessed or analyzed.

## Chapter 4: Findings

### INTRODUCTION

Before outlining a roadmap for this chapter and the analysis of the findings that emerged from the study, I highlight a small segment from an interview I conducted with Dr. Diane Williams (pseudonym), the Associate Superintendent of Curriculum and Instruction for the Balcones School District (BSD). In the excerpt below, she discussed her reaction to feedback provided by a group of outside consultants who were observing the implementation of the district-wide dual language initiative in various classrooms. The curriculum to which Dr. Williams was referring to (and the subject of criticism from the outside consultants) indirectly implicates the district's Instructional Planning Frameworks (IPFs), which are the documents teachers used to plan their instruction.

For example, the Biliteracy Consortium (pseudonym) and the whole dual language thing. They've seen a lot of worksheets out and about too and so they were criticizing the curriculum and so we had to sit down and say, "That's not our curriculum. That did not come from us. We do not promote worksheets. (Interview, November 21, 2014).

This commentary addresses a noteworthy and equally perplexing observation—one which I have witnessed frequently as a district support specialist who both writes the curriculum and monitors its delivery: That is, the IPFs were not producing the desired outcomes they were designed to effect. Rather than encourage teams of teachers to plan in collaboration with each other and thereby interrogate the curriculum goals outlined in the documents in relation to student needs and interests, the IPFs did not seem to curtail the excessive use of worksheets and other similar teacher directed and prescriptive practices.

The implications of this phenomenon are salient to the current study because many of the observations made by the group of consultants and Dr. Williams were

conducted in kindergarten classrooms where, based on the standards of best practices upheld within the community of ECE (e.g., DAP), the use of worksheets and similar decontextualized learning experiences are highly discouraged. Unfortunately, the types of practices that were purportedly occurring in these BSD kindergarten classrooms seem to mirror a national trend that is documented in two large scale quantitative studies (e.g., Bowden and Desimone, 2014; Bassok, Latham, and Rorem, 2016), which compared survey data from the Early Childhood Longitudinal Study (ECLS-K) of kindergarten cohorts from 1998 to 2006. The findings from both studies suggest that hallmarks of child-centered instruction—play, artistic expression, free-exploration—that at one time characterized the traditional kindergarten classroom now appear less frequently as worksheets, direct instruction, and the introduction of more rigorous content—features associated with formal elementary school curriculum—become increasingly prominent in the wake of accountability ratings and high stakes testing initiatives. Although these changes seem to be more acute within the past decade after the passage of No Child Left Behind (NCLB), the transformation has been steadily taking shape since the beginning of the 20<sup>th</sup> century as, for the sake of readying children for the rigors of elementary school, the public-school system began to absorb kindergarten and restructure it to the extent that it no longer retained the appearances of the original model envisioned by Froebel (Fuller 2008, Cuban, 1992).

To be clear, my research does not attempt to link this trend occurring in kindergarten classrooms on a national scale to the preponderance of worksheets in BSD. Rather, this study seeks to understand how such practices could transpire within the context of real-time decision-making as it occurs during teacher planning and instructional implementation in actual kindergarten classrooms. In short, I am trying to make sense of how the apparent mismatch in implementation of a document (the IPFs)

designed to deter such inappropriate practices is ineffective in doing so. Operating under the assumption that the enactment of curriculum transpires beyond the walls of the individual classroom, I am using actor network theory ANT (Latour, 1992) as a methodological lens to trace the effects of “inscribed devices” (the IPFs), which convey the intentionality of BSD curriculum officials seeking to impact instruction from afar to maintain the district’s compliance with state mandated accountability sanctions. Hence, I am asking two questions that focus on how the actors who make up the network seeking to implement the IPFs conceptualize this document to understand why it produces the effects presented in this findings section of the dissertation. These questions are:

1. How are each of the individual actor networks who are bound together within a tenuous assemblage focused on the implementation of the IPFs conceptualizing this document in relation to their respective beliefs, responsibilities, instructional goals, and practices?
2. In what way does the kindergarten teachers’ conceptualization of the IPFs impact their practices and how they frame their role as instructors who are to meet the socio-cultural, individual student needs as expressed in DAP while under the surveillance of their campus administrator or other district level officials and curriculum specialists?

The data I gathered in this case study point to a series of events transpiring during the conceptualization and development phase of the IPFs that would eventually instantiate practices dichotomous to the curriculum’s pedagogical underpinnings and intentions. In this chapter, I discuss how the competing discourses related to strict adherence to state standards and novice teachers’ lack of expertise that circulated among district officials who participated in or contributed to the production of the IPFs would eventually undermine the efficacious intentions guiding the documents’ development. Moreover, it was during this production process when an assemblage of supporting ancillary documents were appended to the IPFs, which, although helpful and welcomed by users, diverted attention away from the constructivist principles inscribed by Office of

C&I officials in the documents. I then continue the discussion of findings by outlining the often-confounding effects on planning and instruction that occurred as teachers and administrators located at two of the district's low performing campuses began to populate the documents with their own intentionality and conceptualization of what teaching kindergarten should entail.

In my analysis of these findings, I draw upon the work of scholars (e.g., Callon, 1986, Latour, 2005, Shinga, 2007, Fenwick & Edwards, 2010) who use Actor Network Theory (ANT) as a way to make sense of how alliances (such as the union of teachers, administrators, and district officials enacting BSD's official curriculum) can form or dissolve as various entities (both human and non-human) interact during a series of maneuvers (or acts of translation) as they encode their identities and wills on to each other in order to accomplish a shared goal. The aim of this analysis is to understand the effects and contingencies of this "network development" process in the way it impacted the instructional decision making and practices of kindergarten teachers located at two underperforming campuses in BSD.

This chapter, the first in a two-part series of findings, attempts to frame the historical and developmental evolution of BSD's Office of C&I's efforts to design and deploy the IPFs as it progresses through four distinct, yet fluid stages of translation—problematization, interessement, enrollment, and mobilization. Translation is a process recognized in actor network theory (ANT) whereby a focal actor—either a group or an individual—attempts to secure an alliance with other actors to procure a desired outcome or an effect of some kind (Munro, 2009). The act of translation under investigation in this study hinges on the BSD curriculum department's efforts to develop a document that would impact teachers' planning and instruction and yet allow administrators and the teachers to make sense of, interpret, and implement the state mandated curriculum

standards—e.g., the Texas Essential Knowledge and Skills (TEKS)—in a way that honors constructivist philosophies and professional decision making.

Problematization occurs “as the first stage in a series of actions by which an actor makes itself indispensable to others” (Shinga, 2007, p. 41). This effort on the part of the focal actor is not a certain outcome as there are outside entities that would entice other actors to join forces to secure competing interests. For the actors (e.g., Office of C&I) who developed the IPFs, what is at stake is the enactment of an official curriculum that will comply with both NCLB regulations and yet meet the academic, individual, and socio-cultural needs of students. Based on what has been found in other policy studies ((McDermott, 2007; Sunderman, 2010, & Shaul & Ganson 2013) the competition involved would likely encourage less constructivist alternatives (e.g., rote-learning and excessive drilling of skill practice etc.) to achieving compliance with high stakes mandates.

Closely linked to, yet also distinct from the act of problematization is the process of interessement—the subsequent stage within translation at which point the focal actor assesses the interests of the other actors (e.g., other district administrators, campus principals, teachers, etc.) he/she/ it wishes to align with, thereby establishing parameters that would deter those actors from forming alliances with competing liaisons outside the network. It is during interessement when non-human devices (documents, technology, etc.) are brought into the fold to help establish a secure link—an obligatory passage point—through which the other actors can successfully fulfill the goal of the focal actor. Hence, in relation to their usage in BSD, I am framing the IPFs as an example of such a device, which would contain elements (e.g., a scope and sequence of mandated state standards, correlations to assessments, lesson suggestions, etc.) that would allow teachers, principals, and the district officials who supervise these actants to perform their

obligations to curriculum alignment and high stakes mandates in a manner that complies with the curriculum department's commitment to constructivist pedagogy.

Securing a tight alignment of forces within a network to achieve a common goal is never a certain outcome. The focal actor must act both diligently and proactively to motivate each constituent actor to continue to fulfill what has been defined as the network's objective. To that end, enrollment occurs as actors identified in the previous interessement stage are officially inscribed (their roles in the network being defined) and a system is set in place to implement the goals the focal actor deemed efficacious to fulfill. For BSD, enrollment occurred at the point in the district's history when the IPFs became recognized as the official curriculum—the documents to which other planning guides or lesson plans developed by teachers, principals, or other district officials would be subordinate. In other words, teachers would be expected to align their planning documents and instructional timetables to the official IPFs. Likewise, administrators and supervisors would be expected to consult the IPFs as they coach teachers and monitor their instructional practices.

Considering that such interrelations within the network and the actions they effect are precarious—that is, they are always at risk of becoming obsolete and non-functioning—an effort to keep the alignment intact—a sort of mobilization—is of critical importance. This act of mobilization, the final stage of the translation process, occurs as delegates representing the interests of key actors within the alliance are deployed to go between boundaries to maintain and stabilize the procured union. For BSD, the process of mobilization took shape in the form of two distinct organizational deployments. At the administrative level, one deployment entailed assuring that central office specialists within the various content departments sent out to campuses were speaking the same message to the end users of the curriculum documents—the teachers and principals. At a

grassroots level, mobilization occurred as a cohort of expert teachers selected by their respective campus administrators were convened during the summer to receive professional development training conducted by district curriculum officials on best practices related to the whole child and then write supporting exemplary lessons aligned to the training objectives and the IPFs. A summary of the genealogy of the IPFs and the process of translation they underwent is provided in Appendix B.

While translation is a useful concept that ANT scholars use to understand how networks web together or fall apart, the actors themselves (both human and non-human) play a pivotal role in orchestrating this developmental/ deconstructive process. However, too consider how non-human actors could exert the same power of influence that humans are capable of in this work of network formation/ deformation, it is important to clarify ANT's treatment of agency. As Munro (2009) points out, ANT avoids dealing with "any talk of entities that exert force in their own right" (p. 127). What he means is that although ANT does acknowledge material devices' potentiality to produce effects, it is careful not to attribute these things with intentionality. That is, material entities do not act with consciousness as humans do. Instead, these non-human devices are granted agency through inscriptions and their associations with other actors. In this way, the IPFs can act autonomously, not willfully, to subjectify teachers' and administrators' identities/roles in the curriculum enactment process. This is an important distinction to make before attempting to trace the genealogy of the IPFs and how they act upon those actors to whom they attach/ detach during this process.

Hence, this chapter seeks to answer the first research question that would provide evidence as to how those actors responsible for the development and oversight of the IPFs conceptualize the document in relation to their respective roles. To do this, the remainder of this chapter presents findings taken from interview data of key district level

officials who had a hand in developing the kindergarten IPFs (as well as those who were instrumental in ensuring the fidelity of their implementation at the campus level) to show how the tenuous actor network anchored by the IPFs progressed through the process of translation. I should mention that the developers of the IPFs and administrative personnel who monitor its implementation make up only part of the network of actors seeking to enact the official curriculum as outlined in the document.

Chapter 5 continues to address the first research question of interest in this dissertation by looking at the interessement, enrolment, and mobilization of the remaining constituents within the network under investigation who are integral to the execution and delivery of the IPGs. These actors are the kindergarten teachers and their respective campus administrators who are monitored closely by BSD district officials to ensure compliance with state accountability sanctions. It then concludes the findings section by answering the second research question of interest to the investigation whereby I present data that follows the actions of the kindergarten teachers and the principals as they utilize the IPFs in ways that ultimately undermine the intentions of the focal actor and thereby produce a series of unintended effects, some of which contradict the developmentally appropriate practices recognized within the community of Early Childhood Education (ECE) as beneficial to the individual and socio-cultural needs of the whole child.

## **AN HISTORICAL OVERVIEW**

Although the IPFs that I am analyzing for the purposes of this study were inscribed as the official district curriculum in BSD for the 2014-2015 school year, they are the product of a twelve-year evolutionary trajectory of development and implementation. When analyzing documents as data for empirical purposes, McColloch

(2004) recommends that the researcher interpret them “in light of specific factors involved in their production and context, such as personal, social, political, and historical relationships” (p. 4). It is with respect to the latter contextual element—the historical background—that I begin my analysis to provide some insight into how the current IPFs were a response to earlier attempts by the BSD curriculum department to align the district with the state’s model of accountability, which essentially hinges on student passing rates on the end-of-year test. Some of the historical information I provide in this section comes from my personal involvement in the development process that led up to the current IPFs. My tenure as an instructional specialist and curriculum writer coincided with the initiation of the district’s tightened standards alignment and subsequent document production projects that began twelve years earlier. In addition to my background knowledge of and direct involvement with the various documents mentioned here, I support and corroborate this information with interview data from the key administrators who took on more of a leadership role in the development process.

One of the district leaders I interviewed is Dr. Margaret Ochoa—the Associate Superintendent for Region 2 in the Office of SA in BSD. In the excerpt below, Dr. Ochoa provided a district level perspective on the timeline and summary of the various ways in which instructional planning and alignment documents, including the current iteration of IPFs, have been used by teachers and administrators in the district over the twelve-year history of accountability and high-stakes monitoring. Dr. Ochoa’s 32-year tenure as an educator in BSD—first as a former kindergarten and first-grade teacher, then as a campus administrator, and eventually in her current supervisory role as a district official—gave her some perspective and credibility to make the following observation:

Because our state has pretty clearly defined standards that students need to master, our district has had a long history of attempting to produce curriculum

that guides our administrators, and most importantly our teachers, in understanding how to lay out those standards to be taught for the year. The current IPFs are the latest iteration. We go through different periods in the district where sometimes at certain times in our history; people have been told they need to teach that very explicitly and in another time it's more of a guide. It depends, generally, because we have a system that's performance based empowerment that a campus has more leeway to make those kind of decisions based on how their performance is with the children (Interview, June, 2, 2015).

Dr. Ochoa shed light here on two important issues involved in the historical implementation of the different instructional planning documents used in BSD. One of those issues relates to how teachers and administrators should interpret the content within these documents—either loosely (e.g., use them as a framework and guide for teaching and keeping everyone accountable to the vertical and horizontal alignment of requisite content standards)—or by the book (e.g., follow them like a script or as a checklist to monitor and regulate instructional delivery.) The second issue that Dr. Ochoa alluded to is the degree of fidelity to which teachers and administrators at their respective campuses should adhere to the scope and sequence timelines and content standards specified on the district's official curriculum documents. As Dr. Ochoa pointed out, compliance has historically been contingent upon the campus' academic accountability ratings designated by the state. If the campus maintained exemplary or adequate academic standing on the test, there was more leeway and freedom to how closely its teachers should follow the curriculum. If the school was close to or designated as low performing according to the state's probationary ranking, implementation of the curriculum was closely monitored and enforced by officials (the campus advisory team) from the Region 2 Office of SA.

. To better understand the variation of expectations for implementation that Dr. Ochoa described in her commentary, I highlight some of the historical background that underscored the development of the instructional planning and alignment guides, which preceded the revised deployment of IPFs. Again, the source of the information that is

forthcoming is based on my experiences in being involved in the production and implementation of the various iterations of these documents. In addition to my personal account of the development process and its history, I also analyze and describe sample layouts of these various documents. According to Prior (2004), the documents themselves help to “make ‘things’ visible and traceable” (p. 87). The “things” that are of importance to this analysis are the features of the curriculum and the intentionality of the standards that the documents were designed to convey to the users—the teachers and administrators.

### **Before the IPFs**

The first iteration of the IPFs, which were identified by a different name at that time, began in the fall of the 2002-2003 school year. The former director of curriculum responsible for the conceptualization and subsequent development of these documents lead and coordinated a team of district level curriculum leaders and specialists to conduct a rigorous analysis of the vertical and horizontal alignment of the state’s content standards K-12. The purpose of this inspection was to locate gaps within the state’s rendition of standards where certain knowledge and skills did not have a requisite or foundational counterpart in the grade below and above. So, by eliminating any possibility of misalignment within a concept domain, students in grades 3 through 12 would thereby be sufficiently prepared to take the end-of-year test. However, the challenge for the team of developers and writers who were assigned the task of rectifying the alignment discrepancies within the standards was to make this knowledge apparent to the teachers and administrators who would need to implement the reconceptualized version of the curriculum to ensure that all students within the district would be well prepared to meet the state’s accountability measures.

One of the final products of this initial endeavor—a sample 1<sup>st</sup> grade math planning guide—is shown in Figure 4.A. This document provides some insight into what district leaders in BSD considered to be of primary importance as its teachers and administrators attended to the delivery and enactment of the curriculum. Once again, as Prior (2004) reminds those who use documents in social research, “the organization of things is anchored in writing as well as in three-dimensional space” (p.70). The point being that beyond actual words, the organizational and structural features within the document—e.g., where various elements within the template are located and how they are referenced—can convey (for purposes of analysis) what is and is not of importance from the authors’ point of view in terms of how the intended users are supposed to implement the curriculum.

The sample document showcased in Appendix C follows a prescribed template, which other content areas in addition to mathematics were directed to use to guide teachers in planning their instructional content over the course of the school year. When read from left-to-right, the reader’s eye is immediately drawn to a series of columns labeled respectively as “matrix number”, “content stand”, “TEKS Knowledge and Skill”, “student expectation”, and “TAKS objective”—which BSD district officials deemed as the “what” or “nuts and bolts” of the curriculum or, more specifically, the content upon which all instruction should hinge. Again, the prominence and importance of these state and local standards are demarcated by their location on the template—the left-hand side—which is where users will begin to read as they analyze the document moving in a top-to-bottom, left-to right direction.

Located in the far-left column of the planning template is a special code or enumeration system labeled as matrix numbers. These numbers are assigned to a corresponding content strand, knowledge and skill statement, and student expectation (all

located in the adjacent columns to the right) specified and authored by the state. BSD curriculum officials recoded these state standards during the process of its vertical realignment project. In addition to the state’s knowledge and skills and student expectations, BISS district officials also authored and inserted its own local objectives, all of which were housed in a separate document that was referenced as the Curriculum Matrix. Note that whereas the state’s knowledge and skill statements and their respective student expectations are situated in rows within separate columns, the local objectives developed by the team of BSD curriculum specialists were collapsed into one entire column that spans the length of the knowledge and skill statement and corresponding student expectation columns. Also, at the end of each state designated student expectation, there is a matching code—the numeral representing the corresponding knowledge and skill, and the capital letter signifying the expectation’s designated order in relation to the knowledge and skill statement. BSD local objectives are not assigned specific numbers, but are designated as being separate from the state’s knowledge and skill expectations by the capital (L), which immediately precedes the objective. The Director of Curriculum intended for administrators, specialists, and teachers to use this matrix guide when they wanted to see how the student outcomes they were teaching at their grade level were aligned vertically to the grade levels above and below. Hence, the teacher would be able to refer to the matrix document to think about how to adjust the instructional content they were teaching to meet the conceptual level of the student who was performing above or below the targeted grade-level outcome.

Also of importance in terms of its relationship to the state’s and district’s list of standards on the planning document is the reference to what is labeled in the fifth column to the left, “TAKS Objective.” Designated as by single numeral, this objective specifies under which strand all the knowledge and skills and student expectations it is linked to in

the adjacent columns to the right are organized on the state's high stakes, end-of-year test. In other words, test objectives are classified by content strand—e.g., geometry, measurement, number and operations within the domain of mathematics. Those knowledge and skill and corresponding student expectations that are directly assessed on the state exam are highlighted on the document in bold print, thus directing the reader to their importance when making instructional decisions for content delivery.

The other columns to the right of the standards and correlated test objectives on the planning document template give more clarification and possible suggestions as to how to teach the content in relation to the targeted student expectations. In the middle column, there is reference to which state adopted resources and textbook basals teachers can consult or use for possible lesson plans that would address the content standards highlighted to the left. Directly to the right of this column is the suggested pacing guide. Although this pacing is flexible, the expectation is that the teacher will be able to incorporate and address all the student objectives highlighted to the left of that column within that designated time frame. However, a teacher who has not looked ahead or studied the documents thoroughly beforehand may not notice that while the state and local objectives will indeed be taught during that specified pacing period, each of them will spiral back into the instructional cycle at another point in time during the school year. Hence, during the planning process, teachers might not be clear as to what degree their students will be able to understand or master the specified knowledge and skills, which are end-of-year goals. The only way that the teacher would be able to ascertain as to what level she might anticipate her students will meet the targeted standards is by consulting the suggestions that are provided under the student work products and assessment columns located on the right side of the document. The teaching notes located in the far-right column also give some clarification as to the content focus within the

lessons referenced in the suggested resources section, but there is no direct script or day-by-day outline of how and when to teach specific concepts and what materials to use. This aspect of the teaching and planning process is left to the judgment of the teacher so that she may exercise some autonomy as a professional decision-maker.

When analyzing the format and content within this first of multiple iterations of similar planning documents, two issues emerge that are central to this investigation on how actors within a network focused on the enactment of a kindergarten curriculum conceptualize their respective roles and practices in this process. First, a dilemma for kindergarten teachers is the scope of the planning process that the teacher must attend to while mapping out her entire instructional day. The document highlighted in Appendix C is only one within a series of similar grade level guides. There are five other content areas that the kindergarten teachers must give equal attention to when taking into consideration how to integrate the curriculum in a way that is meaningful and engaging to the children. The time and effort necessary to read through these documents, and then plan for meaningful, integrated instruction, presents a challenge to teachers (Richards, 2012).

Secondly, considering that these documents were designated as the official curriculum by which teachers will plan their instruction and from which administrators will monitor its delivery, users with little understanding of or appreciation for the role and importance of attending to students' background knowledge as well their individual and social cultural needs might have overlooked this important dimension of the teaching process altogether. Quite possibly, only skilled teachers who operated under the epistemological paradigm of student centered and culturally relevant instruction would know how to incorporate these less defined aspects of the teaching process into the delivery of the district's defined curriculum (Brown & Lee, 2012). The content included in the document and how it is organized within the planning template gives no indication

of or significance to the place that individual, developmental, and cultural needs of the child have in the teaching of young children. In sum, based on the scope and prominent display of the state and district standards on BSD's initial planning guide, kindergarten teachers were positioned as users of the document to frame their instructional delivery in terms of a set of predetermined knowledge and skills rather than a paradigm that is mindful and intentional to meeting children's individual and social cultural needs.

This historical analysis of the planning guide documents that preceded the current iteration of BSD's IPFs provides only partial insight into the dilemma that Dr. Williams encountered when she took lead of the curriculum department. While my purpose for looking back into the development of IPFs was "to find out as much as possible about the document from internal evidence elicited from the text itself," McCullough (2004) insists that "it is no less important to discover how and why it was produced and how it was received" (p. 6). What is more, "documents need also to be understood with reference to their author/s and to what they were seeking to achieve, in so far as this can be known" (p. 6). Hence, what follows in this section is an attempt to make sense of what Dr. Williams had in mind with the creation of the new IPFs and how her vision resonated as well as conflicted with expectations from teachers and administrators in the district who had now developed an expectation for following a teaching scope and sequence that complied with state accountability measures while also giving more specific guidance on how to plan and monitor that instruction accordingly.

### **The Current IPFs**

Dr. Williams became the director of the BSD curriculum department in the summer of the 2010 school year at a time when a new superintendent was attempting to make changes within the district, one of which was a subsequent redesign of the

curriculum. This change would come upon the heels of what had eventually become an unmitigated production of documents to supplement and give more guidance on how to implement the district's official curriculum guides. After two years of implementation (2002-2004), the first iteration of BISD curriculum guides (which I analyzed in the previous section) underwent subsequent revisions based on user feedback from both teachers and administrators. In addition to realigning some of the standards and tweaking the scope and sequence of knowledge and skills, the curriculum department began to develop supplemental documents that would provide more specificity for how to teach the standards at a deeper level and with increased rigor. Each content area within the curriculum department developed its own rendition of what was essentially a daily set of lesson plans mapping out instruction for the entire year.

Appendix D showcases a sample layout of one of these day-by-day yearly lesson plans, which content specialists from the Office of C&I (including me in my role as an ECE specialist) were responsible for developing for kindergarten mathematics. Although these plans do not contain a script that specify what and when to teach specific content and how to relay that information to children, they do suggest which materials and resources to use and how to use them. Some of the materials and resources—mostly textbooks and basal teacher guides—did indeed include scripted language that indicated what the teacher should say and how students would likely respond. Nevertheless, this eventual digression into more scripted lesson plans is what Dr. Williams intended to terminate during her tenure as director of curriculum. The production of these daily lesson plans and extensions to the original curriculum planning guides took place during the 2003-2004 school year and continued up until Dr. Williams became the director of curriculum in 2010. In the following excerpt, she explained the short turn around and expectations for production that limited the degree of change she could affect:

Just a little background to what you know from being in the district but in June 4 years ago, the then CEO decided to rewrite the curriculum guides and so that started in June, I was hired July 1 and we had to roll out in August. It was fast and furious that first summer because we didn't have the curriculum writing teams to the extent that we do now (Interview, November 21, 2014).

Dr. Williams went on to emphatically explain how she was steadfast in insisting that the development of scripted curriculum was not in the best interest of teachers or students:

Before my time in the IPFs, and that was a hard transition when I got here because there were still folks who wanted daily lesson plans and weekly assessments and so early on, I'd probably just been here a month and I sat down with the CEO and I said, if I misunderstood, I'll submit my resignation now, but I did not come here to do that kind of work. It's not what I believe in. I can't do it. It's wrong for teachers but most importantly it's wrong for kids to think at central office we can write daily lesson plans and weekly assessments, oh my gosh (Interview, November 21, 2014).

Change eventually came two years into Dr. William's tenure as these lesson plans were phased out of production in the curriculum department by the 2012 school year. In short, Dr. Williams was confronted by a critical juncture in the district's development and deployment of curriculum documents whereby teachers and administrators had already become acclimated to a mandated and tightly prescriptive curriculum. Her goal was therefore twofold whereby she would attempt to reverse a precedent for lock step standardization while simultaneously develop a curriculum that would allow BSD to continue to comply under the regulations specified by the state's educational accountability plan. Here at this juncture is where translation—a central feature of ANT—is useful for understanding how the current iteration of IPFs would eventually evolve into a cumbersome document and subsequently be used and interpreted in ways that, while not intended, were contrary to constructivist teaching and the tenets of DAP by a team of kindergarten teachers and administrators at two BSD under-performing campuses. The following section outlines and follows Dr. Williams, the Office of C&I, and the IPFs through these moments of translation.

## **TRANSLATION**

The process of translation, as defined by ANT, allows the social researcher to make sense of how two disparate goals could coexist under the umbrella of a unified front—a network of district officials, administrators and teachers in BSD—committed to the implementation of Dr. William’s new vision for curriculum alignment. This process could prove to be either a problematic, contentious project or an opportunity to manage the divergent agendas involved to make them interdependent—fulfilling a common goal that would somehow serve and placate the different needs and interests of the various constituents within this network. Shiga (2007) explains that when conceptualized within the framework of ANT, the process of translation can be metaphorically understood as “the manner in which entities’ interests, goals, or desires are represented, simplified, and transformed in the production and mobilization of artifacts” (p. 40). For purposes of analysis, I am therefore framing the IPFs as a conduit of BSD’s efforts and intentions to align its teachers, administrators, and curriculum to state accountability measures under the auspices of constructivism. For Dr. Williams to successfully realize the changes for the district she envisioned could happen, she needed to secure support and compliance from both the teachers who would implement the curriculum and the administrators and officials who would monitor its enactment. According to Dr. Williams, trying to win support from each of these constituencies—those who make up the actor network for the implementation of the IPFs (e.g., the teachers, principals, and district officials from both the Office of C&I and the Office of SA)—was not an easy endeavor.

## **Problematization**

In the series of excerpts that follow, Dr. Williams identified potential allies and what their concerns and interests are regarding the implementation of the IPFs. First, based on her interaction with district teachers, she acknowledged the struggle they

underwent as they tried to reconcile how they knew they should teach with respect to best practices as opposed to the type of didactic instruction they felt compelled to perform:

Because when we work with the [Curriculum Development Task Force] teachers, they say to us, “We want to teach this way and we know this is the way to teach.” But they feel pressured. I heard something at a conference recently, maybe it was Texas ASCD, one of the key notes speakers said teachers are incentivized to teach the test (Interview, November 21, 2014).

The test to which Dr. Williams was referring was the high stakes, end-of-year exam that a certain percentage of students must pass for a school to meet the state’s accountability standard. The intense pressure that these teachers felt to ensure their students were prepared for this test is a trend that was well documented in studies that have examined the impact of high stakes testing on curriculum decision making (Boohmer-Jennings, 2005; Hoffman et al., 2002). Dr. Williams went on to explain that because of the emphasis placed on preparing their students for the test, teachers “*whether it’s self-imposed or not...feel pressured to teach in a certain way and that is more I think direct instruction.*” To be clear, although the stakes were higher for teachers assigned to the grade levels directly tested (grades 3 and above), the burden of preparing children to take these types of standardized tests and the instructional practices (e.g., direct instruction) this pressure encouraged teachers to adopt is increasingly moving into kindergarten and preschool (Stipek, 2006; Hatch, 2005). In kindergarten classrooms, the impacts take the form of excessive worksheets and the elimination or reduction of play and recess (Bowden & Desimone, 2014; Bassok et al., 2016).

What Dr. Williams wanted to accomplish through the implementation of the IPFs was to provide teachers a document that would give them flexibility and a rationale to be able to teach in a more constructivist way. She was aware, however, that achieving such a goal was not without its challenges:

Personally, I'm convinced that inquiry-based instruction is the instruction that's going to lead students to life-long success and achievement, but it's a big shift. It's a big shift and so we have to know that [BSD] educators are really willing to commit to it if there could be an achievement dip because you know our scores are splashed all over the front page of [name of the city's newspaper] and that's hard for principals and hard for our colleagues in the [Office of SA], it's hard for teachers, you know? (Interview, November 21, 2014)

Hence, the main obstacle that Dr. Williams had to consider as she developed an instructional planning document that would align to all stakeholders' interests was the threat of an "achievement dip" occurring in BSD. According to Michael Fullan (2001), this phenomenon (the achievement dip as he calls it) occurs when there is a dip in student academic performance due to any number of instructional issues—lack of fidelity, resources, etc.—that stem from the steep learning curve involved in implementing a new curriculum.

In the day and age of school accountability, however, there is little tolerance or margin for poor performance. This is a risk that, as Dr. Williams acknowledged, jeopardizes not only the reputation and job of teachers but also the administrators—both campus and district level—who monitor and therefore take responsibility for schools' performance. The bad publicity that would fall on the backs of district level officials due to any dip in achievement in BSD was a dilemma that Dr. Williams explained she had to address and make concessions for while at the same time hold steadfastly to her agenda to promote the integrity of the constructivist instructional planning model she envisioned for the district:

It was a battle quite honestly between the academic side of the house and the [Office of SA] side of the house, and so we had to do a lot of negotiation in there to come to some agreements moving forward. I feel like we've made a lot of headway, just the start of my 5th year and I think that was one of the hills that I was willing to stand on, like I didn't come here to do that work, it's wrong, wrong for kids. We have those different opinions about instruction. (Interview, November 21, 2014)

The negotiation that Dr. Williams said she engaged in with the Office of SA (those responsible for monitoring school performance) was an example of a key movement ANT scholars would identify as problematization—a process of translation whereby a focal actor has “determined a set of actors and defined their identities in such a way as to establish themselves as an obligatory passage point in the network of relationships they were building” (Callon, 1986). The actors identified—officials within the Office of SA—had at stake their reputation, which hinged on maintaining BSD schools and students within the margin of acceptable academic performance as measured by state standards. Dr. Williams, serving as the spokesperson for the curriculum department, had to present her agenda and goals in a convincing manner to establish herself as the focal actor (the obligatory passage point) through which all other actors (teachers, administrators, etc.) would operate to secure a unified network focused on the successful implementation of the IPFs. In addition to fulfilling her own vision for the district, Dr. Williams was also fully aware of and sympathetic to the level of scrutiny and embarrassment the administrators and specialist within the schools’ office would experience should the IPFs not produce the desired outcomes of achievement as measured by the state test and its accountability markers: “I don’t mean to disparage my colleagues at all because it’s not my name that’s on the ... or my head on the chopping block when schools go down.” (Interview, November 21, 2014). Again, the penalty for not meeting academic performance standards was a strong deterrent to persuading district officials to take a risk on adopting a less prescriptive version of the IPFs.

To summarize what has transpired so far, Dr. Williams identified and attempted to convince key actors (the teachers and administrators who work outside the Office of C&I in BSD) to embrace and commit to a new, less prescriptive process for instructional planning that would allow the district to remain in compliance with state accountability

standards. This is the first step—problematization—in the act of translation as it pertains to the implementation of the IPFs. The subsequent challenge for Dr. Williams and the Office of C&I was to “build devices which can be placed between them [the other actors in the network] and all other entities who want to define their identities otherwise” (p. 9). Since there were agendas (e.g., teaching to the state test, direct instruction, etc.) within the district that are not aligned to the same constructivist philosophies espoused by the Office of C&I and Dr. Williams, preparing for these actors’ dissension from the network was a necessary step for the developers and writers of the IPFs (the focal actor) to undergo. In other words, the IPF development team had to insert itself between the interests of other actors—the teachers, administrators, and district officials who would use the document. This “interessement”—an act whereby the focal actor inserts itself between other actors and instantiates its own interests as the primary goal of the actor network—is the next movement involved in the process of translation.

### **Interessement**

The IPFs, albeit non-human, nevertheless played an integral role within the network of the other human actors focused on the implementation of the district’s official curriculum. The document allowed the curriculum department (being defined here as the focal actor) to ascribe to the other actors “an identity, interests, a role to play, a course of action to follow, and projects to carry out” (Callon, 1986, p. 24). In this way, it served as an intermediary, providing a roadmap whereby the teachers who planned with the document and the administrators who might use it to monitor the instruction were given direction as to how they should perform their respective roles. In short, the identities and the interests that were established at the moment of problematization for the actors who

operated outside the department of curriculum have now been operationalized during the development and the deployment of the IPFs—a process called *interessement*.

In this section, I analyze a sample kindergarten IPF to understand how the roles and identities of the other actors within the network were being defined. Again, this analysis answers another question, which is the focus of Chapter 5—that is, whether the actors do indeed behave in a manner aligned to the constructivist and developmentally appropriate paradigms advocated by the department of curriculum. According to ANT scholars (Callon, 1986), when the goal of the network is fulfilled and the actors continue to perform their assigned roles as defined by the focal actor, only then will enrollment—the third and often overlapping step in translation—succeed.

The current iteration of IPFs, which Dr. Williams was instrumental in developing and rolling out during the 2014-2015 school year, embodied a newly conceptualized paradigm for instructional decision making that diverged significantly from the philosophical underpinnings inscribed within the first round of planning guides issued by BSD curriculum officials. Through her leadership and guidance, the Office of C&I created the new documents to help its teachers and administrators implement Wiggins & McTigh’s (1998) *Understanding by Design (UBD)* framework, which Dr. Williams considered to be a more constructivist method for instructional planning. In short, UBD is ‘an approach to curriculum and instruction designed to engage students in inquiry, promote transfer of learning, provide a conceptual framework for helping students make sense of discrete facts and skills, and uncover the big ideas of content’ (p.4). Under this rationale, learning is a sense making process whereby students are guided to construct connections among related concepts that tie into a deeper and broader knowledge base, which provides structure and direction to their epistemological worlds. In the excerpt below, Dr. Williams juxtaposed the pedagogical basis behind UBD with a common

practice she observed in many district classrooms where the instruction occurring was aligned and focused exclusively on teaching to a single standard:

I would say one of my biggest concerns about the curriculum right now is that when we walk classrooms and we see a single standard on the board, and then we hear, “We don’t have time, we don’t have time!” Well, no you don’t. Not if you have one single standard on the board, you’re not going to get through the curriculum. We know the TEKS, inch deep, mile wide, you know that old saying. That’s our thinking behind the UBD notions of enduring understandings and essential questions. When you ask those deep concept-level kinds of questions then you embed those standards under those bigger topics and so kids start to see connections not only within their content but hopefully across contents as well. The main thing I would say is that it’s a framework, not a lockstep approach to teaching and learning. (Interview, November 21, 2014)

Dr. William’s intent, therefore, was that the IPFs guide users to think more deeply about the nature of the content they were teaching (or observing) and how it related to significant ideas. For the culture of instructional planning in BSD to undergo this type of epistemological and pedagogical transformation, a significant redesign of the template was necessary—one that would keep teachers and administrators focused on the gestalt of the content so that they would address and approach the related knowledge and skills in a meaningful and connected manner. In short, this new template would need to redefine the role of BSD teachers and administrators from one that focused on an uncritical consumption of district created curriculum to one that encouraged reflective and collaborative instructional planning and coaching.

Appendix E is a sample IPF for kindergarten mathematics and exemplifies the revised layout of the new IPFs, which were designed to highlight elements that are fundamental to the UBD paradigm. Directly below the title of the IPF referencing the content area, the corresponding reporting period, and the suggested pacing, is the section shaded in light yellow labeled “desired results.” The statement inside this box informed the teacher what learning within the unit would transfer to other closely related

knowledge domains. According to Wiggins and McTighe (1998), “successful transfer means that students can perform well with minimal or no hand-holding, guiding, or cueing by teachers” (p. 78). Hence, the learning that happens during the unit should help the children apply their new knowledge in novel, less familiar situations. What is more, for this successful transfer to occur, teaching and learning must focus on big ideas that are tightly aligned to supporting learning objectives. The big idea for the learning specified in the IPFs was summarized by a list of enduring understandings built around essential questions. These enduring understandings and essential questions highlighted within the template were divided in two separate columns under the heading, making meaning, which directly followed the transfer statement. A big idea is defined in UBD as “a concept, theme, or issue that gives meaning and connection to discrete facts and skills” (p.5). Furthermore, these enduring understandings and essential questions were addressed recursively and cumulatively throughout the duration of the unit to spiral the students’ thinking and learning back to the big idea.

What is important to note is how the enduring understandings and the essential questions were located directly below the transfer statement prominently displayed on at the top of the page. Moving in a direction from top to bottom, the reader would therefore more likely make sense of this statement before proceeding down the page to the supporting knowledge and skill statements. This top-to-bottom directionality, as opposed to the left to right layout utilized in the previous planning documents, was an intentional design change on the IPFs to highlight the significance of the big ideas to which the knowledge and skill statements (the state standards) were subordinate. This hierarchy of positioning is not meant to play down the significance of the state standards but, rather, emphasize how they should have been interpreted in relation to the big ideas instead of in isolation. Additionally, to the right of the knowledge and skill statement column is a

section labeled, acquisition, which was further subdivided into two columns. The first column directly to the right specified what aspect of the related standard the student should know. The second column described what the student would be able to do; or, rather, which of the behaviors specified in the standard she should be able to perform and to what degree. Therefore, instead of selecting a single knowledge and skill statement from the IPF and teaching directly to that one standard—a behavior which Dr. Williams claimed she has observed in many BSD classrooms—the teacher was positioned to use the document to think about elements of the standard she wanted the students to be able to do and how the learning that occurs should reflect that understanding as it related to the bigger idea.

At the very end of the IPF, there was a separate section that is labeled, assessment evidence. The activities or work samples described there provide summative information in terms of how well the students understood the knowledge and skills that were the focus of the big idea. The assumption was that if the child could demonstrate her understanding from the teaching and learning that occurred during the unit to the degree specified in these tasks, she should be able to then apply it in a different context where the parameters have changed. What is important to note is that these few assessment tasks were the only teaching or student activities provided in the IPF. There was no series of incremental lesson plans that guided the teacher on how to get to that end goal. Essentially, the UBD model encourages teachers to plan strategically and critically with the end in mind. Teachers then construct their own roadmap starting from that point (the result) backwards (to the big idea), using specific elements of the standards that relate directly to the essential understandings. This feature of UBD is pivotal to the planning process so that instruction and learning remain connected to something meaningful and applicable for solving future problems or addressing challenges in authentic contexts.

As primary users of the IPFs, teachers' and campus administrators' identities as actors in BSD's newly conceived network of curriculum implementation were now defined differently than they were by the previous iteration of district planning documents. Instead of mere implementers of a prescribed curriculum, teachers were now positioned to act in a more agentic role whereby they could make decisions on how to orchestrate student learning that progressed toward essential understandings as defined by district curriculum developers who were guided by the principles of UBD. Likewise, the principal was also at liberty to use the IPFs, particularly when she was trying to coach or sit in as teachers are planning their instruction. However, what might not be as apparent in this role augmentation is the constraint on instructional autonomy afforded to teachers. In other words, the teachers were not completely free to plan instruction at their own will in so much as they were co-constructing the curriculum alongside other actors (those who developed the IPFs under the direction of Dr. Williams) within parameters that acquiesce to what district officials (the other actors in this network) were obligated by the state to uphold and monitor. This act of negotiation wherein concessions are made at the cost of some compromise epitomizes how the process of interestment operates with the intent to satisfy a diverse representation of interests and needs within a tenuous network of actors.

Interestment, however, does not necessarily guarantee that an alliance among constituents within the network will form. The first step the BSD Office of C&I took toward interestment was to produce a road map (the IPFs), which delineated how all the actors should fulfill their role in the implementation of a less prescriptive but nevertheless clearly defined curriculum that guaranteed full coverage of the mandated state standards. The second step would need to focus on harnessing these actors' commitment and allegiance to the newly defined network. If all actors do indeed perform their identities as

defined by the focal actor, enrollment will occur. Callon (1986) defines enrollment, the next step in the translation process, as a “group of multilateral negotiations, trials of strength and tricks that accompany the intersements and enable them to succeed” (p. 10). Moreover, intersement and enrollment can at times overlap, occurring simultaneously through a variety of maneuvers, such as “[s]eduction, force, and persuasion,” which if successful will “stabilize the entities’ identities, set parameters for their interaction and cut them off from alternative definitions of their identities” (Shinga, 2007, p. 41). For the time being, the IPFs achieved enrollment only to the extent that they were ascribed status as the official district curriculum. Beyond this designation, true enrollment required that teachers, principals, and district administrators wholeheartedly use the IPFs according to the conceptual framework outlined by UBD and the Office of C&I.

## **ENROLLMENT**

The degree to which BSD kindergarten teachers and their principals could abide by the UBD paradigm for planning and teaching inscribed in the IPFs would partially hinge on whether the developers and administrators of the curriculum—the central office district officials—would support and monitor the documents’ implementation to that same standard. Before unpacking how those actors located at the campus level would use the IPFs, which is the focus of the following chapter, a prerequisite analysis now follows to understand the process of enrollment as it takes place from within and among two distinct district level offices--the Office of C&I (those responsible for the development of the IPFs) and the Office of SA (those who monitor curriculum implementation and campus performance).

My analysis of transcripts, interview data, and BSD curriculum documents uncovers two dilemmas—ease of accessibility and substandard teacher expertise—both of which influenced the way individual actors within the district central office network conceptualized how teachers and administrators in BSD should use the IPFs. To summarize, although there was general agreement among district level officials on how the IPFs should be used, different opinions circulated among these individuals about how to make the documents more accessible (user friendly) and minimize the variance that occurs as teachers with different levels of pedagogical proficiency interpret the documents for instructional use. To best understand how this dynamic unfolds, it is important first to analyze the relationship between the two district level offices mentioned in the above.

On most occasions, the Office of C&I and the Office of SA related and interfaced with each other more symbiotically rather than through structures of subordination. What is salient about this unique relationship to my study is how it influenced the efficacy of the actor network committed to the UBD framework inscribed within the IPFs. Although both departments worked directly with teachers and principals by providing instructional support at the classroom level, the Office of SA assumed responsibility for making sure that campus performance meets state accountability measures. The Office of SA would therefore intervene with administrative assistance and surveillance when campus achievement was below standard.

The Office of C&I, on the other hand, focused on the development of curriculum that is aligned to the state standards, to which all campuses had to adhere. Whatever was produced within this department was considered the official curriculum for the district. However, the Office of C&I had to seek guidance and approval from the Office of SA when trying to gain access to campuses to provide instructional assistance. Hence, each

department had to at times acquiesce to the other when performing a designated role. These moments of acquiescence mirror the process of enrollment that is of concern to the current analysis: which looks at what happens when the Office of C&I (serving as the focal actor) must concede to the requests made by the Office of SA in the establishment of the actor network committed to the UBD framework for IPF implementation.

The two campuses where I conducted my observational data reported directly to Dr. Ochoa, who was one of two acting superintendents in the Office of SA. The authority she had in making administrative decisions for these campuses led me to interview her about her philosophical framings of the IPFs and how these documents should be used by the teachers and administrators within the schools she oversaw. Interestingly, the position she took on this issue aligned to the protocols for planning proposed by the Office of C&I. In the excerpt below, she discussed how teachers must be granted autonomy to make decisions based on knowledge of best practices and the needs of their individual students:

We always tell teachers and others to be critical consumers. Like any document, there's going to be either alignments and there's going to be interpretations and sometimes there's misalignment and sometimes there's misinterpretations. But in general, the more they know themselves about the standards and the better decisions they can make about which pieces of the IPFs they really want to focus on. Also, it has to do with their own students, where their students are at and what they need. They have to be able, there's got to be enough flexibility in there to customize it for those, both their own knowledge and understanding their students' abilities and what they need. (Interview, June 2, 2015)

In the commentary highlighted above, Dr. Ochoa was speaking to the teacher's responsibility to take into consideration the needs of the individual student in relation to the standards when planning for instruction. Although she did not directly cite specific UBD constructs, such as big ideas, transfer, and essential questions, Dr. Ochoa did speak to the centrality of the teacher as the primary decision maker in the planning process for

learning. Wiggins and McTighe (2005) frame the teacher in the same way that Dr. Ochoa does. They explicitly refer to teachers as “designers” who are nonetheless “similarly constrained” (p. 13). In other words, the teacher must not only take into consideration what the standards are and what they mean, but she “must also factor in the needs of [her] many and varied students when designing learning experiences” (p. 14).

In addition to tenets that closely align with UBD, Dr. Ochoa, who was once a former kindergarten teacher, also emphasized how teachers of young children must make modifications in their instructional planning to accommodate the individual and social cultural needs of the child--a discourse which is compatible to DAP (Copple & Bredekamp, 2009) as well as culturally relevant teaching (Ladson-Billings, 2013).

Some children learn best, especially at the younger grades, we really have to know what their learning style is. Some children are very tactile; some are totally different. As they're adjusting for that, for the IPFs, they're having to make sure they're thinking about “Okay, if I think about my children, what is the best way? Is this the best story? Is there a way I can chose a piece of text to read to them to get this concept across that is more culturally relevant? Because I know what's going on in Susana's life or Joe's life?” or whatever that is. (Interview, June 2, 2015).

What Dr. Ochoa appeared to be trying to say is that teachers cannot just blindly follow a curriculum as it is scripted, but rather, they must take into consideration what special issues or interests are salient to the children in their classrooms and then incorporate those needs into learning experiences accordingly. What is also noteworthy about these statements is that they reveal an apparent alignment between Dr. Ochoa's vision of effective curriculum planning and what Dr. Williams and the Office of C&I were trying to convey in the IPFs. Both individuals appear to agree that teachers should ultimately be held responsible for making instructional decisions in the classroom with respect to standards and children.

Nevertheless, what appeared to impede an uncontested alliance between these two offices (those actors joined in a network committed to the implementation of a UBD framework) is what Dr. Ochoa identified as an unfortunate as well as unprecedented lack of pedagogical knowledge and skill among many of the kindergarten teachers assigned to the campuses she oversaw.

We have some schools where like, say the kindergarten team, traditionally you always rely on it's got some veteran teachers and you've got a newbie and they're going to bring a newbie along. We have schools where everybody is in their first year or second year. That's why what we produce as a district, as a team, etc., has got to be really user friendly. It cannot be predicated on somebody needing for every lesson, needing 6 or 7 hours to be able to really understand that lesson. Which I hate saying that, it almost sounds like blasphemy to me, but what you're actually see happening is you see children who are being taught by people who don't have a lot of experience. You cannot ... that child cannot afford to have a wasted year (Interview, June 2, 2015).

The commentary above brings to light a tension that seemed to compel Dr. Ochoa to forgo her philosophy in what she believed is best in supporting teachers' professional decision making in favor of a more prescriptive approach for mitigating the potential drop in student achievement that could come at the hands of unexperienced teachers who have not demonstrated sufficient know-how to plan their instruction to the caliber articulated in the district's understanding of the UBD model. Although this reality appeared to cause her notable regret, she seemed to indicate that it was incumbent upon her as the superintendent of school affairs to make these types of difficult decisions, which are grounded on keeping a low-performing campus off the state's radar for intervention and possible take-over. The pressure she was under to conform to the state's high-stakes accountability standards came through more poignantly in the dialogue below:

My team is monitored more carefully, so that's what it looks like. Because you have to ensure that those children are able to master, get to that standard and left

on their own, the school hasn't demonstrated an ability to get them there (Interview, June 2, 2015).

Hence, the nature of this high-stakes dilemma seemed to push Dr. Ochoa to lead her team of specialists (who work outside the Office of C&I) to create protocols of support--some of which included the development of additional documents to supplement the IPFs--that would ultimately keep low performing campuses experiencing a shortage of teacher expertise from further academic failure.

Even more perplexing was that the support provided to these campuses from the specialists within the Office of SA did not appear to always include IPFs. In the following excerpt, Dr. Ochoa explained the rationale for her team's hesitation to use the IPFs as a source of instructional support for the campuses her advisory team had to closely monitor:

The IPFs are ...they're good to know, but for schools like that, you have to dig down deep. You basically almost have to say because what we hear from teachers of those schools, schools over and over. It's like it's overwhelming. There's so many student expectations that have to be taught, but we cannot teach them all and I get it. When you start looking at how many SEs per week or two-week period they have to do, it is incredible. Then you have to help them see the bigger picture of okay, what are those things, if you took all the IPFs all the [state standards] and IPFs and you looked at them. What are those things that, by month to month, what do you really want to see? What are the big things, the big ideas, the big skills that you need to see students master because if they don't, you know that there's no hope of them being successful academically? (Interview, June 2, 2015)

Based on what Dr. Ochoa was saying in the above passage, her and her team's dissatisfaction with the IPFs seemed to come from the overwhelming multitude of standards that each unit tried to cover over a relatively short (e.g., two week) period. Apparently, the density of standards in these documents impeded the inexperienced teacher's ability to process the nuance of the content the children needed to learn to effectively design and orchestrate instruction that matched this overarching objective.

However, what remained unclear from Dr. Ochoa's critique is why she and her advisory team of specialist failed to refer to the big ideas and essential understanding that were prominently displayed at the front of each IPF. Indeed, the IPFs do contain a lengthy list of state standards, but the intention of the UBD model was that these knowledge and skill statements support the big ideas and transfer goals guiding the focus of instruction (Wiggins & McTighe, 2005). This misunderstanding or misinterpretation of the document led me to question whether the Office of C&I had been able to adequately advertise these important features of the IPFs to the other actors in the network--those who made up the Office of SA. Whether this was the case, it seems that Dr. Ochoa and the specialist who made up her campus support team have not been completely enrolled within the actor network established by the Office of C&I to pursue the implementation of the UBD model inscribed in the IPFs.

Despite the apparent lack of enrollment of the Office of SA, Dr. Williams and her team of curriculum writers and developers had made attempts to address some of the ease of use and accessibility issues that not only posed a problem for unexperienced teachers, but also confounded all users in general as they tried to sort through all the IPF documents from each content area and plan efficiently with them. To be clear, I am framing the Office of C&I's efforts to make the IPFs more accessible as an example of the type of maneuvers that characterize the act of enrollment as defined by ANT scholars (Callon, 1986). For example, specialists and administrators from the Office of C&I developed two supplementary documents that could meet two distinct needs representative of district users, especially for those who Dr. Ochoa and her team within the Office of SA had to provide explicit guidance. At one end of the spectrum are those who only wanted to see a general overview of what needed to be taught. The Yearly Content Overviews (YCOs) served this purpose by providing a summarized compilation

of all the state standards that were covered in each IPF. At the opposite extreme were those who could benefit from having more specificity on how to implement the standards through the lens of the UBD framework. The other document--what BISD officials termed an exemplary lesson--addressed this need by outlining how to orchestrate student-centered, constructivist teaching in the form of a sample lesson plan. Hence, used in tandem with the IPFs rather than replacing them, these two documents were developed to clarify any ambiguity as to which state standards were covered and provide more specificity on how to orchestrate student learning through inquiry-based lessons rather than discrete skill exercises.

Appendix F shows a sample YCO for Kindergarten Mathematics. Each subject area (e.g., Language Arts, Social Studies, Science, Health, etc.) had its own YCO. The document was a truncated version of the IPF whereby all the components specific to UBD--e.g., enduring understandings, essential questions, transfer statements, etc.--had been eliminated. What remained was an outline of each unit (representing one IPF, which focuses on a key concept) and a list of the supporting state standards. The standards were represented by a corresponding numerical code without the attached knowledge and skill statements that were covered within that designated period to cut down on the length of the document. The intention behind this abbreviated format was to allow teachers and administrators to see the standards that were addressed throughout the year at more of a glance and to get a bigger picture of the scope of the content without having to wade through the copious amount of information necessary for more comprehensive, unit-by-unit planning. This latter goal--in depth instructional planning--was the primary purpose of the IPFs.

Opposite from an overview, and therefore serving a different purpose than what the YCO was deigned to do, were the exemplary lessons (see Appendix G), which

provided some guidance on how to teach to the depth and complexity suggested in the UBD model. BSD curriculum specialists co-wrote and guided the development of these lessons with teams of expert teachers to help users of the planning documents (teachers and administrators alike) make sense of what a sample learning experience would look like that was aligned to the big ideas and enduring understandings specified in the IPFs. Teachers could access these lessons through a hyperlink embedded within each individual IFP categorized by related units and subject areas. In short, these exemplary lessons appeared to move away from traditional teaching methods focused on rote memorization and test preparation procedures and instead plan meaningful and engaging learning experiences that could address several state standards all related to a core of enduring understandings and big ideas.

The kindergarten math lesson shown in Appendix G contained many of the content and structural elements incorporated in all exemplary lessons designed by BSD. To illustrate what a UBD inspired lesson should look like, the lesson template was injected with a few supportive features that help teachers and administrators visualize how state standards aligned to enduring questions referenced in the IPFs. For example, embedded within the document were various sections with titles such as “Anchors of Support” and “Differentiation Strategies”, both of which offered suggestions on types of accommodations for English Language Learners (ELLs) and students with special needs. Another feature written within the lessons was a list of supporting “College and Career Readiness” and “21<sup>st</sup> Century Skills” that students were being prepared for as they authentically engaged in the lesson. Moreover, the set of guiding questions preceded by the state standards, lesson objectives, and prerequisites for prior knowledge and student skill attainment foregrounded the actual lesson. Although notably extensive (and perhaps overwhelming), each of these elements--all of which were common and incorporated

within each content area--served as a guide for a sort of golden standard of instructional delivery of the district's official curriculum.

One singular instructional component that was unique to both the math and science lessons, however, was their adherence to the 5E model framework. Originating from the work of Johann Herbart in the early 20<sup>th</sup> century (Bybee, Taylor, Gardner, Van Scotter, Powell, and Westbrook, 2006), the 5E model closely aligned with UBD's constructivist underpinnings in its focus on meaning making as opposed to rote learning. Accordingly, each of the model's 5 steps were underscored by a verb (notably beginning with the letter e), which indicated the active role the student should take in his/her own learning. Hence, instruction was supposed to begin with what was termed engagement, which implicated the teacher's responsibility to tap into students' prior knowledge, linking it to some type of inquiry that triggered curiosity and sparked interest to pursue learning at greater depth. The learning experiences that followed, all of which took place during exploration, "provide[d] students with a common base of activities within which current concepts (i.e., misconceptions), processes, and skills [were] identified and conceptual change [was] facilitated" (p. 2). After sufficient exploration, the explanation and elaboration parts of the lesson allowed the teacher to facilitate learning within a series of instructional steps that involved explicit teaching of new concepts as well as opportunities to help students to confirm, solidify, and deepen their understanding through discussion and additional exploratory work. The learning then culminated in the evaluation stage when students would demonstrate their new understanding in performance based tasks that allowed them to transfer what they had learned in new and novel contexts. In sum, each of these iterative and interrelated stages of conceptual refinement that are essential to the 5E model emphasize student's sustained and on-going

engagement with learning--a focus that is also paramount to and therefore congruent with the UBD framework espoused and utilized by the BSD curriculum department.

An equally significant feature highlighted prominently at the top right hand corner of each exemplary lesson was the suggested time frame, which did not specify an actual date when implementation should occur. This omission, notably intentional, granted the teacher authority to decide as to at what point in time to teach the lesson; that is if she chose to do so at all. Far from being prescriptive or scripted, the exemplary lessons, therefore, provided additional support and guidance through specificity as to how to carry out the tenets of UBD outlined in the IPFs.

Before moving on to see how entities (both human and non-human) within BSD were mobilized to secure an enduring actor network committed to the delivery and implementation of a standards-based curriculum predicated on constructivism, a short summary is necessary at this juncture to situate where in this analysis the focal actor (the BSD Office of C&I) is in the translation process. In short, when utilized together, the IPFs and the two supporting documents (the YPOs and the exemplary lessons) represented an attempt on the part of the focal actor to enroll other actants in adhering to the UBD model for teaching and planning. The development of these two additional documents were deliberate maneuvers executed by the Office of C&I to address potential protests on the part of teachers, campus administrators, and district officials (the end-users of the IPFs) who at any given point in time might have refrained from consulting the IPFs when they needed less content to look at (an overview of the yearly scope and sequence) or more guidance (a step-by step-walk through that outlined each stage of the learning progression). Essentially, this endeavor at enrollment was a critical stage within the translation process whereby the focal actor (BSDs Office of C&I) attempted to allure

outside entities--teachers, administrators, as well as the Office of SA--in submitting to the newly adopted UBD pedagogical framework (Callon, 1986).

### **Mobilization: A tale of two trajectories**

I have already alluded to the inclination for dissent among other actors in the network--those who worked within the Office of SA --which operated alongside the Office of C&I, but also exercised some authority in limiting the latter's access to campuses where teachers and campus administrators attempted to use the IPFs. Dr. Ochoa, who represented the Office of SA, expressed dissatisfaction with the IPFs ability to provide explicit guidance for the high percentage of inexperienced teachers who staffed the campuses she supervised--specifically those designated as underperforming according to state accountability markers. Whether the IPFs and their supporting artifacts--e.g., the YCOs and Exemplary Lessons--could offset the Office of SA's attempt to break from the actor network hinged on the Office of C&I's efforts to mobilize actants within the district who would advocate for the UBD model inscribed within the planning documents. In the following, Shinga (2007) provides an "ANT-ian" explanation of how this mobilization effort works within the process of translation:

The definitions of interests, goals, and identities are then mobilized through representational techniques and the physical displacement of entities. In general the process of translation tends towards the association, combination, and simplification of entities and the reduction of representatives to one or a few actors. It transforms weak, provisional, and generally defined identities into durable and seemingly irreversible ties. (p. 41)

During the IPFs' movement through their conceptualization process into the subsequent production and dissemination stage, their identities underwent a series of transformations--a phenomenon that Shinga is referring to in the above as "physical displacement": To summarize, as BSD curriculum officials recruited and then inculcated

ambassadors (specialists and teachers) on the purpose and intention of the UBD framework inscribed within the IPFs, these representatives would subsequently (and perhaps inadvertently) populate the documents with their understandings of what this type of curriculum enactment should entail. In effect, the IPFs would then emerge from this mobilization with their original intent (e.g., to encourage critical thinking about how standards and content relate to big ideas and student centered learning) partially diluted or perhaps undermined as additional supplemental and supporting documents were produced to simplify any ambiguity that came as teachers and administrators tried to make sense of how the tenets of UBD should impact planning and unfold in instruction.

The effort to mobilize the IPFs into district-wide implementation was incremental and extensive, spanning a 3-year timeline during which district officials and administrators, as well as a select group of exemplary teachers, received training on the principles and practices of the UBD model. The district hired James McTighe for two days during each school year starting in 2011 as an outside consultant to familiarize district-level curriculum support specialists, as well any campus administrator who chose to attend, on the theoretical constructs and applications of the UBD model. Dr. Williams also developed and promoted a district cadre of exemplary teachers--the Curriculum Development Task Force (CDTF)--who were selected by their campus administrators and district officials to write the exemplary lessons that would accompany the IPFs. This event took place during the first weeks of June, beginning in the summer of 2012 and continuing for each consecutive summer up until 2015. In addition to being able to write and plan together in grade level teams, the teachers also spent some of their time in professional development sessions where they received training on the best practices--e.g., culturally relevant teaching lesson design, project based learning, whole-child

instruction, differentiated and social emotional learning, etc.--that district curriculum officials wanted to see integrated into the supplemental lessons.

Appendix H shows the official itinerary for the 2015 summer CDTF, which listed the types of sessions that the participating teacher writers could attend and outlined a daily schedule of the blocks of time available for lesson writing. The professional development advocacy sessions and the grade level/ content area curriculum writing groups were facilitated by district level specialists from the Office of C&I. Every district level specialist had attended the official trainings led Jay McTighe and were deemed qualified, therefore, to guide the teams of teachers who were writing the UBD embedded exemplary lessons.

Hence, the dissemination of information (aka the mobilization) on the principles and practices of UBD was designed to reach classroom teachers in a top-down flow of delivery: First, Jay McTighe would train district level officials, specialists and administrators. Next, these specialists would turn around the information they received to the group of CDTF writers while facilitating their lesson writing and leading advocacy sessions. Finally, the teachers selected to participate in this exclusive district-endorsed event would then be able to model and advocate for the progressive constructivist methodologies (e.g., UBD, culturally relevant teaching, social emotional learning, etc.) they learned at the CDTG when they returned to their respective campuses in the fall. The idea is that these CDTG members would serve as spokespersons when they began to plan and subsequently share the lessons they had written at the event with grade level team members. However, none of the kindergarten teachers from the two campuses I selected for this study had attended any one of the CDTF summer sessions at the time of my observation and engagement in the field.

Nevertheless, these two teams of kindergarten teachers did interact, although minimally, with the district level early childhood team, which was a part of the larger Office of C&I. In this respect, the staff members on the early childhood team were also spokespersons for BSD's official curriculum (the IPFs) and the pedagogical frameworks (e.g., UBD, CRT, etc.) that underlaid it. I interviewed two key members from the early childhood staff: Dr. Rena Hudson, the program director; and Kelly Ruffalo, the specialist who supported and oversaw the development of the Kindergarten IPFs and conducted campus walk-throughs in kindergarten classrooms. My purpose for interviewing these two staff members was to clearly understand what impact (if any) their decision making, messaging of the intent and purpose of the IPFs, and interactions with other actants (the teachers at the two campuses where I conducted my study) could possibly have on the larger actor network (the district's new curriculum implementation).

Dr. Hudson's role in BISD's dissemination and enactment of the IPFs for kindergarten teachers entailed not only supervising the production and development of the documents during the CDTF but also passing along district related information to grade level representatives from each campus during two-hour team leader meetings that took place after school every nine-week reporting period. Most time during the first meeting of the school year was devoted to familiarizing the team leader representatives on any changes and updates related to the IPFs and their supporting documents. Although attendance at these meeting was not mandatory, the team leaders from the two campuses selected for this study were present at this meeting, which took place on September 10, 2014. Also in attendance were teachers who participated in the CDTF summer session. Their participation provided an opportunity for discourse to occur between those who had a hand in the development of the exemplar lessons and those who would use the documents. Dr. Hudson explained how this makeup of both developers and end users at

the meetings set up an opportunity for a productive dialogue to occur whereby she and her team of early childhood specialist (including Kelly) could gather feedback about the curriculum and clarify any misunderstandings about its intended use:

Because what we push out from this office and what we intend, once you have an audience and they give you feedback on that then... “Oh, I see” “What I said was...but what I meant was...” and, you know, there’s an opportunity to clarify and then there’s an opportunity by having that many more heads to do the writing for them to say “Have you seen this book?” “Have you seen this lesson?” “Have you thought about this?” “Could we...” and then that gives the teachers much more of a suggestion pallet. (Interview/ September 3, 2014)

Hence, the teachers who wrote the exemplar lessons could respond to the other attendees’ questions and receive input and suggestions for future development and revisions.

When I asked Dr. Hudson about how kindergarten teachers should use the IPFs when planning and thinking about the socio-cultural or individual needs of the children in their classrooms, she discussed the following limitations in terms of the types of instructional decisions the documents were able to encourage:

Anytime you try and write curriculum for everyone then it doesn’t fit anyone. And so you’re going to have to, as a teacher, figure out “well yes, they tried to put in some culturally relevant...but I’m getting...I’m...this doesn’t work for my population but it does help me to be mindful that that’s what I need to do.” They need to look for another thing to replace this activity that they have that does work for our kids. (Interview/ September 3, 2014)

Dr. Hudson saw the content embedded in the exemplar lessons that made references to materials or activity ideas to support culturally relevant teaching as mere suggestions rather than explicit mandates dictating how and what to do to achieve the listed objectives and student outcomes. The teacher was responsible for making decisions as to what was appropriate and relevant to her students. Again, however, discourse related to UBD and how to plan instruction around big ideas, essential questions, and transfer did not seem to factor into conversations and messages going back and forth between district staff from

the early childhood department, members of the CDTF, and the kindergarten teachers attending the team leader meeting. The IPFs themselves took more of a back seat to their ancillary documents, which offered teachers more of what Dr. Hudson appropriately called a “suggestion pallet”.

In her role as the district designated kindergarten curriculum specialist, Kelly Ruffalo spent approximately sixty percent of her time going into district kindergarten classrooms supporting teachers in their instructional delivery and implementation of developmentally appropriate practices. The remaining forty percent of her job responsibilities entailed delivery of staff development, attending and facilitating meetings, and writing curriculum, which included the IPFs. Combined, her access to classrooms and experience in the development of district curriculum gave her a considerable degree of insight into not only how closely teachers adhered to the content and pedagogical principles inscribed in the IPFs, but also the challenges and limitations the curriculum documents posed to those who used them.

The length of the IPFs was one of the factors that Kelly identified as a deterrent to kindergarten teachers’ willingness to use the documents more frequently. What is more, the work load was compounded by the way the IPFs were packaged as individual documents in separate content domains--e.g., language arts, math, science, social studies, and health--thereby causing the number of pages that teachers must review to increase exponentially. Kelly shed light on the degree and intensity of this issue in the following:

The [IPF] is written week by week for each 9-weeks and that’s how they’re grouped is by 9 weeks. The first 9 weeks was 27 pages long just for the language arts. So, they [teachers] have that; and then they have the science, which was probably equally as long; and we’ve cut that down. Then they have social studies...I mean it’s so much paperwork to go through. I guess I shouldn’t be as surprised that they’re not really using it [the IPF]. (Interview/ August 29, 2014)

Rather than being critical, Kelly admitted that the kindergarten teachers she observed and interfaced with did have good cause for not referring to the IPFs as judiciously as district curriculum officials would expect. In her role as a representative of the office of curriculum and instruction, she had to walk a tenuous line between following protocols to support teachers on district initiatives and advocating for what she felt is reasonable and practical in terms of classroom implementation. Thus, although she was a spokesperson in the mobilization effort to build a viable network of curriculum implementation (e.g., the enactment of the IPFs), she was also an intermediary who worked at the boundaries with other outside networks (e.g., kindergarten teachers) whose willingness to align hinged on her willingness to compromise. A good example of this type of negotiation occurred when Kelly tweaked district initiatives to make them more accessible and palatable to the actors (e.g., the teachers) whose compliance she was trying to effect.

In the excerpt below, Kelly referred to an additional document--a scope and sequence overview--which she developed in response to the difficulty she observed and heard kindergarten teachers express with respect to what they needed to make the cross-content planning with the IPFs more user-friendly:

What has been helpful, what I'm hearing across the district, and people we're asking for it quite a bit when it wasn't online in its best in form, would be our Scope and Sequence, which mapped it out for you for the year. (Interview/ August 29, 2014)

The scope and sequence document Kelly alluded to in the above is shown in Appendix I. The template was structured to facilitate integration--a hallmark of traditional kindergarten instruction (Jones, 2012). Each row was equivalent to a week of instruction. The columns indicated the topic of focus in each content area as well as which phonemes and sight words teachers should introduce within that suggested time

line. The third column from the left specified the theme being covered in the district's state adopted reading basal that corresponded with those areas of focus. Kelly was quick to point out how during some weeks, there was not a coherent relationship between the theme happening in the basal and the material covered in the content areas, most notably in science and social studies. This dilemma was to a large extent out of Kelly's control since specialists in the science and social studies departments determined the scope and sequence of their respective content areas. Nevertheless, the document reportedly helped kindergarten teachers more effectively manage their planning with the multiple IPFs they had to consult and weave together for one week's instruction.

Difficulty with integration was not the only problem kindergarten teachers in BSD purportedly experienced in their attempts to use the IPFs. Based on what Kelly suggested in the critique below, the IPFs did not seem to provide enough clarity for how to differentiate learning based on the varying levels and range of needs that students brought to school:

Well the IPFs don't give you an explicit picture of a student who is maybe low functioning and how you would support that student. And I think it tries as best it can to give some differentiated pieces...so in that area, yeah, it touches a little bit on your lower end and it touches a little bit on the higher end which would be the GT but I think if the teacher doesn't have strong support in how carry that out then the CRMS just aren't clear enough and that's something that we're working on. (Interview/ August 29, 2014)

The "work" to which Kelly referred in the above was her on-going collaboration with the kindergarten teachers who participated in the yearly summer CDTF meetings. This collaborative effort produced yet another document, which I showcase in Appendix J. The document was a formative assessment rubric that standardized expectations for what kindergarteners across the district should be able to know and do at the end of a specific nine-week reporting period. Kelly described these rubrics "*as a baseline for the*

*kids across the district.*” The four-point scale on the rubrics also allowed teachers to see the variance and range of skill performance beyond the baseline standard, which was the only piece of information that is duplicated on the IPFs under the section titled, “Acquisition: Students Will Know/ Students Will Be Able To...” (see Figure 4.H). Supposedly, teachers could refer to the “Student Work Products/Assessment Evidence” section on each IPF to determine what type of assessment to administer and then consult the scale for the corresponding outcome/ standard on the rubric when trying to ascertain to what degree the students mastered that skill. In this best-case scenario, teachers who used the two documents in this way (e.g., in conjunction with each other as a type of cross-referencing system) would still theoretically follow the UBD model of backward design--e.g., starting with the end goal and then planning/ designing learning tasks that would help students reach those performance standards (Wiggins & McTighe, 1998). If successful and helpful to teachers, such a design feature--two documents that interact and support the other--could perhaps enhance and strengthen the bonds of fidelity within the larger actor network committed to the enactment of BSD’s official kindergarten curriculum.

Along with the integration and differentiation supplements that were appended to the IPFs, Kelly noted yet another significant feature she and the team of CDFT writers added to the documents to make them even more appealing and comprehensive. Specifically, she was referring to a sequence of writing lessons, which she described as being more user friendly in the way “*that it takes you day by day.*” Kelly provided more detail about how these lessons are helpful in the commentary below:

What I see as big support, much more useful would be the lessons we created during our curriculum writing task force. In particular would be the writing lessons that we focused on. They are very explicit and it takes you step by step

and those give you lots of ideas for the differentiated piece that again are very explicit. (Interview/ August 29, 2014)

The series of lessons (six in total) were designed to be taught sequentially in the suggested order during the recommended transportation unit (specified as Unit 3 in the district adopted reading basal). However, the addition of these lessons deviated from the standard exemplary lesson format developed and advocated by the Office of C&I. Furthermore, a day-by-day planning guide was contrary to the purpose that Dr. William envisioned for the exemplary lessons to serve. This type of breach from the original intent of the actor network's protocol for curriculum enactment closely exemplifies what ANT scholars term "dissention" (Callon, 1986). For Kelly, however, this decision appeared to be an act of compromise to prevent other actors (the district kindergarten teachers) from breaking completely from the network committed to the implementation of the IPFs.

To be clear, Kelly did not dismiss the usefulness and best practices inscribed within the IPFs. She was intent to point out that "[f]or me, the IPFs are again as they are good tools and they are a good resource but we have multiple supporting tools that are all, are just like the CRMS just in a different format" (Interview/ August 29, 2014). What Kelly seemed to be suggesting is that when used as standalone documents, the IPFs did not adequately address the range of needs and interests that kindergarten teachers would encounter if they were to effectively plan for instruction. The other documents developed by Kelly and the team of teacher curriculum writers were designed to address all the missing components--e.g., specificity, material suggestions, etc.--that they felt the IPFs did not provide for instructional planning.

Serving as representatives of BISD's office of curriculum and instruction, Kelly and the team of kindergarten CDTF writers were positioned to be the designated

spokespersons responsible for upholding and inserting within the IPFs and other ancillary materials the tenets of UBD that Dr. Williams, the focal actor, intended for teachers across the district to attend to as they planned their instruction. In the culminating stages of mobilization, the IPFs and the other documents that were aligned to them would displace the human actors (Kelly and the CDTF writers) and become the principle vehicle (the obligatory passage point) through which other actants (district kindergarten teachers and campus administrators) would make sense of the UBD framework advocated by Dr. Williams and the Office of C&I.

Kelly and her team of teachers, however, were not acting alone in the network committed to the district's implementation of the official curriculum. Dr. Ochoa and her team of specialists representing the Office of SA--actors who were not completely enrolled within Dr. William's network of IPF implementation--were also interacting with the teachers and campus administrators who would use the IPFs. As I pointed out earlier, Dr. Ochoa expressed concern with these documents' ability to effectively convey the intent of the state's content standards and guide inexperienced teachers, at low performing campuses through the process of aligning their planning to those standards to meet accountability markers determined by passing rates on the state's high stakes exam. A potential roadblock to the Office of SA's enrollment into the network of IPF implementation was therefore eminent as the representatives (spokespersons) from this office began to mobilize efforts at district campuses to prepare students for this high-stakes testing.

To understand how this breakdown might occur, I interviewed one of the specialists, Tina Miller, who works directly under Dr. Ochoa. Although she admitted that her focus on preparing 3<sup>rd</sup> through 5<sup>th</sup> grade teachers for the rigors of the state exam did not allow her to work directly with kindergarten teachers at the campuses she visits, Tina

did have contact with those campus administrators who made decisions as to which curriculum documents their grade level teams (kindergarten teachers included) would use as they planned together. I asked Tina to share how she felt the IPFs prepare students for the knowledge and skills they needed to be successful in school. Her response revealed a similar sentiment expressed by Dr. Ochoa about the documents. That is, the IPFs did not provide enough guidance for inexperienced teachers on how to organize instruction coherently and efficiently around a manageable number of content standards:

Now, they don't have a scope and sequence. They just have a [yearly overview]. The point of that was to help teachers supposedly to give them more autonomy to what they do and they figure out how to, but you can't do that with new teachers. You can't say, "You're going to have addition, subtraction, place value, and multiplication. You're kind of fitting it in just nine weeks." They may need a little bit more structure or for instance, it'll be multiplication, division, maybe you have five weeks and there's twelve [state standards]. How do you structure that? That's overwhelming. (Interview/ April 24, 2015)

In the above, Tina implied that rather than giving novice teachers space for autonomy in professional decision making, district leaders needed to provide more clarity and specificity as to what to teach and when to teach it. Left to their respective expertise, these teachers could not be expected to know how to break apart and sequence into more manageable time segments the multitude of standards that the YCOs suggested covering in a nine-week period of instruction. Tina went on to suggest, however, that rather than dictate what to teach, she and her team within the Office of SA provided the requisite support to these novice teachers through face-to-face coaching modules during the instructional and planning process:

You've seen our core content coaching modules. We help them to break it up a little bit more. All the teachers said, I mean, they'll all tell you today that was the biggest thing that, our principals all said, "We wouldn't have it done without those." (Interview/ April 24, 2015)

Tina affirmed the success of these modules, stating that these principals “found more of our stuff [planning documents] more helpful than what is in the [IPFs]”. Through this model, the teachers could dialogue and interact with the district specialist as they planned so that they would develop a clear and shared understanding of the meaning of the state’s content standards. The documents that the specialists within the Office of SA used with the teachers they coached (which did not apparently include the IPFs) were therefore interpreted through a dialogic process as opposed to being consumed in isolation.

Lastly, in addition to critiquing the lack of guidance and specificity provided in the IPFs, Tina also made note of the poor alignment between the content covered in the exemplary lessons and the state standards that were referenced in the district’s planning documents:

I know with our lesson plans that we have, they're not aligned. You'll read them and they'll be things like where the [state standard] says to analyze graphs of some sort, analyze something rather with graphs and the actual ... what their activity will be doing is creating a graph. They've been creating graphs forever. That's not what they have an issue with. Now, they have in it ... and that's not what the [state standard] is. Then, when we're trying to help teachers with planning their lessons or working with them or going in their classroom, and they're doing this activity that's from the [IPF], they think they're doing everything they're supposed to be doing and they were giving them feedback of, "That's not aligned. Here's your [state standard]." (Interview/ April 24, 2015)

The teachers who Tina observed were focusing on creating graphs instead of having students analyze data from a graph, which was the intent of the state standard referenced in the IPF. Hence, Tina and the team within her office purportedly created lesson plans for the teachers they worked with because, as she pointed out in the above, there was an issue with the lessons from the IPFs not aligning with the corresponding state standards. Again, the lesson plans she cited in the above were not available for

kindergarten teachers--only 3<sup>rd</sup> grade and above. However, there was one document she used to assist teachers in unpacking the meaning and intent specified in the state standards that was in fact referenced by one of the kindergarten teachers I interviewed. Tina explained that this document, which is called the Essential 9, helped the teachers to “break down” what the state standard was saying by making sense of the embedded verbs, which specified how students were supposed to demonstrate their understanding of that corresponding knowledge and skill statement.

Appendix K shows the 9-by-9 box layout of the Essential 9 template. Rather than serving as a scope and sequence that specified how, what, or when to teach content, the document functioned as more of a worksheet that teachers or administrators could use to think or reflect upon how instruction would (or did) align to dimensions/ components of the state’s standards. Except for the first box to the left in the top row (where the user was prompted to list the single standard that were the focus of analysis), all the other boxes contained questions that encouraged reflection on whether learning tasks, questioning strategies, assessments, and anchors of support used during instruction did or would encourage students to think to the level of rigor specified in the designated standard. Hence, the Essential 9 supported the type of dialogic planning and interrogation of the standards that Tina sought to achieve among the teams of teachers she coached and mentored. Furthermore, according to Tina, when the experienced teachers she coached were using the Essential 9 document, they noticed instances whereby standards cited in the IPFs were not well aligned to the teaching objectives referenced in the correlating exemplary lessons:

As a matter of fact, now we've gotten teachers where they actually ... of course, that's not a new teacher. A new teacher does exactly whatever, but I have teachers now that will look and they'll go, "These aren't aligned," or "This isn't aligned."  
(Interview/ April 24, 2015)

Within these types of interactions--where teachers interfaced with district specialists who were spokespersons for what was advertised as the official curriculum for BSD--discourses of distrust related to viability and efficacy of the IPFs to guarantee alignment to the mandated state standards began to circulate among those actors within this procured network who had to use the district's curriculum to achieve indicators of achievement as specified on the state's high stakes exam. Hence, there appeared to be emerging within circles of interaction among BSD teachers, administrators, and specialists during the Office of SA's mobilization efforts to enact the district's official curriculum a discourse of dissidence that posed a threat to the main actor network initiated by Dr. Williams. What Dr. Williams was trying to instantiate through the IPFs was a more critical stance toward the standards and increased instructional autonomy from the teachers. More importantly, the lack of confidence in the IPFs I described in the above is not confined to the upper grade level teachers (3<sup>rd</sup>-5<sup>th</sup>) who Tina coached, but it also impacted how the campus administrators perceived the documents and, consequently, how likely they were to prescribe their usage to other grade levels, including kindergarten.

In sum, mobilization of the IPFs was occurring on two fronts moving in divergent directions. Heading along one trajectory was the Office of C&I, which was trying to promote a more constructivist approach to curriculum alignment following the tenets of UBD. Rather than promote an uncontested adherence to a prescribed sequence of mandated content standards, this model encouraged teachers to be active in interrogating how the end goals and big ideas within the curriculum converged and intersected with students' social contexts, interests and academic needs (Wiggins & McTighe, 1998). Deviating somewhat off this desired course were the specialists and officials within the Office of SA who had developed other documents (e.g., the Essential 9) to help teachers

at the district's low performing campuses address and essentialize the state standards, which strongly influenced the content that was tested on the end-of-year high stakes exam. Further complicating, albeit discretely, allegiance to the actor network committed to IPF implementation was the production of other ancillary documents--e.g., the YCOs and exemplary lessons--developed by the specialists and CDFT advocates from the Office of C&I. These documents had the potential to inadvertently divert attention away from the principles of UBD to enroll reluctant teachers and administrators who needed either more specificity or a summative scope and sequence of standards, neither of which the IPFs were designed to provide.

To put what is happening here in perspective, I cite Michael Callon (1986), a prominent ANT scholar, who advises that actor networks always run the risk of becoming compromised or dissolving into another assemblage of alliances at the most precarious step in the translation process, which happens during mobilization:

[F]rom translation to treason there is only a short step. It is this step that is taken in the last stage [mobilization]. New displacements take the pace of the previous ones but divert the actors from the obligatory passage points that had been imposed upon them (p. 19).

For the purposes of my study, I am interpreting the displacements that Callon is referring to in the above as the multitude of ancillary documents--e.g., the YCOs, the exemplary lessons, the daily lesson supplements appended to the writing lessons, the Kindergarten Scope and Sequence, and the Essential 9 planning tool--all of which were added to the IPFs to address the varying and divergent needs of teachers and administrators within BSD. Likewise, in relation to this analogy, the IPFs were notably the obligatory passage point through which teachers and administrators in the district were to enact their roles as actors within the network of district wide implementation of UBD tenets inscribed with the official BSD curriculum. The focus of the forthcoming

chapter is to make sense of how this apparent treason took place among teams of kindergarten teachers and administrators at two low performing campuses in BSD. Although the IPFs were indeed referenced in the interviews I conducted and the planning sessions I observed during my field work, the documents did not seem to produce the practices they were envisioned to effect by the original focal actor (the Office of C&I) represented by Dr. Williams.

## CONCLUSION

To be clear, the failure of the IPFs to promote the type of constructivist approach to planning and teaching outlined in UBD does not mean that the documents did not produce some type of an effect in the instructional planning and performativity of the kindergarten teachers at the two campuses I selected for this study. Based upon the analysis of the interviews, artifacts, and field notes I discuss in the next chapter, the IPFs did indeed engender certain identities of what it means to be a kindergarten teacher and how to perform those identities, but this performativity did not totally occur within the parameters of what district officials within the Office of C&I would sanction nor what advocates of early childhood best practices would label as DAP. However, before I go into more detail analyzing the data to understand how this phenomenon unfolded during my field work, I summarize the transformation that the IPFs endured as they emerged through the process of translation.

In addition to an analysis of the IPFs and other related documents, the findings in this chapter centered upon how district officials who either contributed to the development of or were responsible for the IPFs' implementation conceptualized these documents in relation to the goals of the actor network committed to the district's enactment of its official curriculum. Two overarching themes emerged from this analysis.

Decisions on how to implement and monitor the curriculum hinged upon district officials' distrust of teacher expertise and an unwavering adherence to aligning instruction to state content standards to meet high stakes accountability markers.

At their point of conception, the IPFs were conceived and subsequently designed to subtly redirect the district's uncontested efforts at aligning its official curriculum solely on the indicators of academic performance and strict adherence to content standards as measured on the state's single end-of-year high stakes exam. Rather than focus exclusively on teaching to the standards, the IPFs contained tenets of the UBD model that would help teachers consider how to tap into students' background knowledge and connect it to a well-articulated and meaningful core of enduring understandings and big ideas predicated on transfer to deeper knowledge and application. Nevertheless, during these initial moments of problematization, Dr. Williams was fully aware of the district's historical entrenchment in more prescribed and scripted attempts at curriculum alignment, which included the production of daily lesson plans. Hence, the IPFs were an attempt to interrupt this full-scale commitment to such practices.

Through the processes of interessement and enrollment, however, district officials from the Office of C&I had to make strategic amendments to the IPFs authority as the primary mover and conduit through which planning and assessment would occur by adding to the documents additional planning tools and resources that would provide specificity and, in some places, more concise overviews for novice teachers and overwhelmed administrators working at low performing campuses. Fenwick and Edwards (2010) provide a useful explanation for how actor networks can form or dissolve in circles related to educational practices that closely mirror what transpired in BISD during the final moments of mobilization as representatives from two offices within the district

competed for relevancy and acceptance in attempts to help teachers and campus administrators avert the state's high stakes accountability sanctions:

Entities that connect eventually form a chain or network of actions and things, and these networks tend to become stable and durable. At each of these connections, one entity has worked upon another to translate or change it to become part of a collective or network of coordinated things and actions. (p. 9)

In short, during the process of translation, the IPFs became an entity--an assemblage of other appended documents (some of them serving purposes contrary to the desired outcome) --which ultimately took on a new identity that encouraged the types of practices and discourses I describe and outline in the next chapter. These practices ran contrary to UBD, DAP and CRT.

## Chapter 5: Findings Part 2

### INTRODUCTION

In the previous chapter, I outlined the evolution of the Instructional Planning Frameworks (IPFs) as they became BSD's official curriculum. I specifically focused on the district's Kindergarten version of the IPFs to trace their development and transformation as a device that was meant to keep teachers' curriculum enactment standardized across the district, which I argued was a goal incongruous to the principles of developmentally appropriate practices (DAP). The analysis of finding in this chapter continues to follow the uptake of the IPFs as they proceeded through the process of enrollment in the kindergarten classrooms at two BSD campuses undergoing surveillance from district officials who were trying to monitor each school's academic improvement on the state's high-stakes accountability exam. In this analysis, I attempt to address two research questions, with more emphasis on the second question, which focuses on how the end users of the IPFs (teachers and administrators) understood the document's purpose and what the effects were of its subsequent uptake on the instructional planning and decision making of the individual kindergarten teachers at each of these campuses. The questions that guide this inquiry are:

1. How are each of the individual actor networks who are bound together within a tenuous assemblage focused on the implementation of the IPFs conceptualizing this document in relation to their respective beliefs, responsibilities, instructional goals, and practices?
2. In what way does the kindergarten teachers' conceptualization of the IPFs impact their practices and how they frame their role as instructors who are to meet the socio-cultural, individual student needs as expressed in DAP while under the surveillance of their campus administrator or other district level officials and curriculum specialists?

My analysis in Chapter 4 was devoted exclusively to unpacking the first research question, which attempts to disentangle two actor networks--e.g., the Office of

Curriculum and Instruction (C&I) and the Office of School Affairs (SA)--from which the IPFs originated. Under Dr. William's leadership, the Office of C&I developed a common planning document--the IPFs--that would allow teachers across the district to approach the mandated state standards through a constructivist lens focused on understanding and aligning instruction to big ideas rather than discrete, disconnected skills and outcomes. For the district officials operating within the Office of SA whose responsibility it was to monitor the enactment of the district's official curriculum, such a loosely structured document predicated on teacher professional decision-making and interpretation would prove to be insufficient to help guide novice teachers in understanding the state standards to the depth necessary to assure their instruction would lead to student achievement on the state's end-of-year examination. This translation process was messy and contested as district leadership and specialists from these two networks attempted to reconcile or insert their conceptualization of what alignment and implementation across the district should look like. The compromise and result from this negotiation was an assemblage of ancillary documents that included explicit lesson plans, succinct yearly overviews, student assessment rubrics, and an integrated scope and sequence created to assist kindergarten teachers in piecing together all content areas into a cohesive and coherent whole. Hence, from their point of conceptualization to their eventual introduction into the hands of the district's teachers and campus administrators, the IPFs underwent a series of transformations--a phenomenon that would continue to characterize the life of the document as it entered its implementation phase, which is now the focus of this chapter, Chapter 5, the second of a two-part series of findings and analyses.

In this chapter, I will continue to use ANT as a theoretical lens to interpret the confounding and often incongruous findings that emerged from the data, which consists of transcribed interviews as well as field notes. In addition to understanding how the

teachers and their respective administrators interpreted their role in the process of enacting the district's official curriculum, the interview data tried to make sense of these actors' pedagogical framing of two diametrically opposed discourses--standardized instruction and developmentally appropriate practices (DAP)--which appeared to intersect in discordant ways during the process of curriculum decision-making within the kindergarten classrooms. The field notes I include in this chapter supported this documentation through thick description of classroom vignettes as well as accounts of specific team planning sessions where the kindergarten teachers at both campuses participated in conversations that revealed how they used the IPFs along with the other ancillary documents to make decisions on what and how to teach the material and content they deemed necessary to cover.

I organize the forthcoming findings presented in this chapter into three sections. The first section provides a snapshot of how the teachers at both campuses attempted to align their instruction and planning to the district's scope and sequence of state standards outlined in the IPFs and its ancillary documents. It is during these planning sessions when the translation process unfolds through the teachers' actions and conversations about how to enact the curriculum specified in the IPFs.

Then, in the following section, I attempt to trace how the actors at each campus attached/translated themselves to the IPFs during the instructional planning process observed in the above in unique, localized ways to be compliant with the district's expectations while at the same time pursue their own instructional goals and agendas. To more fully unpack what was occurring as these teachers used the district's curriculum to plan with some measure of standardization, I present data substantiating Latour's (2005) assertion that "[a]ction is not done under the full control of consciousness; [but rather] should rather be felt as a node, a knot, and a conglomerate of many surprising sets of

agencies that have to be slowly disentangled” (p.44). Specifically, I use ANT to penetrate these networks under analysis to show how the district’s goal to regulate curriculum enactment through the IPFs incurred resistance as the teacher’s instructional decision-making took place within the contextual milieu of the campus (a conglomeration of texts, materials, subjectivities, and discourses).

My findings from this section suggest that while some acts of contestation and treason did transpire through this process of translation to produce a semblance of teacher agency, such effects were nonetheless concealed by a pretense of standardization as the kindergarten teachers performed an on-the-spot rendition rather than an exact duplication of the district’s prescribed protocol for teaching its official curriculum. Functioning as an obligatory passage point (OPP) for enactment of the district’s official curriculum, the IPFs were useful to the actors in this network to the extent they provide access to a scope and sequence of the state standards, which were what the teachers and administrators who I interviewed reported to perceive as non-negotiable outcomes (immutable mobiles) that would allow them to meet the high-stakes accountability measures associated with the state’s end-of-year exam. Conversely, however, the constructivist tenets of UBD that were inscribed into the IPFs to help teachers interrogate the standards in a way that would ensure deeper student understanding, engagement and transfer were to a certain extent ignored or overlooked by the teachers and administrators as they enacted their conceptualization of how to teach kindergarten according the district’s accountability markers as well as their own pedagogical epistemologies.

The final section of the analysis of findings problematizes the effects of this standardized performativity on the instructional practices of the kindergarten teachers at the two campuses selected for this study. I compare the instruction I observed and captured through field notes to tenets of DAP to locate spaces within this enactment

where mediation might be necessary to help these teachers resist the negative effects of standardization and instead focus on outcomes that attend to the children's developmental needs and socio cultural worlds.

## **SECTION 1: THE APPEARANCE OF STANDARDIZATION**

Both teams of kindergarten teachers at the two campuses I selected for this study met weekly after school to plan their instruction for the following week. The four teachers at Hernandez Elementary met on Wednesdays for approximately an hour, and the team of four teachers at Wiley Elementary met on Thursdays for up to an hour-and-a-half. Although the interactive dynamics and procedural protocols of these planning sessions was unique to each campus, the format and organization was similar in that each of the team members was assigned a content area, which they plan for before meeting together and sharing as a group. In this section, I examine field notes I took and the transcribed conversations I recorded while sitting in on both campus meetings, which took place the week of January 26-30, 2015. My goal in observing the planning at these two campuses during the same week was to examine the extent to which the teachers were aligning instruction to the district's scope and sequence of standards specified in the IPFs. I also looked for ways the teachers used the district documents (if at all) to trace how they aligned themselves to the goals of the official curriculum and UBD.

Table 5.1 highlights the TEKS foci for the week of February 2-6, 2015 as they are listed on the BSD Kindergarten 2014-2015 Scope and Sequence (See Table 5.1). Note that the TEKS in Language Arts are recursive and recycle throughout the year. However, the Scope and Sequence document specified that summarizing, identifying main ideas and details, text features, and maps were the foci in the district's state adopted basal resource for that week of instruction.

Table 5.1: Focus standards for the Week of February 2-6, 2015 (as cited on the BISD Kindergarten 2014-2015 Scope and Sequence

Content Area	State Standard (TEKS)
Social Studies	(6) Economics. The student understands that basic human needs and wants are met in many ways. The student is expected to: (A) identify basic human needs of food, clothing, and shelter; (B) explain the difference between needs and wants; and (C) explain how basic human needs can be met such as through self-producing, purchasing, and trading.
Mathematics	(5) Algebraic reasoning. The student applies mathematical process standards to identify the pattern in the number word list. The student is expected to recite numbers up to at least 100 by ones and tens beginning with any given number.
Science	(9) Organisms and Environments. The student knows that plants and animals have basic needs and depend on the living and nonliving things around them for survival. The student is expected to: (A) differentiate between living and nonliving things based upon whether they have basic needs and produce offspring;

A review of the field notes and transcriptions that follow shows that while the teachers at both campuses did follow the district’s suggested scope and sequence of topics and state content standards (TEKS), the IPFs were not visible during the planning sessions, and the teachers did not regularly adhere to the protocols for UBD, which involve a critical analysis of the big ideas and enduring understandings that underscore the state standards to ensure transfer and meaningful application of knowledge and skills. Instead, the teachers spent some of their time completing clerical tasks (e.g., field trips, gathering supplies, etc.) while devoting most their team meeting to sharing activities that addressed the standards in ways they feel would be of interest to the students or allow them to meet the grade level expectations for mastery.

## Hernandez Elementary

What follows is an anecdotal account of a portion of the meeting that took place at Hernandez Elementary on January 28, 2015. All four kindergarten teachers were present, including the two who chose not to participate fully in the study but did consent in allowing me to transcribe and audiotape the meetings while they were in attendance.

Madalyn Mathers has just made popcorn in the microwave oven and offers a pile to each team member seated around the low standing rectangular table located in Patricia Caldwell's classroom. Mrs. Caldwell is discussing the contents of various videos she has shown her students in past years about the migration and nesting of sea turtles, the hatching of alligators, and general information on the tuatara in New Zealand. As she shares, Ms. Mathers is taking down notes. The other teachers are listening.

Mrs. Caldwell begins to share how she teaches her students to take notes as they watch the videos: *"They have done two bird movies taking notes this week, and they're getting pretty good at it. You still have some that will just draw things. You say point out something you learned from their notes and they haven't got a clue. Then you have the other kids that go straight from the front, 'We saw this happening, and we saw this happening.' They really have the idea of notes and why it's being used. I do that with all the reptile movies too."*

Mrs. Caldwell now offers to lend the video to other team members. Ms. Mathers responds, *"It really doesn't matter to me, whenever someone is not using it."* Mrs. Caldwell agrees to use it on Monday of the following week, and Ms. Mathers decides that she will borrow it for either Thursday or Friday. The other two teachers make no mention of wanting to use the videos.

The conversation about the science video abruptly ends as Mrs. Caldwell discusses plans for Groundhogs Day and Hundred's Day: *"I didn't give you any plans for Groundhogs Day so I hope you have some stuff. Then, Hundreds Day. [She directs her gaze and inquiry to Mr. Lopez, who oversees planning for math] I'm sure you have a bunch of stuff for first grade [Mr. Lopez used to teach first grade.]* He responds, *"Yeah, I'll get some stuff from...since it's not."* Mrs. Caldwell interrupts him, *"We have a bunch of stuff that, yeah, if you pull some stuff together because we kind of do Hundreds Day."* Ms. Mathers, who continues to jot down details from the meeting on her notepad, asks Mr. Lopez to make a note for her about what he will send everyone. She emphasizes, *"I need to get the letter ready. It needs to go home Thursday."* She is referring to the grade level letter that goes out to all the kindergarten parents.

The topic of what to do for Hundreds Day leads to a discussion back and forth between Mrs. Caldwell, Ms. Mathers, and Mr. Lopez about what type of projects to do for the Hundreds Day celebration. Mr. Lopez mentions a 100s Day poster he has been doing with his students. Mrs. Caldwell and Ms. Mathers discuss how they have had the parents from the past years send it snacks (e.g., Cheerios) so that the children could make collections of 100, which would be compiled into a trail mix. The conversation around this activity abruptly ends as Mrs. Caldwell, who oversees planning for science, tries to move on to other content areas: *“What else do I need to do? Okay, that takes care of science. Math next week is still hundreds stuff, right?”*

The vignette in the above, which annotated the proceedings that transpired just within few minutes of the meeting between the kindergarten teachers at Hernandez Elementary School, showcases the cursory nature of the content and conversations that typified the pedagogical focus of their weekly planning sessions. Although the teachers did talk about instructional issues and content, the conversation appeared to be mostly preoccupied with taking care of procedural tasks, such as putting together information for the weekly newsletter, or each teacher suggesting and then explaining an activity that would address the scope and sequence of topics outlined in the district’s yearly overview compiled by the specialists in the department of Early Childhood. The video that Mrs. Caldwell recommended to her team members did perhaps correlate to the focus in science specified for that week of instruction (see Table 5.1). However, Mrs. Caldwell did not provide detail on how the content would specifically address the knowledge and skill statement (K.9.A), which suggested that children will be able to identify characteristics of organisms that are classified as living and non-living. Moreover, there was no conversation between the teachers about how the students’ engagement in these activities would show evidence of deep understanding related to the big ideas inherent in the state standards correlated to the list of topics on the Kindergarten Scope and Sequence. Furthermore, neither the IPF for each content area or the Kindergarten Scope and

Sequence were visible in the hands of the teachers during the meeting. Although the absence of the IPFs might suggest that each teacher had studied the document related to his/ her assigned content area before meeting as a team, it also might attest to the document's low import in helping to maintain a focus of the ensuing discourse among team members accountable to the tents of UBD. That is, rather than discussing what knowledge and skills or essential understandings would show evidence of conceptual transfer for the end-of-unit performance based assessment suggested in the IPFs, the teachers were mostly considering how the children would complete a set of tasks, such as the taking notes activity that Mrs. Caldwell had her students do while watching videos.

Only a few instances arise during the planning session where a meaningful dialogue appeared to transpire about how a kindergarten student might demonstrate a conceptual understanding in relation to a specific state standard. For example, the following commentary pertained to what Mrs. Caldwell had noticed about her students' proficiency in counting to 100:

Mine finally...that doesn't mean they can count to a hundred. They've got the pattern of oh, if all the ones column is missing, then it's just one and I put ones all the way down. Then, they just do their 1, 2, 3, 4, 5, 6, 7, 8, 9. It just means they kind of caught the pattern. Tomorrow, we're going to do one with just missing numbers and we'll see if they can figure it out with missing numbers, if they can remember the pattern that goes on.

Apparently, Mrs. Caldwell's students were on the cusp of noticing that the string of number words they recited as they counted to 100 followed a predictable pattern, which consisted of saying a decade (e.g., twenty, thirty, etc.) followed by the name of the repeated sequence of single digit numbers in order 1 through 9. Although I have no evidence to suggest Mrs. Caldwell had referred to Kindergarten Math IPF # 11 before meeting with her team members, her observation was nevertheless in alignment to one of

the essential understandings highlighted in the first bullet listed under the “Making Meaning” section of that document:

The counting word list to 100 follows a predictable pattern that involves the repetition of the 0-9-digit sequence ordered within a base-ten grouping, which accumulates and transitions within a system of decades.

Beyond this single commentary, a more in depth conversation about what this essential understanding means and how the students in the other three classrooms have shown evidence of it in their learning never seemed to take place during the duration of the planning session.

Eventually, the Hernandez Elementary kindergarten teachers did move on to the remaining subject areas, which included language arts and social studies. In the portion of field notes that follow, I highlight what drove the teacher’s conversation in relation to these two content domains. Again, based on the conversation that ensued, it appeared that while the team continues to align to the district’s scope and sequence foci, they brush over the essential understandings the children needed to be able to transfer at a deeper conceptual level to other related content and knowledge and skills:

Ms. Mathers brings up the topic of language arts: *“Are we starting language arts?”* There is a minute of silence. When no one responds to her question, Ms. Mathers informs the other team members that the content for the following week’s language arts material is on the grade level share drive. Making no acknowledgement of Ms. Mather’s announcement, Mrs. Caldwell brings up another topic: *“Are you doing much with community helpers during this time?”* Ms. Mathers replies, *“Is that one of our grades this time? We may need to look a little closer at social studies.”*

Mrs. Caldwell gets up from her seat to retrieve a copy of the district’s report card rubric for the third nine week to confirm if the concept of community helpers is a skill that will require a grade. As she searches, Ms. Mathers reminisces about the past unit on community helpers the team used to do: *“We used to do such a nice community helpers unit years ago. I just thought it might be a thing to ask.”* She offers more popcorn to the team members: *“You all are going to have to finish that up [referring to the popcorn] or I will not be able to eat supper.”*

Mrs. Caldwell returns to the table with the report card rubric. She reminds the others that they must finish administering a required math assessment for middle of the year benchmark scores by the following Thursday. She then closely inspects the report card rubric to determine what social studies skills must be assessed for that nine-week reporting period: *“Okay, historical figures, we’ve talked about several. Hopefully, they can come up with at least 4.”* Ms. Mathers begins to think out loud about what content they have already covered that the students would be able to retrieve to earn a perfect score of 4 on the rubric: *“Well, between the money, then Dr. King, then we’ll have Dr. Carver by the end, right?”* After more carefully reading the requirements on the scoring scale for the report card Mrs. Caldwell clarifies for the rest of the team what the expectations are for earning a 4: *“For 4. I guess we should look at this closer. One historical figure and 3 important things about him. One historical figure and 3 important things about him gives you a 4. I thought it was 1, 2, 3, 4 historical figures. Read it.”*

In this vignette, Ms. Mather’s brief reference to the language arts content for the following week quickly transitioned to a longer discussion about the upcoming social studies unit on community helpers. The coupling of these two subject areas—language arts and social studies—within the same conversation was not a coincidence since the district’s state adopted basal for reading is organized thematically by units related to social studies and science. Per the district’s Kindergarten Scope and Sequence, the upcoming unit for the following week was a study of the neighborhood. The Kindergarten Social Studies IPF, however, was not aligned to this topic, focusing instead on the contribution of historical figures as well community workers. The teachers did not appear to express dissatisfaction with the mismatch of these two resources and timelines, but this is an issue I will discuss more fully in the second section of this findings chapter as it seems to have had some bearing on the uptake and implementation of the IPFs.

What is significant about the above vignette to the current analysis of findings is the lack of discussion among the team members about the content of the language arts lesson plans that Ms. Mathers had uploaded to the grade level server and what pedagogical approach they should take to ensure the children were engaged both

emotionally and intellectually in the learning that would occur. This apparent lack of interest in and critical interrogation of the content standards and enduring understandings that underscored the activities Ms. Mathers had planned did not align with the stated outcomes district officials and specialists who designed the IPFs envisioned would occur. Ideally, to be fully enrolled in the district's actor network of constructivist curriculum enactment, the teachers would use the IPFs during the team meetings to keep their instructional planning in line with the tenets of UBD. Instead, as the incident in the above scenario reveals, the teachers acted as consumers (Apple, 2004) of the ready-made lesson plans without engaging in a discourse on what the outcomes of the learning would be for their students.

Another potential roadblock to the successful translation of the IPFs on the discursive practices of the kindergarten teachers at Hernandez Elementary was the presence of other ancillary documents, which encouraged alternative pedagogical approaches that did not necessarily focus on connecting student learning to deeper and meaningful ideas through application and engagement. More specifically, I am talking about the BSD kindergarten report card rubric that Mrs. Caldwell referenced to determine what should be the content focus the following week in social studies. Mrs. Caldwell and Ms. Mathers appeared to be more concerned with what the children would be able to do to show success on the report card than they did in taking into consideration how to create learning experiences that would provide evidence of student's attainment of the essential understandings highlighted on the Kindergarten social studies IPF. The first bullet under the Enduring Understandings column on the 3<sup>rd</sup> nine weeks IPF specified that the children should make sense of the following big idea: "Culture affects people's daily lives. Different ethnic and cultural groups and individuals contribute to and change the community and society through their accomplishments." However, the criteria for

mastery that Mrs. Caldwell read from the report card rubric failed to address the level of critical thinking expressed in the enduring understanding stated on the IPF. Whereas the report card rubric expectation focused on the ability to recite from memory a list of unrelated facts, the enduring understanding statement on the IPF suggested that children identify and make connections to the contributions that historical figures have had in enacting change in the community.

In Chapter 4, I discussed how the report card rubrics were developed as a document to help teachers more clearly delineate levels of student attainment of the state's kindergarten standards, which purportedly were not as fully unpacked in the IPFs. Kelly Ruffalo, the district's kindergarten specialist, explained the rationalization for the rubrics in this way:

So, over the past couple of years we've also developed rubrics that match with the [IPFs]. And so while we are aware that we have different pockets around the city that are higher socioeconomic and that those kiddos have different opportunities than students maybe on some of our eastside campuses that are lower socioeconomic, the baseline piece kinda, and with the Rubrics, just takes that into account. So if our kiddos know what we have written into the [IPFs] then we're meeting them at this level, which would kinda be a blanket not necessarily above. (Interview/ August 29, 2014)

According to Ms. Ruffalo, BSD's kindergarten rubrics apparently provided a baseline metric that considered the range and variance of academic experiences and performance levels present within the district. This specificity eliminated the guess work for teachers to determine where their students should be academically in relation to the district's baseline, which became progressively more rigorous at nine week intervals throughout the year. Such convenience, however, came with a cost. The UBD framework inscribed in the IPF sought to encourage teachers to thoughtfully incorporate the children's socio cultural worlds into a culturally relevant exploration of the contributions from historical

figures. Hence, the kindergarten teachers' deferral to the report card expectations as opposed to the enduring understandings housed in the IPFs could be framed as an example of dissidence (Callon, 1986); whereby, actors betray the roles or identities they were enrolled to perform within a network. The network in peril in this analysis involved the enactment of UBD principals written into the IPFs. For the teachers at Hernandez Elementary, such betrayal unfortunately lead to their failure to incorporate and plan more culturally relevant learning experiences for their students.

### **Wylie Elementary**

On January 29, 2015, the day after the teachers at Hernandez Elementary meet for their team planning session, the four kindergarten teachers at Wiley Elementary, located on the other side of town, convene after school to began planning for their following week of instruction. Mrs. Velazquez, Miss Villarreal, Miss Harris, and Mrs. Wilson were present at the meeting, which they had given me permission to observe and audio record. The content area foci for which they were planning was identical to what the teachers at Hernandez Elementary reviewed. Conversations about the 100<sup>th</sup> day of School celebration, Valentine's Day, Groundhog's Day as well as what types of activities would most appropriately address the topic of living and non-living animals mostly dominated the informal banter of exchanges and commentary circulating among the four teachers. The similarity of pedagogical content occurring at both campuses' team meetings gave the impression that the official curriculum BSD district specialists inscribed within the multitude of planning documents they created was succeeding in governing the instructional decision-making of kindergarten teachers located at two of its academically low performing campuses. This appearance of standardization, however, veiled how these teachers incorporated the district's curriculum as they engaged with it through other

texts and devices in ways that were at times compliant but at other moments discordant with the intentionality of the IPFs. In short, what transpired in this moment of enactment (when the teachers at Wylie Elementary are planning together) was a situated performance that produced other possibilities for pedagogical practices tailored to their teaching contexts while maintaining some semblance of the district's scope and sequence of standards.

In the segment of transcribed field notes I highlight below, each of the four teachers was seated around Miss Velazquez's small group teacher table with their laptop in toe. They were simultaneously filling out a common grade level weekly lesson plan template, which was uploaded on google docs so that each teacher could synchronously populate her assigned content area section/ column as the other team members worked on theirs. This set up allowed the teachers to multi-task and attend to other housekeeping items, such as registering on-line for a district-sponsored workshop offered at an offsite campus.

Miss Velazquez and Miss Villarreal are trying to confirm the exact location of the professional development session they are going to attend. Miss Villarreal is having trouble seeing where the information is located on the webpage. As they discuss, Miss Harris asks about how she should send names of children she has identified as Gifted and Talented to one of the campus administrators: *"If I'm going to email Miss. Cook [pseudonym] with the GT names, what is...I know she is such a stickler for the format thing. What do I put? Just their first name and last initial?"* Just as Miss. Villarreal responds yes, Miss Harris laughs and jokingly says, *"Should I just go and tell her? Do you remember that email she sent?"* Mrs. Wilson sarcastically jumps into the conversation and tells Miss Harris, *"No, I probably did not read it because I was like...I am so...I usually do not read her emails."* As this exchange between Miss Harris and Mrs. Wilson occurs, Mrs. Velazquez and Miss Villarreal continue their conversation about the location of the professional development and where they should park when they arrive.

The many off-topic exchanges occurring in the above, which did not appear to be related to the instructional content for the planning of the following week's instruction,

were nevertheless important to the team as they allowed the teachers to take care of pending clerical tasks that applied to each team member in the relatively short time they had for interacting together as a group. The laptop computers and the electronic lesson plan template therein served as devises (non-human actors) that allowed the teachers to quickly eliminate those less important agenda items (e.g., sending emails, registering for workshops, etc.) and subsequently get back to planning content for the following week. On the other hand, the computers were also distractors in that they encouraged the teachers to divert their attention to completing many tasks simultaneously (e.g., filling out the lesson plan template) instead of maintaining a coherent focus on critically reviewing the enduring understandings and big ideas listed on the IPFs in relation to their student's academic needs and interests.

Eventually, the discussion and focus of the meeting did shift to outlining the instructional content for the week ahead. Even as the teachers began to talk about pedagogy, the ensuing discourse was limited to art and craft activities that introduced the children to those historical figures associated with the upcoming President's Day.

Mrs. Velazquez laughingly announces to the others that she will post her "octopus men" on the outside wall display. She explains how this art project for the children received its peculiar name: *"Okay, so at [my previous school], we had all those lockers and we'd hang our artwork outside. About the end of February, [teacher's name] looks at it and she's like, '[Patricia], I've got to ask you ... Why do you have octopus man hanging outside?' After I stopped laughing so hard, I was beat. I'm like, 'That's Abe Lincoln.'" Laughter breaks out among the other team members. Mrs. Velazquez explains that the reason the figure resembles an octopus man is because the children trace their handprint on black construction paper and then paste it to the bottom of the human face. Mrs. Wilson then shares a related arts and crafts activity that would address both presidents, Washington and Lincoln: "I saw a really cute one on Pinterest one time where you could do Abe Lincoln and George Washington if you lifted over, [Washington's] coat was the other [Lincoln's] hat; so, it was back to back. It was really cute."*

Each of the activities suggested during the conversation highlighted above had no relevance to the big ideas that pertained to the concept of historical figures as it was specified on the kindergarten social studies IPF. Instead, the cuteness the teachers admittedly attributed to these craft projects seemed to have more importance than how the activities might contribute to the children's critical framing of history, such as the contributions these presidents did or did not make to the American culture. The teachers' personal arsenal of ready-made activities they have had success doing in the past and access to platforms such as Pinterest helped to forge alliances and commitments that circumvented the district's insertion of UBD practices in the IPFs to ensure the enactment of its official curriculum. Thus, when conceptualized through the lens of ANT, these material entities (e.g., internet platforms, old lesson plans) could be attributed power to produce effects that interacted with the human actors' agency to successfully align or resist allegiance to an actor network (Fenwick & Edwards, 2010).

Even when the teachers' instructional focus deviated from the protocols outlined in the district's official curriculum documents, the intentions that populated this decision-making were not always discordant to best practices, such as DAP. For example, as the teachers at Wylie Elementary continued to plan, they began to brainstorm ways to integrate the topics that were designated for that week of instruction on the Kindergarten Scope and Sequence. In the following excerpt, Miss Villarreal suggested using the book, *The Wolf's Chicken Stew* by Keiko Kaska (1996), as a read aloud activity that would address both the math focus (e.g., counting by ones to 100) and the language arts objectives related to text features:

Miss Villarreal and Miss Harris are brainstorming ideas for literacy centers, such as having the children do picture puzzles and make words in Elkonin Boxes using letters they have been learning. Miss Villarreal suggests that Miss Harris could include another activity related to the "*read aloud with the chicken stew and have*

*them [the children] start working on that as a center.*” Miss Villarreal explains that this idea would be a good way to address the concept of setting.

Showing interest in doing this activity as well, Mrs. Wilson requests more information about the book: *“What was it? The chicken stew? What was the purpose of that? Was there a hundred something?”* Mrs. Velazquez responds by explaining how the book relates to the concept of one hundred: *He [the fox] wants to eat her [the chicken] so he's chasing her. He loves to cook, so he decides to make 100 pancakes and he takes it to her and 100 doughnuts and he takes it to her, and a cake that weighs 100 pounds. Then he was ready. He goes and he's looking in and he's peeping in. All of the sudden the mom opens the door and she says, "Oh, so it was you, Mr. Wolf. It wasn't Santa Claus. It was Mr. Wolf." The chicks gave him ... Want to guess how many kisses? 100 kisses, so he couldn't look at that wolf in the face. He couldn't eat them.”*

Miss Harris inquires how to extend the book to address the concept of setting for the children. Miss Villarreal summarizes what the children would be doing: *“You just talk about the same. They had the cutouts, the characters... [cross talk ensues] ... Then they have to draw the setting of the story. Then they get to ... Is it what Popsicle sticks? Do they get to do readers' theater? No, not readers' theater, but a little puppet show.”*

While the discussion that transpired in the short vignette above was not representative of the type of critical discourse promoted in UBD, which encourages educators to interrogate how learning outcomes align to big ideas and possibilities of transfer, it did provide evidence to show how this group of kindergarten teachers at Wylie Elementary were enacting their roles of curriculum developers as opposed to consumers of a ready-made lesson plan. In this way, the teachers were following the tenets of DAP, which framed the integration of content areas as an important feature of curriculum planning for young children (Copple & Bredekamp, 2009). I argue that the design of the IPFs, which were packaged as separate content specific planning documents, did not provide enough guidance on how to integrate learning in a way that might enable children to make connections across subject areas. Instead of following the IPFs exactly in the format they were designed, these teachers found a way to side step the documents and rectify an omission that was not clearly spelled out how to manage.

To be clear, I am not suggesting that at any time during their meetings together did the team of kindergarten teachers at Wylie Elementary ever adhere or refer to the IPFs. On a few occasions, they do. For example, just before the January 29<sup>th</sup> team meeting concluded, the discussion became more salient to the content outlined on the science IPF, which focused on the concept of living and non-living organisms. Miss Villarreal, who was responsible for preparing the science portion of the team's weekly lesson plans, began to explain to the others the ideas the children should explore and how she has outlined for them to demonstrate these concepts through a series of activities that progressed throughout the week:

Well, [for] science I started the plans for next week that were compiled from this week's and next week's from [the IPFs] at least. It's living or non-living. I just have engaging them, so reading a book about living and non-living and introducing it. I checked some out from the library. It's in my triple basket in my library. Then there's these picture sorts that they can do where it's like is it a living object or a non-living object and talking about what those characteristics are. Does it grow? Does it breathe air, whatever? Does it eat, reproduce? Does it move?... Did I give it to y'all, an actual sort that they can make? I only have two plans. This one or there was, or it was this one?" Mrs. Wilson responds, "I like that one more." Miss Villa Real acknowledges: "That' one? I'll just go with that one. It's in English, though, so I would have to translate it for us."

More cross talk about translation ensues until Miss Villarreal goes on to explain the continuation of the activity: Anyway, then they pick an object. Then they get to chart it. Does it need air? Does it need food? Does it move? Does it grow? Is it living? They decide what their object is and then chart it."

The conversation then evolved into additional cross talk in which two of the teachers (Miss. Harris and Mrs. Wilson) speculated how their students might not be able to independently engage in the sorting and charting activities that Miss Villarreal had just shared. Miss Villarreal addressed these issues by explaining how she would structure and sequence the activities from a modeled lesson, to a guided practice, and then eventually to an assessment task that would allow the children to demonstrate their new knowledge:

A good way to do that one, too, is ... I have this on the lessons plan for the following day. You make a big chart, basically, that looks like that with the characteristics and is it living. Then you write does it breathe, does it grow, does it reproduce, does it move or whatever the characteristics are. Then you do maybe an example and discuss it together. Then have them come up with examples or you would have cards ready or something. Then you get to pick another object and do it as a class together. In the beginning of the week you do it together. So, like a dog... Does it breathe? They'll say yes, so you put a check mark or an X or a Y for yes or an N for no, or you can even write the word since that's what you're saying. Write the sight word because they're supposed to know yes or no. Write the word, yes, no. Then does it move? Just going in each space. Do one or two each day depending on how big your chart is or if you can fit it. Then by Thursday or Friday they hopefully can do it more or less on their own. Okay, now you have to think of a new thing that's not on our chart. Remember how we did it. Now ask yourself. Does it do this? Does it do this? Maybe by modeling it and doing it together, a shared writing, they can hopefully go off and do it.

Miss Villarreal's suggestions and commentary on how she intended for her team members to implement the living and non-living lesson plan did show evidence that she had indeed consulted the IPFs. The first bullet under the Essential Questions column on the science IPF proposed that teachers pursue the following inquiry with their students: *"What does it mean to be alive?"* To that end, Miss Villarreal recommended prompts--e.g., "Does it breathe? Does it grow?" --for her team members to use to lead their children to think about observable characteristics and behaviors exhibited by living organisms. Moreover, Miss Villarreal also appeared to have given some thoughtful consideration on how to orchestrate the learning so that the children could demonstrate their newly acquired knowledge through various performance based tasks, such as completing a yes/no checklist for classifying an object as living or non-living. This activity is closely aligned to the suggested classification task suggested in the first bullet under the Performance Assessment column on the last page of the science IPF. So, while the teachers did at times comply with the district's protocols specified in the IPFs, these instances did not seem to occur regularly or predictably as other non-human actors (e.g.,

internet access, electronic templates, treasured and long established lesson activities) influenced the team's instructional decision making practices.

Lastly, the teachers' efforts to remain compliant with the district's vision of how to plan and carry out their instruction were never certain and could at any moment fail to transpire. In some cases, defiance can be purposefully inscribed on paper with its intentionality disguised to provide the illusion of compliance. The Wylie Elementary team meeting ended on an interesting note that speaks to the difficulty the teachers experienced in trying to follow the pacing suggested in the IPFs. In the conversation that follows, the teachers seek clarification on when the living and non-living unit of study will begin:

- Mrs. Velazquez: So, we are going to start living and non-living next week?
- Miss Villarreal: I just put it in the plans for whenever you guys are ready, at whatever pace you guys are at. I know this is supposed to be this week's plans. I compiled it with next week's.
- Mrs. Velazquez: [Name of campus principal] might actually like looking at them. If we have to turn them in ...
- Miss Villarreal: I don't know if there was anything, but ... That's the pace our kids are going. It's not like we're not teaching it. That's how they're able to ...
- Mrs. Velazquez: There's not enough time. I'm trying to do all my literacy stuff in two languages. It's impossible.
- Mrs. Wilson: [Laughing]: There's not enough time and I don't even teach two languages.

Although the teachers appeared to discuss their predicament in a joking manner, their issue with managing their unit schedules to accommodate the amount of content they had to teach and their student's attainment of the requisite knowledge and skills posed a real threat to their ability to maintain the suggested pacing outlined on the

district's science IPF. To manage this dilemma, Miss Villarreal indicated that she had taken the liberty to write down the team's projected (although tentative) plan on paper in case they are questioned by their administrator, who (as Mrs. Velazquez points out) might be monitoring their alignment. Hence, the documentation of alignment on paper seemed to allow the teachers at Wylie Elementary to feign compliance if these plans should not transpire in practice.

To summarize, I presented findings from this section to document how two teams of kindergarten teachers at two different campuses within the same district responded to a common planning document (the IPFs), which attempted to guide them in aligning their instructional practices to the state's standards in a way that would promote student engagement around a core of enduring understandings and big ideas. The data I have presented suggest that while both campuses did appear to follow with fidelity the scope and sequence of these standards, this enactment encountered variations and deviations as the teachers pursued different and at times conflicting agendas mediated by a variety of material objects (e.g., lesson plans, access to the internet, report cards, laptop computers, etc.). I argue that this enactment, which operates within a heterogeneous network of relations (both human and non-human actors), is never accomplished the same way in different spaces and localities. Hence, I agree with Law's (2009) rejection of any claim based on ANT that would suggest "successful translation generates a single coordinated network and a single coherent reality" (p. 152). Instead, he contends that the iteration of actor networks operating at numerous sites of practice render an effect of multiplicity, which produces endless possibilities of enactment rather than one predictable standard outcome.

Thus, when conceptualized as an effect of multiplicity, the instructional planning sessions that occurred among the teams of kindergarten teachers at both Hernandez and

Wylie Elementary appeared to follow a common protocol, which was loosely predicated on the scope and sequence of standards outlined in the IPFs and its ancillary documents. However, the lesson plans produced at each campus appeared to be unique and salient to the individual teams, their agendas, and their material realities. To more fully unpack the concept of multiplicity as it pertained to these two teams of kindergarten teachers, I interviewed the campus teachers and their administrators to understand the way in which these actors conceptualize the IPFs in conjunction with the individual, developmental and socio cultural needs of their students.

## **SECTION 2: MULTIPLE POSSIBILITIES FOR ENACTMENT**

The data from the team planning sessions I presented in the previous section offered insight into how the teachers made instructional decisions about what, when, and how to teach content with or without the guidance of the IPFs. The findings I gleaned from these sessions showed conflicting evidence about each team's use of the district's official curriculum documents on their professional and pedagogical decision-making. Whereas the teachers followed the pacing guides that outlined when to introduce topics and knowledge and skills, they rarely acknowledged or adhered to tents of UBD, which frame how the IPFs should be used. In fact, the actual IPF documents were never visible in the hands of the teachers as they planned together.

What follows in this section is an attempt to peer deeper within the webs of relations at each campus (Hernandez and Wylie Elementary) to understand how the contingencies the actors encountered during these interactions engendered unique ways of enacting BSDs official curriculum. My contention is that the relationships the teachers, administrators, and other school or district personnel forged with other individuals and non-human entities (e.g., texts, assessments, technologies, etc.) might provide some clues

on how to these actors assembled and networked in both complementary as well as discordant ways that align with BSD's intended implementation of the IPFs. To ascertain this information, I individually interviewed the teachers and their campus administrators to gain insight into how they thought the IPFs should be used and if this framing contradicted or supported what they state they believe is in the best interest of young children's individual, developmental, and socio cultural worlds.

### **Hernandez Elementary**

#### ***The principal: focus on academic rigor***

The principal of Hernandez Elementary, Ms. Mary Ann Oxford, and her staff appeared to place a strong emphasis on student achievement. This focus on academic success was implicated in the principal's expectations that her teachers closely interrogate and follow the student expectations authored by the state. Ms. Oxford explained her position on the state standards and how her teachers should approach them:

Of course, the state curriculum is tight and my expectation of planning together and working together is tight, but I'm loose when it comes to, you know, your baby's home sick, you've got to be there, you know. You need to go see your grandkids in Kansas. Do it. But I do expect the kids to master the SEs [student expectations]. So now ... I've got work on my own thing. I've got to kind of help them do more analysis. (Initial Interview/ September 24, 2014)

Although Ms. Oxford appeared to afford her staff some leniency on how they managed their personal affairs, she did hold the teachers and their students accountable to meeting the state academic expectations. She did indicate, however, that some of her staff needed more assistance on analyzing what those student expectations mean. To more specifically clarify what she wanted the teachers to do to make sense of these standards, Ms. Oxford provided an example from her own experience as a fourth-grade teacher, and how she and her team members would unpack the knowledge and skill statements from

the state: “We were really into the action of the verb of the SE [student expectation]. How can we see kids doing this?” (Initial Interview/ September 24, 2014) In other words, Ms. Oxford apparently wanted her staff to pay attention to what the student expectation specified the child could do and to what level of academic complexity he/she should demonstrate that outcome. Moreover, to achieve this level of analysis during their instructional planning, Ms. Oxford thought the teachers at her school should have placed an emphasis on “making student production important...making a big deal about quality products and eventually showing kids how to create rubrics.” (Initial Interview/ September 24, 2014) The development of the rubrics that Ms. Oxford envisioned here was an organic classroom process with the teacher guiding the students as they assess their own work to establish criteria for what different levels of quality would look like.

The emphasis that Ms. Oxford placed on student performance appeared to have implications for how she wanted her kindergarten teachers to frame their expectations for their young learners. More specifically, she pushed back on the construct of developmentally appropriate instruction only to the extent when adherence to such practices limited the teachers on taking children as far as they could go academically. She described her stance on this issue in the excerpt below:

What we model and put out there is what we get back...having no ceiling, and I think sometimes that to have this kinder ceiling, you know, as far as, like, the expectations. And now, with all of this, and then how kids have to be sophisticated readers in 3rd grade and when you have to write an essay, write a paper in one day and it can only be 26 lines and it's got to be succinct; it affects everything that we do. (Initial Interview/ September 24, 2014)

The performance expectations she outlined in the above relate to the rigor she has analyzed on the state's 3<sup>rd</sup> grade reading and writing end-of-year exam. As the instructional leader of her school, Ms. Oxford stated that she had to seriously consider the implications of these and other steep expectations for acceptable performance at each

grade level and what the grade level directly below must do to be sure the students were ready. Consequently, she also had to develop systems of practice on her campus that encouraged the teachers to take responsibility and ownership in crafting what the academic expectations would be at each grade level. One of the systems she put into place were grade level cadres, which she explained below:

So, we have vertical cadres in all those subjects and so as the 4th grade teachers were talking and sharing, this is what they have to do now. So, what should it look like in 3rd, what should it look like in 2nd and they came up with some agreements. So, we have to keep visiting those agreements to see if they need to be tweaked, see if they need to, if we need to, you know, [think about] how are we holding each other accountable for it?

The agreements that each cadre developed specified what students should know to be prepared for the next grade level. Apparently, this activity was designed to encourage the teachers at Hernandez Elementary to take ownership of and be accountable for their grade level expectations and state standards. However, it also appeared to create a ‘trickle-down’ effect whereby each subsequent grade level would seek to increase the academic expectations of the grade level below so that students entered prepared and ready meet the content standards established by the state. What is more, this accountability shove down created some confusion for the kindergarten teachers as they reconciled what their campus had established as end-of-year benchmarks for reading on grade level to what the district had interpreted as the state’s expectations in both its curriculum documents (including the IPFs) and state adopted basal program.

***The kindergarten team: stressed for success***

Mrs. Mathers, one of the kindergarten teachers on the kindergarten team at Hernandez Elementary, described the disappointment she experienced at the start of each school year when the 1st grade teachers at her school contested the leveled reading scores

that the entering group of new first graders were assigned at the end of the kindergarten year:

It was this panic. Part of it, I think, arises every year at the beginning of the school year, because you are sending learners up that you're saying "I tested with your instruments, and this baby can read easily, independently, on a six." Then, they go up and they're tested, and "Oh my word, you're telling me, you sent up all these sixes and they're scoring a two in first grade." You start getting this really nasty feeling from the other grade level that you're just inflating your scores. It has nothing to do with it, and we wouldn't do that (Initial Interview/ November 11, 2014).

At Hernandez Elementary, the expectation was that kindergarteners would enter 1<sup>st</sup> grade reading at a level 6 on the state adopted DRA assessment; although there did appear to be some discrepancy on this metric as the kindergarten teachers also claimed the benchmark to be set at a level 10. The district expectation, however, was that the children would leave kindergarten reading at a level 3, which reflected the child's ability to decode simple, repetitive and patterned text. To read at a level 6, the child needed to be able to answer questions that would show adequate comprehension of what occurred in the story. Apparently, the discrepancy in the scores Ms. Mathers and her team gave on the end-of-year DRA assessment were attributed to the way the test was administered. The kindergarten teachers could read passages to the children and then ask the comprehension questions, whereas in 1st grade, the children had to both read the passages and answer the questions. Regardless of the discrepancy in test administration, the real issue for the kindergarten team would mean adjusting the scope and sequence of concepts outlined on the IPFs to accommodate the campus designated expectations for first grade.

In addition to the accountability pressures and high academic performance expectations they had to meet at their campus, the kindergarten teachers at Hernandez Elementary also had to contend with occasional, though very intense administrative

walkthroughs during which both campus administrators and district specialists from the central office staff would carry clipboards and check off a list of indicators to provide evidence if each classroom's instruction was aligned to the district's expectations. Mrs. Caldwell recounted this dramatic experience, which created a significant degree of anxiety and shame for the teachers in her grade level:

She [a district specialist] walked through our rooms, and she wrote the most horrific stuff: "These children are not going to learn anything, these teachers are not following [the IPFs]." In my very politically correct way I went to the principle and I said, "These people are not allowed in my room anymore." To think they can say this kind of stuff about this. They don't know our children, they don't know anything about us. They looked to see what was posted on our walls, and they said our children were never going to learn anything and they were bound for failure (Initial Interview/ October 2, 2014).

Understandably, Mrs. Caldwell appeared deeply affected by this negative feedback. As she recalled, "I went home and cried every day for six weeks."

Coupled with their campus's focus on academic performance as well as the negative feedback they had received from both their first-grade team (with respect to incoming students' reading scores) and the district specialist who criticized their pacing and alignment with the basal resource, the kindergarten teachers at Hernandez Elementary were notably distrustful in following the district's IPFs and ancillary curriculum documents. In the transcript that follows, Mrs. Mathers spoke to what she identified as a "bottom line" contingency:

[Ms. Oxford, the principal] said ...she told someone downtown that [the assistant principal] was the primary principal and she was the intermediate principal. If primary was not successful, that was on [the assistant principal]. Okay, so we were having to look at what we understand to be the bottom line. The bottom line is not going to be what they walk through the classroom and look at. It's not going to be the lesson plans that you put online. It's not going to be whatever anchor charts you have. The bottom line is going to be who reads at what level the last day of the school year or the end of the reporting period. And when you look at it that cut and dried, the bottom line is- it doesn't matter what you do or how you get

them there. The bottom line is how they leave. Some of this stuff kind of just falls away. (Initial Interview/ September 24, 2014)

Ms. Mather's seemed to have interpreted what was reported to her by the assistant principal (which appears to be an ultimatum from Ms. Oxford) to mean that any decision to be made about what to teach should be predicated on what would help the kindergarten students meet the end-of-year reading benchmark. Moreover, the "stuff" that Ms. Mathers referred to in the above was the district's curriculum, which included the IPFs, the Early Childhood Department's advocacy for play, and the scope and sequence of reading skills outlined in the basal resource. These curricular items were what she saw as being negotiable since they did not provide the level of rigor she believed would help her students succeed at reading at a level 6. She explained her decision to ignore these district-endorsed resources and practices in the commentary below:

So, you're in school and you're studying, I can't even remember the theorist name now. You used to have observations of children where you would figure out where they are in their play development and all this stuff, because we don't let them do that anymore, I'm saying I don't let them do that, where that's coming from, it's probably because I know I'm supposed to have these kids reading at a ten when they walk out the school door to be quite honest with you. (Initial Interview/ November 11, 2014)

Mrs. Mathers appeared to be confessing that her sense of urgency to prepare her kindergarteners to be successful and competent readers at the beginning of 1<sup>st</sup> grade caused her to disregard the theoretical pedagogy she learned as a preservice teacher, which advocated for play-based instruction. Furthermore, when I asked in this interview about how often she referred to the IPFs, she responded, "I haven't looked at those since my third year, maybe." Ms. Mathers then went on to explain: "We can't stick to the pacing in the lessons that would come from the [Kindergarten] TEKS when we're having to look at first grade TEKS. What can we teach them that will help them get to an eight or a six?" (Initial Interview/ September 24, 2014) In this statement, Ms. Mathers was

making a clear case for not following the kindergarten state standards: her point being that to do so would not prepare the children to perform at a level 6 on the end-of-year reading kindergarten benchmark assessment. A level 6 required that children demonstrate the knowledge and skills or receive instruction aligned to the state's first grade reading outcomes. What is more, the pacing in the basal, which was foregrounded on the state standards, would not adequately ensure all children would meet that target by the end of kindergarten.

And yet, Ms. Oxford did specify that she expected the teachers at Hernandez Elementary to teach thoroughly and diligently to their grade level standards. When asked how she expected the teachers to approach the IPFs, Ms. Oxford's response was, "So I tell my teachers to be highly critical, that that's the lesson or exemplar lessons or, you know, what's in the pacing. Does that help you get to what you want? Is that mastering the SE [student expectation]?" (Initial Interview/ September 24, 2014). Considering that the exemplar lessons Ms. Oxford mentioned here were correlated to the state standards and pacing indexed in the IPFs, children's mastery of these outcomes would still not have sufficiently prepared all kindergarteners to read at a level requiring first grade knowledge and skills. Hence, with these types of inconsistencies in the messaging they were hearing from their campus administrators and district curriculum specialists, the kindergarten teachers at Hernandez Elementary, as Ms. Mathers indicated, had to make instructional decisions based on what they interpreted as the bottom line.

Although Ms. Mathers did not consult the IPFs, her instructional pacing as I witnessed in the January 26<sup>th</sup> team meeting still reasonably fell within the weekly schedule outlined on the district's Kindergarten Yearly Scope and Sequence. I attribute this alignment to her willingness to follow the lesson plans provided by her other teammates. When I asked her if she consulted the IPFs from the other subject areas, she

responded, “[Mrs. Wallace] looks at this. I don't look at this because I don't plan the math. I go with what you tell me to do and then I am going to supplement as I see fit for the needs of my learners.” It appeared that Ms. Mathers could therefore show compliance on paper (the grade level lesson plans that were turned in to administration) but tweak the content where she deemed necessary to accommodate the instructional needs of her students. In short, Ms. Mather’s connections with the other team members, who apparently did use the IPFs, enabled her to participate (albeit loosely) in the actor network committed to the implementation of the BISD official curriculum documents.

Mrs. Caldwell, the designated kindergarten team leader at Hernandez Elementary, expressed a different outlook on the role that the IPFs should play in her instruction. As Ms. Mathers indicated, Mrs. Caldwell used the district documents with more fidelity, mostly the IPFs for science since she planned that content area for her team mates. When I showed Mrs. Caldwell a sample IPF, she quickly identified those features on the document that she was most familiar with: *“Vocabulary for sure. enduring understands, what's the real thing we're supposed to be in, and how does this tie into the [state standards] that are listed? Because the [state standards] are what we really have to cover.”* Mrs. Caldwell appeared to be very aware that the state standards were the cornerstone of the official curriculum and, therefore, should be of high priority.

Although she did use the documents to help her plan, she was also thoughtfully critical of their limitations: “It’s [the IPFs] got some good stuff, I just get overwhelmed with the amount of it.” (Second Interview/ November 11, 2014) What Mrs. Caldwell seemed to be suggesting here is that the IPFs contained too much information for teachers to thoroughly and comprehensively process for planning purposes. In that regard, she seemed to be aware that the amount of time to cover the content to the level of complexity she needed to was compromised by the number of other subject areas that

must be addressed: “To get these essential questions, essential understandings, I didn't do a very good job at it. I think I was more looking at the time element and what little can I squeeze in and what little time we've got.” (Second Interview/ November 11, 2014) Mrs. Caldwell was notably self-critical in this statement about how effectively she attended to those components in the IPFs that pertained to UBD, such as deep understanding and student transfer. Most importantly, however, she appeared to understand that children needed ample time to recursively make connections from past learning experiences to new concepts linked together by the big ideas within that content domain.

Mrs. Caldwell also responded differently to the pressures placed on her from the district and her administration. For example, when I asked her how she felt about the administrative push to focus on more structured academics, she gave a very matter-of-fact response:

It just kind of sits on the back of my neck until I go to the chiropractor again. Oh, my gosh if somebody walked in my room right now and look around here and these kids are just playing, you know. Except those in the corner just decided to make books, oh yeah, and those over there if you really watched them how much counting they're doing. Trying to play that silly game that they don't know how to play, you know but, oh, kids I guess we better be getting back onto learning how to read because you're saying ten and I thought it was six.

As noted in the above, Mrs. Caldwell expressed an appreciation for the role of play in children's learning. She made note of the ways in which children could still practice academic skills (e.g., writing, counting, and problem solving) while engaged in play scenarios. Mrs. Caldwell attributed her tolerance for children's play in the classroom to being a formally trained Montessori teacher: *“Some of that maybe just some of the Montessori background that if you give children enough latitude and you've got them excited about learning, they're going to start learning.”*

In addition to having practiced Montessori during her career, Mrs. Caldwell had an extensive background in early childhood pedagogy. Unlike Ms. Mathers, who entered the teaching profession seven years earlier (post NCLB), Mrs. Caldwell began her career during a time when issues, such as standards, high-stakes accountability, and testing were not so intensely ubiquitous. Mrs. Caldwell, a kindergarten teacher with over 30 years of experience, recalled a time when there were no standards that specified what and how to teach kindergarten:

Everybody did their own thing... We had this little box of cards that was the curriculum, and you were supposed to pull out what you wanted to do. That's probably where I learned to teach off the cuff. If a child walked in and said, "Look at that bear!" we did bears all day. (First Interview/ October 2, 2014)

Mrs. Caldwell went on to explain that the school officials within the district where she worked during her early years as a kindergarten teacher placed very little emphasis on academic skill acquisition, such as letters and numbers. In fact, Mrs. Caldwell recounted that when "[the administrators] came in, and if they saw stuff in your room that was reading and writing, they got really upset. Or true arithmetic, the one plus one, you couldn't have any of that." (First Interview/ October 2, 2014) Now in her 33<sup>rd</sup> year of teaching kindergarten, Mrs. Caldwell found herself in a very different context--one where there was a strong push for academic readiness.

In summary, I have shown how a unique web of relations were threading together in a unique tapestry of curriculum implementation as the principal and kindergarten teachers at Hernandez Elementary interacted through a basal reading program, state standards, and an end-of-year reading benchmark test to plan for weekly instruction. This network of human and non-human actors produced a tenuous and precarious enactment of the district's IPFs. The two other team members I did not present in this section also apparently planned from the IPFs, but data to show how they conceptualized these

documents was not available since they chose to not participate in the semi structured interviews. Moreover, since Ms. Mathers had developed a more rigorous pacing for the language arts standards to prepare the children to leave kindergarten reading on a first-grade level, her compliance with the district's suggested scope and sequence seemed to hinge on what her teammates prepared and wrote on paper for the weekly lesson plans. Hence, the alignment that the kindergarten teachers at Hernandez Elementary demonstrated in practice and on paper to their district's IPFs was largely accomplished through the leadership of Mrs. Caldwell who, despite her criticisms of the documents, used them to plan science content for the rest of the team.

### **Wylie Elementary**

The kindergarten teachers at Wylie Elementary also planned instruction that closely followed the district's scope and sequence of topics and knowledge and skills, albeit it appeared to occur with more fidelity than it did with the team at Hernandez. Furthermore, Wylie teachers' rendition of BSD's IPF implementation was mediated through a whole other assemblage of relationships, contingencies, and textual entities. The most notable differences among the kindergarten team at Wylie Elementary were the various levels of teaching experience each member brought to the grade level as well as the camaraderie between them and the mutual respect they had for each other and their campus administrator. The principal, Andrea Russo, in her interview was very complementary of each teacher on the kindergarten team and had this to say about their group dynamics: "The conversations that go on between them are really interesting, and everybody brings something different to that, their interpretation of what that particular standard means." She went on to report that the instruction she had observed in each classroom and the planning that occurred between the team was reasonably synchronized:

Their plans are pretty much uniform in terms of how they're going to do something. How it looks exactly in their classroom--it's different, but in doing observations in the classrooms mostly what I'm seeing, I see very similar kinds of activities. (First Interview/ December 5, 2014)

Despite the standardized appearance that Principal Russo described, the team's enactment of the district's official curriculum underwent manifestations that were unique to that campus.

***The principal: a supportive ally***

First, while Mrs. Russo wanted students to achieve, she did not essentialize this success as the only goal of the campus. However, like Ms. Oxford, Mrs. Russo acknowledged the primacy of the state standards in the teachers' focus and implementation of the district's curriculum documents:

We really want our teachers to study the [state standards] and know what they really mean. Break it down and really look closely at the SE's [student expectations] ... so what the kids are doing actually matches the rigor, not the written plans, and not what the teacher's doing, so much as what the kids are doing. (First Interview/ December 5, 2014)

Beyond mere work products, however, Mrs. Russo stated that when she observed instruction she wanted to see children engaged in learning that mirrored the type of performance specified in the learning outcome. This level of engagement and rigor was not predicated on the teacher's delivery of content as much as it was evident in the thinking and effort the children demonstrated as they actively participated in the activity.

A more notable distinction in Mrs. Russo's conceptualization of good instruction was her acknowledgement that the outcomes and evidence of rigorous learning were not all solely contingent on student achievement scores. In addition to academic success, she appeared to recognize that the curriculum must engender children's positive approaches to learning, which included dispositions such as intrinsic motivation, interest, and

perseverance (Hyson, 2008). In my interview with her, Mrs. Russo, a former art teacher, expressed a great appreciation for an emergent approach to curriculum:

Yeah. Emergent curriculum... That's really what it's going to take to educate our kids. That's what's going to level the playing field is that kind of approach to teaching and learning. You do need to know what your [state standards] are. You need to know that you need to [address] the [state standards] because the kids are always going to, they're going to be accountable for those all the way up. (First Interview/ December 5, 2014)

In an emergent curriculum, children are encouraged to identify and pursue topics that are of interest to them under the support and guidance of the teacher (Jones, 2012). However, Mrs. Russo's contention was that this type of emergent curriculum is most effective when it was managed by an intentional teacher who possessed critical insight of the content students needed to learn and how they would progress toward those outcomes (Epstein, 2007).

The teachers at Wylie Elementary also enjoyed a degree of professional freedom when it came to pacing their instruction using the district's IPFs and scope and sequence documents. Such autonomy was possible because Mrs. Russo inserted herself as a mediator between her staff and the district administrators who monitored the campus's performance and enactment of curriculum. She mentioned how she intervened at times when people from the district's central office visited classrooms and critiqued the teachers' pacing of topics and standards:

What they'll tell me, and I believe them [referring to the teachers], and so now our folks are starting to believe them from downtown, is don't worry, we're going to get it all. I can't teach this to them because they don't understand this yet. (First Interview/ December 5, 2014)

Mrs. Russo seemed to respect her teachers as professional, independent decision makers and tried to encourage and convey to the district officials to maintain that same level of confidence and veneration of the staff when making evaluations. Moreover, Mrs.

Russo appeared conscientious of the socio-political framing prioritizing student achievement and accountability that caused the level of surveillance perpetuating these critiques on the teachers' instructional decision making. When asked why she believed the district created the IPFs in the first place, she responded, "To make sure that the kids pass the STAAR test." Mrs. Russo's remark here seemed to testify to her recognition of the high-stakes conditioning to which the district and her campus had to situate their curriculum goals.

### **The kindergarten team: diversity of experience and need for instructional support**

#### ***Mrs. Velazquez***

It appeared that a second factor influencing how the kindergarten team at Wylie utilized the IPFs was the range of teaching experience at the grade level. Mrs. Velazquez, the veteran on the team, had 26 years of experience teaching kindergarten as well as children with special needs. Despite her more traditional approach to early childhood pedagogy, her role as the most experienced team member on the grade level seemed to make her more willing to follow the IPFs than she would have if she were planning alone. She explained her dilemma in the excerpt below:

We go through the IPFs. We really stick to them. Um, I'd be more willing to switch things around because I know what my end results kinda needs to be at the end of the year and what I really need to make sure is taught, but my team is a young team. (Initial Interview/ November 14, 2014)

In this statement, Mrs. Velazquez noted that she must comply with the district's scope and sequence of units and standards so that she could be on the same page and operate within a common framework to provide the necessary guidance her less experienced teammates needed to successfully plan instruction that satisfied the developmental needs of their kindergarten students.

In addition to her apparent willingness to follow the IPFs, Mrs. Velazquez seemed to be sympathetic to the district's need to have one standardized curriculum document. The rationale she provided to justify the documents' existence followed along the same reasoning of her principal's explanation:

So, they [the IPFs] are connected to the [state standards], which is what we're expected to teach. That's the State established guidelines of what the kids in Kindergarten should learn and the [IPFs] are the District's way of kind of insuring that it's being taught...across the board, across the District. Because we are a huge District, there is some sense of continuity and alignment. (First Interview/ November 14, 2014)

One issue that Mrs. Velazquez highlighted as being important for a large district like BSD to consider in this statement is the number of students transferring in and out of its schools. She perceived the IPFs as providing some consistency to ensure all children were receiving the same content and level of instruction regardless of which of these schools they attended.

Although Mrs. Velazquez seemed willing to forgo her own instructional sequence of topics and standards and followed what the district has laid out for its kindergarten teachers, she did continue to structure her classroom environment to match her pedagogical ideals. For example, when I observed her classroom, she seemed to be the only teacher on her team who allowed her children to paint at the easel and to self-select activities during center time. Her only requirement was that the children complete a given set of what she called "non-negotiable" tasks within a week's time frame. Otherwise, the children were free to determine when and on which days of the week they would visit those required tasks.

Mrs. Velazquez did admit, however, there were some protocols and resources suggested in the IPFs that she chose not to incorporate into her instructional planning. Her greatest complaint, which was shared by her team-mates, was the lack of

coordination between the content presented in the social studies IPFs and the schedule of thematic units introduced in the Language Arts basal program:

They [the social studies IPFs] are awful, they're way off...I think we were doing...African American History in January and then it went on, and then we did President's Day and then we did George Washington and then Abraham Lincoln and it's like "Are these people really thinking about what it is they are asking five-year-olds to do and for how long?" (First Interview/ November 14, 2014)

Apparently, in addition to the awkward pacing of instructional topics, the way the social studies concepts were presented in the ancillary exemplar lessons appeared not to align with what Mrs. Velazquez believed were appropriate for kindergarten children.

The other three teachers who made up the kindergarten team at Wylie Elementary did not appear to have the level of expertise with and insight about early childhood pedagogy and practice that Mrs. Velazquez possessed. It seemed that their limitation in grade level experience made them more reliant on the resources offered in the ancillary documents that accompanied the IPFs, such as the report card rubrics as well as the exemplary lessons. Despite their dependence on these supplemental materials, they each offered different perspectives about teaching kindergarten that influenced how they interpreted and implemented the IPFs.

### ***Miss. Villarreal***

With one year under her belt teaching kindergarten, Miss Villarreal was the designated grade level team leader. This responsibility allowed her to attend the district's bi-monthly kindergarten team leader meetings where she received first-hand information and updates on the IPFs from the Early Childhood Director, Dr. Hudson, and the district's kindergarten instructional specialist, Kelly Ruffalo. Because of the administrative responsibilities that came with the team leader position, Miss Villarreal seemed to be more familiar with IPF implementation issues and features than her other

team members did. For instance, the other teachers, including Mrs. Velazquez, noted that they often went to Miss Villarreal with questions on how to access the documents on the district's web page.

Although the principal considered her to perform "like a natural" at teaching, Miss Villarreal stated there are areas, particularly with lesson preparation, for which she did need extra support. In her second year of teaching, she was still in the process of developing resources to support her instructional units. She explained how the IPFs were useful to her in her description of what she perceived as the district's purpose in providing these support documents for teachers:

[They are] a road map, a path to follow in what to teach. It gives you ideas on how to teach it or activities you can do and just different things that can help out so you're not just making everything up on your own and scrambling, especially as a new teacher. There's already so many materials and resources that you do need to get together to make up for your classroom. (First Interview/ December 17, 2014)

Hence, Miss Villarreal appeared to conceptualize the IPFs as a directional compass that could point teachers toward a destination--the end outcomes for students. They were not a rigid set of directions that explicitly dictated every exact turn and road to take along the way. She stated that she considered the ancillary documents that accompanied the IPFs to serve as suggested route plans to help teachers map out a course to successfully arrive at those goals without deviating too far off track. As Miss Villarreal explained, this type of guidance was most useful to novice teachers who could easily get lost while trying to locate the appropriate resources and materials among with the multitude that were available.

*Mrs. Wilson*

Although she was new to BSD, Mrs. Wilson taught second grade for seven years in a neighboring district. However, having been in her first-year teaching kindergarten, she stated that she still felt under prepared for the challenges she encountered in this grade level. More specifically, she explained that “it's been a challenge because my expectations sometimes are a little higher for what they're capable of actually doing, I'm like, "Okay, let's scratch that and start over." (Second Interview/ January 8, 2015) Therefore, rather than rely entirely on her own intuitions, Mrs. Wilson noted that she looked to the IPFs to give her some direction on how to calibrate her instruction to a level that was developmentally appropriate for kindergarten students.

In addition to having no teaching experience in kindergarten, Mrs. Wallace was also new to BSD and, consequently, was the team member who was least familiar with the IPFs as well as other district protocols. Despite this limitation, she seemed to have adopted a framework for understanding the IPFs that closely resembled how her teammates appeared to conceptualize the documents:

I would say that the [IPF's] are correlated with the [state standards]. So, they're trying to hit objectives that are required for us to cover and it gives us exemplar lessons, which are lessons that give more student engagement, and it allows for the teacher ... I'd say, spend a little less time going and searching for things. It gives us guidelines, and you can always add to them from other resources that you might want to. (First Interview/ November 25, 2014)

In this response, Mrs. Wallace cited the alignment of the IPFs to the state's standards as the primary purpose the documents served in helping teachers plan for instruction. The exemplary lessons, however, were what she seemed to feel provided the necessary clarification for teachers on how to orchestrate student learning and engagement aligned to the requisite knowledge and skills designated by the state. Mrs. Wallace also

acknowledged that the teacher should have some discretion in selecting which resources to carry out those plans.

*Miss Harris*

Closely mirroring what the other team members have expressed in their interpretations of the IPFs, Miss Harris's positionality on the issue focused on the essential role the standards should play in the teacher's usage of the documents to make instructional decisions. In the following, Miss Harris emphasized that the IPFs provided direction on what to teach rather than specify how:

I would probably say they are a guideline for what you should be teaching. I wouldn't say that they explicitly tell you, "At 9:00 this is what you're going to do," they just kind of tell you, "This week you should be focusing on these things," and then you can decide from there how you want to teach those things. (First Interview/ November 14, 2014)

Miss Harris was clear that the IPFs could not be used like a script. Rather, she believed they provided insight into the intent of the learning outcomes from which teachers could then interpret to make decisions on how to orchestrate instruction accordingly.

Miss Harris, however, stated that she experienced challenges when trying to use the IPFs to design her instructional goals for the children in her classroom. Like Miss Villarreal, Miss Harris was in her second year of teaching. Additionally, she had never taught kindergarten and, therefore, felt she was at a disadvantage as she tried to reasonably anticipate how her children would respond to the expectations she had been accustomed to setting for first graders. She clarified her struggle in the excerpt below:

I think, just coming from first grade too, I know where they have to be at the beginning of the year and sometimes I'm like, "That sounds good, but really?" Granted, it's only the end of the third semester but just the way some of them are progressing, they are just ... This isn't ... Sometimes it's not high enough. I go back and forth, too, because I'm like, "They are so young." They are five and six.

Balancing that with the academic side of it too, is just, it's a lot to juggle. (Final Interview/ May 7, 2015)

Miss. Harris appeared conflicted in knowing how to reconcile what her expectations were to what the IPFs said the children should know and do. Consequently, she admitted that she was more inclined to consult the exemplar lessons, which she felt provided more specificity on how the children would demonstrate the desired outcomes:

Honestly, I look more at the exemplar lessons where they have the examples of what you could be doing with your shared reading with the big books. Sometimes they have little songs and stuff in them too that I find really helpful, more of what you can do versus, "This is what they should be able to do." To me, this doesn't haven't enough of, "Here's some examples of things you could do." I like the more concrete examples. (Final Interview/ May 7, 2015)

Even though Miss Harris seemed to understand that the IPFs were designed on a theoretical level to identify the big ideas and essential understandings within the content and state standards, she seemed to apparently prefer if the documents contained more of the practical information provided in the exemplar lessons, which described how to teach the subject matter. Again, like her other novice teammates, Miss Harris appeared to have developed somewhat of a dependency on the availability of the exemplar lessons rather than refer more intentionally to the IPFs as the primary source for understanding and interrogating the state standards to plan meaningful instruction that incorporated the principals of UBD and connected to the children's individual interests and socio cultural realities.

### **Multiplicity: Possibilities for Translation**

To be clear, the teachers' default to focus more on the exemplary lessons rather than big ideas and enduring understandings provided in the IPFs did not appear to be an effect of any one single source. Rather, the enactment of these practices seemed to emerge from the teachers' participation within an actor network to perform a rendition of

a teaching protocol inscribed within various devices, which in addition to discourses and ideologies (e.g., high-stakes testing) could also include texts and non-human materiality (e.g., basal readers). Fenwick and Edwards (2010) borrow from ANT-inspired terminology to provide a more concise conceptualization of the messiness involved here:

What appears to be the teacher's agency is an effect of different focuses including actions, desires, capacities and connections that move through her, as well as the forces exerted by the texts and technologies in all educational encounter. While networks and other flows circulate through the teacher's practices, her own actions, desires and so on are not determined by the network, but emerge through the myriad of translations that are negotiated among all the movements, talk, materials, emotions, and discourses making up the classroom's everyday encounters (p. 8).

Therefore, what transpires within a single planning session, such as the meeting that took place at Wylie Elementary on January 28<sup>th</sup>, 2015, is never really an event that is certain to happen to the precise intention envisioned in the IPFs. Such a coincidence would be a perfect translation. In the case involving the kindergarten teachers at Wylie, the conditions at the campus (e.g., the autonomy they are afforded from their principal, the variation of grade level teaching experience within the team, etc.) surfaced through the material objects that were present at the planning session (e.g., laptops, internet access, electronic lesson plans, etc.) to produce a plan for instruction on paper containing traces of the IPF's intentionality. Likewise, under a different set of circumstances that were influenced by the teachers' need to show progress toward an end-of-year reading score and produce evidence for a grade on a district report card, the kindergarten team at Hernandez Elementary also developed a weekly set of lesson plans, which aligned only partially to the IPFs.

### **An Obligatory Passage Point (OPP) and Immutable Mobiles (IM)**

Although each campus's rendering of the official curriculum was uniquely local, it was nevertheless accomplished through an agreement (albeit tacit) to acknowledge some features of a single document (the IPFs) that specified how, when, and under what circumstances to plan and perform instruction. When positioned this way, the IPFs assumed the role of an obligatory passage point (OPP), which is a device (e.g., a text, protocol, etc.) that is established by the focal actor within an actor network during the problematization stage of translation (Latour, 1987). In BSD, the Office of C&I functioned as the focal actor under the leadership and guidance of Dr. Williams. As I explained in Chapter 4, her vision was that teachers in the district would plan their instruction using constructivist ideals that honored rigor and authentic inquiry rather than essentializing the state standards. In terms of how these devices function, obligatory points of passage "are central assemblages through which all relations in the network must flow at some time" (Fenwick and Edwards, 2010, p. 18). Thus, the IPFs were developed to serve as this conduit (the obligatory passage point) through which kindergarten teachers and their campus administrators/ support staff in BSD were expected to translate their conceptualizations of how to successfully teach young children to the district's articulated curriculum, which were the state's standards of knowledge and skills.

However, as I pointed out in the first section of this chapter, my observations of the teachers' planning sessions revealed that the teachers did not wholeheartedly engage with the IPFs in a manner that followed the protocols of UBD. This dissention indicated that the teachers were not successfully enrolled as actants into the district's vision of UBD implementation. Yet, again, the translation was not totally unsuccessful since the teachers did follow the scope and sequence of units outlined in the IPFs.

To make sense of this conundrum, I briefly review what I tried to accomplish in this second section of the study's findings. First, I interviewed the actors being enrolled into the actor network (the kindergarten teachers and the administrators) to understand their rendering of how the IPFs aligned to their contextual and pedagogical realities. In my analysis of these findings I located other sources of interest that would potentially divert the kindergarten teams' instructional decision making away from what the BSD Office of C&I had intended to occur if teachers and administrators approached the IPFs with some degree of fidelity to UBD. These obstacles included discourses (e.g., high-stakes testing), texts (e.g., basal readers, benchmark tests) and material resources (lesson plan templates, etc.), which significantly influenced the degree to which the teachers were willing to focus on the tenets of UBD inscribed in the IPFs. Most importantly, however, a common thread of discourse that emerged through most of the interview data was the importance the teachers and their administrators seemed to place on the insertion of the state standards into the IPFs.

In short, the findings I presented in section one and two suggest that these standards have been operationalized, taking on the form of what ANT scholars identify as immutable mobiles (IM). Per Shiga (2007), "immutable mobility describes the way in which texts and other forms of inscription enable the relations that make up an object to be fixed even while they are mobilized within a network by different actors according to their own projects and goals" (p. 49). The mobilization of the kindergarten teachers and administrators at the two campuses selected for this study appeared to hinge on the containment of the state standards within the district's multitude of curriculum documents. More importantly, these state standards were what link all the actors, including the IPFs, to the district's performance on the end-of-year exam. Thus, the state

standards appeared to exert enough influence to disposition the teachers and administrators to consult the IPFs without having to abide by the tenets of UBD.

### **SECTION 3: THE EFFECTS OF STANDARDIZATION ON TEACHERS' PRACTICES**

Fenwick and Edwards (2011) emphasize that “ANT focuses not on what texts and other objects mean, but on what they do” (p. 3). I take careful steps to abide by this caveat in this final section of this chapter by tracing the effects of how the teachers at Hernandez and Wylie appeared to ultimately translate the IPFs in ways that were not only incongruous to UBD but incompatible to DAP as well. I argue that these effects have consequences on the discursive and material world of the early childhood classroom that can undermine attention to young children’s approaches to learning and socio-cultural realities.

Two themes that emerged from the interview data and field notes annotating classroom observations of teachers’ instructional practices that support my claims were: first, the volume of planning documents that the teachers had to consult prior to the team meetings subtracted from the time they needed to critically process the information for a deep understanding of how the content and standards connected meaningfully to big ideas, and secondly, the packaging and dissemination of the IPFs as separate documents by subject area jeopardized the teachers’ ability to thoughtfully integrate the content to help students make connections across domains, including the socio-cultural dimension of the curriculum and the children’s personal lives.

#### **Too Much Content, Not Enough Time:**

In Chapter 4, I explained how the IPs were developed as a compilation of documents, each of which was categorized under a content domain--English Language

Arts, Mathematics, Science, Social Studies, and Health. Some of these documents were organized by units of instruction whereas others were divided into nine-week reporting periods. Each document contained a list of big ideas and essential understandings, which were features based on the instructional principles of Understanding by Design (UBD)--a pedagogical framework developed by Jay McTighe and Grant Wiggins (1998). A big idea, which Wiggins and McTighe define as “a concept, theme, or issue that gives meaning and connection to discrete facts and skills,” (p. 5) were inserted into the IPF document to foreground the state standards that were covered within that unit of instruction. There were also specifications that explained to what level of mastery the students were expected to demonstrate each standard. Finally, at the end of each document, there were suggestions for both formative and performance based summative assessments that helped to clarify how the students would demonstrate a deep understanding of the content taught during the unit.

Although many of these organizational and structural features inserted in the IPFs were useful and helpful for planning units of instruction, what appeared to be problematic for kindergarten teachers was the extensive volume of information they had to review. For example, the Language Arts document alone for each nine-week reporting period was approximately 26 pages long. The kindergarten teachers at Wylie and Hernandez Elementary managed the time dilemma that came with having to plan instruction aligned to these documents by assigning content areas—e.g., math, science, social studies, and language arts—to each team member. Hence, although I did not observe each teacher review the IPF for her assigned content area, the information I gleaned from interview data suggested that each teacher, except one, did do so before meeting to plan with the other team members. During the actual meeting, every team member is provided a turn to verbally summarize the content she reviewed. At both campuses, this information was

then summarized and annotated on a common lesson plan template accessible to each team member and their administrator.

This documentation not only appeared to provide an assurance of standardization across each classroom but also cut down on the amount of time each teacher on the team had to devote to individualized planning necessary to effectively and thoroughly address the standards and big ideas from all 4 content area domains. Miss Villarreal from Wylie Elementary explained the team's rationale for adopting this streamline planning strategy:

We're looking at our template that we should have had already made plans for, using all of this information just because if we're all looking at this and we're all trying to plan right then and there, we'll be there forever. We're already there for a while as it is...an hour to an hour and a half. (Final Interview/ June 3, 2015)

As Miss Villarreal's statement demonstrated, the decision to assign each teacher to be the expert in each content area seemed to be advantageous to the team for the sake of conserving each other's time, a considerable amount of which is taken up by gathering resources and preparing the necessary materials for their individual classrooms.

However, despite its apparent efficiency, this organizational plan seemed to limit each teacher's capacity to sufficiently understand all four content areas to an equal level of depth necessary to effectively integrate subject matter strategically and meaningfully in a way that made sense and appeals to young children. While the teachers did have the opportunity to become experts in the domain they were assigned to share with other members, they may not have had adequate understanding, preparation, or background knowledge to see how the big ideas within this content could be cohesively linked to the other areas they left to their peers to investigate and align to instructional strategies, activities, assessments, and resources. They were essentially relying on the level of expertise their team member had developed in this area or had invested time in researching before sharing with the group. This knowledge gap could be even more

pronounced when the discourse during the planning session was didactic versus dialogic; whereby, the conversation focused almost exclusively upon relating to group members the procedural knowledge for enacting a lesson rather than interrogating how the content related to student's interest, needs and prior knowledge. In the following transcript, Miss Villarreal was relaying information to her fellow members on how she thought they could carry out the weekly science plan for the upcoming week:

Okay, let me run through science quick... We're on location of movement and force, so we're starting to do objects in the sky. Sun, stars, moon, clouds, all the good stuff. On Monday, we're just introducing what's in the sky, what they know about it. They are supposed to go outside to look and see what they can actually see in the sky. Right now, they would only see skies, or clouds or darkness. We can talk about that. We should also remind them about safety, not to look directly into the sun. Just have them come back inside and work in their journal like draw what they saw, and then write or label what you saw. I saw or I see the clouds. I see the sun. I see this, or if they see a plane in the sky. That's Tuesday, so we're introducing it. Then Wednesday, we're starting with clouds. I just said introduce clouds by reading a story or a book about clouds. Discussing what we know about clouds or what shapes they can be, what we think they're made out of. We can even talk about it when we go outside for recess, just having them look at the clouds to see what they notice about them, how they look and such, and then how they're moving and changing shapes, and recording our observations and ideas on a chart of some sort, however you want to record their answers. Thursday, there is a cloud video on Discovery. (Team Planning/ Field notes/ November 6, 2014)

Although Miss Villarreal has given suggestions to her teammates on how to integrate writing into the study on objects in the sky (the unit recommended on the district's science IPF), the delivery seemed to flow in one direction; wherein, she merely talked at the other teachers rather than solicit suggestions from them or encourage their feedback. In this excerpt, none of the other team members took the initiative to offer suggestions where content standards and objectives from their assigned domain might have tied into these activity recommendations. Furthermore, there appeared to be no discussion of big ideas, essential questions, or enduring understandings—pedagogical

components of the UBD framework upon which the district’s IPFs were predicated—to spark interest and inquiry in this topic. For instance, there might be an opportunity in mathematics to discuss three-dimensional attributes of various celestial objects—e.g., “Why is the sun round and not shaped like a cube? Do stars really have points/ vertices?” The team could have also discussed how the rotational orbit of the moon, stars, planets, and sun related to units of study introduced earlier in the year, such as force and motion.

My point in highlighting this issue is not to criticize the teachers’ instructional planning protocols. I recognize that they were required to follow their district’s IPF with some fidelity, which would necessitate that they review a lot of information during a relatively short period of time. Nevertheless, without applying some level of thoughtful reflection, which I argue is not happening during the teachers’ planning session, consequences that could exert adverse effects have the possibility to remain unchecked. In fact, the reflective process should be an on-going and daily habit in the life of a teacher. Dewey (1912) states that reflection “enables us to direct our actions with foresight and to plan with according to ends in view of purposes of which we are aware. It enables us to know what we are when we act” (p. 17). In other words, in addition to the technical dimension of reflection, which ponders the how and what of teaching, educators must also consider the socio-political aspect of their work, such as the effect their actions have on children, families, and democracy in general.

### **Content Segmentation: Planning and Teaching in Silos**

Except for Mrs. Caldwell and Mrs. Velazquez, the other teachers I selected as participants for this study had not been in the field of ECE long enough as teachers to remember when kindergarten was more play-based and integrated. Mrs. Velazquez, a 26-year teaching veteran on this kindergarten team, offered the following reflection on how

planning instruction has changed in kindergarten over the trajectory of her teaching career:

The planning is absolutely different because before it was okay what's our global idea and how can we bring in science. Some units lend themselves more to social studies than to science, and so it felt like you weren't developing so many resources. It was more cohesive. I also know it was more fun to teach, the kids were a lot more excited about it. It was like they could delve into things deeper. (Final Interview/ June 29, 2015)

Apparently, earlier in her career, Mrs. Velazquez enjoyed more instructional autonomy to be able to pursue topics at greater depth and complexity in a way that was integrated and meaningful to the children. Now, however, the way BISD officials compartmentalized content areas in five separate IPF documents (Language Arts, Science, Social Studies, Math, and Health), kindergarten teachers seemed to be under the impression that each domain must receive equal or at least daily coverage to sufficiently address all the requisite standards by the end of the year.

As Mrs. Velazquez pointed out, this compartmentalization diminished the teachers' ability to consider how the content they had to teach could be woven together globally in an integrated manner. In other words, rather than teach mathematics only for a predetermined amount of time (e.g., one hour) at a point in the schedule (e.g., from 1:00 to 1:45), perhaps there were sections within the day when certain mathematical skills could have been taught within the context of a social studies, science, or health related topic. For example, when discussing how the process of voting operates in a democratic society as a method for making social decisions or establishing certain policies, an opportunity emerges for students to count, compare, and represent data using tally marks or bar graphs.

Unfortunately, when teachers plan in silos, the instruction they deliver and the experiences they offer children appears to suffer accordingly. This fragmentation was

evident in the schedule highlighted in Appendix L, which comes from Mrs. Mather's classroom. The day was organized into blocks of instructional time that rigidly adhered to a specific content area focus, such as reading/ language arts, writing, math, science and social studies. Rather than label each time segment with a term traditionally used in ECE classrooms that described the mode and format of instruction—whole group/ small group/ circle time, centers, etc.—Mrs. Mathers explicitly indicated what content would be taught. Calendar and announcements were followed by a mandated 2-hour language arts block, which included phonemic awareness, shared/ guided/ independent reading, vocabulary instruction, and literacy work stations. Within this block of time, instruction was further interrupted by a 45-minute teacher planning time where the children left the classroom to attend a rotation of art, P.E., and music. Center time, which the district suggested calling Language Super Centers, was scheduled at the end of the day for 25-minutes when all the required content areas were completed. Mrs. Mathers explained that she often did not get to other content areas, mostly science and social studies, due to the vast amount of content she had to cover in Language Arts and mathematics:

I can't teach science. How am I going to get through everything in this adoption to follow this directive? Then, I have to teach science, I have to teach math, what am I going to do, there is no time for any social studies, anything. Most of my day is gone by the time I get to the end... It became this paring down. What can I not afford to sacrifice? (Final Interview/ May 27, 2015)

The sacrifices that Mrs. Mathers felt compelled to make to accommodate the required curriculum within her daily schedule mirrors a trend across the nation where science, social studies, and play based centers are being cut down (or removed all together) for the sake of reading children for reading (Bassok & Rorem, 2014).

The impact that regimented schedules in kindergarten classrooms dedicated almost exclusively to academics has on children's engagement in learning deserves more

consideration. In the vignette below, Miss. Villarreal's class is gathered around a dry erase board as she introduced a word problem that was part of her school's required daily numerical fluency practice. The kindergarten team chose to conduct this routine right before their block of 45-minute core math instruction.

It is 1:10 PM, two days after Veteran's Day. The class is discussing how to solve the following problem:

***There are 2 chairs and 3 people. Are there enough chairs for everyone?***

Miss. Villarreal asks, "*How do we want to solve this? Do we draw it or act it out?*" The children choose to draw it, which Mrs. Alvarez does as the children talk. The children are adamant that there are not enough chairs because someone would be left standing. Miss. Villarreal draws two chairs with dotted lines drawn to two stick figures. One stick figure has a line extending outward with no corresponding object so that the children can see that one more chair is needed. Miss. Villarreal allows the children to respond to the suggested solution by making a thumbs-up sign if they agree and thumbs-down if they do not agree. This then leads a discussion about how to represent the situation with symbolic notation. She says, "*Well, we are not taking away, we are putting one more.*" This statement seems to cause some confusion when she states that she will need to put the bigger number on top in order to subtract. She writes  $3-2=1$  in vertical notation underneath the problem and illustration.

Now the conversation shifts to an investigation the children have been doing throughout the week to determine whose name has the most letters. The children have made connecting cube trains to represent the number of letters in their name. Individual letters are written on white dot stickers, which are affixed to each cube in the child's name train. Miss. Villarreal selects two cube trains that have the names Maya and Rodolfo. Miss. Villarreal asks the group of children sitting in a semi-circle around the chair she is positioned how many letters are in Maya's name and then Rodolfo's name. Once she has helped to clarify that Maya's name has 4 letters and Rodolfo's name has 7, Miss. Villarreal challenges the children to determine which name has more letters: "*What do we need to do?*" She orients both trains extending horizontally on top of each other, with Rodolfo's on top. She is purposefully holding Maya's name train so that it does not align to the left, directly underneath where Rodolfo's name begins. Maya's train actually juts out a little further to the right of where Rodolfo's name ends, apparently attempting to deceive the children's perception so that they must consider the number of letters rather than focus on the length of the name. Most children appear to agree that Rodolfo has more letters, even though Maya's extends further out to the right.

The children notice that she is trying to trick them and challenges them to explain what is wrong. One child responds, *“Because there is not so much at the bottom.”* Miss. Villarreal helps to clarify this observation, by stating, *“It’s like cheating, you have to start at the same place.”* Miss. Villarreal continues to allow other children to share observations. One girl points out that to have the same number of letters as Rodolfo’s name; Maya’s name would need 3 more letters. Miss. Villarreal affirms, *“Good observation;”* and has another classmate summarize what was said in English.

After being seated on the carpet for approximately 20 minutes, the children are only mildly restless, which does not seem to bother Miss. Villarreal. She now distributes the name trains to each child so that they can compare their names with classmates. The children are scattered around the room, some conferencing with each other at tables, while others remain on the carpet. They are all on task, counting and comparing their trains as Miss. Villarreal moves about prompting them to talk about their findings. One child points to another classmate’s train and says, *“My name is the same like that one.”*

After about 10 to 15 minutes, the children return to the carpet, where Miss. Villarreal prepares those who are still joining the group to focus for the debriefing session that will now follow. She affirms children who are ready to move on, *“I see Jose is ready.”* Once everyone has joined the group, she asks the children to determine which child has the longest/shortest name in the class. The children agree that Fernando, who has 8 letters total, is the longest name and that the child with only 3 letters (Ely) is the shortest. Fernando, notably content to have the longest name in the class comments that a friend of his would need to more letters to be the same as him. Miss. Villarreal summarizes and concludes the conversation by pointing out that *“everyone else’s name is in the middle.”*

Miss. Villarreal glances over to clock in the back of the room, notably aware that time is of issue. She informs the children that they will now transition to the meeting area in the back of the room next to the door so that they can watch a video she has downloaded from the internet about national symbols. The children calmly move to their new location, some eagerly anticipating the video/cartoon they will be watching. (Classroom Observation Field Notes/ November 14, 2014)

To outside observers who are not familiar what traditional kindergartens used looked like when Mrs. Velazquez was teaching 26 years ago, the series of events that unfolded within the 50-minute vignette described in the above might give the impression that there was productive learning going on in Miss Villarreal’s classroom. Indeed, Miss. Villarreal demonstrated qualities of a good teaching and found very positive ways to

manage behavior and engage the children in the tasks she had to cover per the IPFs. What might be questionable, however, is if the children were seeing connections in what they were doing as they counted and compared quantities to other learning experiences that occurred both before and after this time frame or in their daily lives outside of the classroom. The word problem they solved at the beginning of the math time was structurally like the mathematical content they were exploring in the counting and comparing name activity they did immediately afterwards. The big idea underlying both activities—how to figure out quantitative differences between two sets of objects—never appeared to be explored in depth, such as how you could count forward from the smaller number or backward from the larger number the number of units where both quantities would be the same. Instead, both activities occurred within a relatively short period of time of each other with little reflection as to how they were related or connected. Perhaps the word problem would not have been necessary, which would have allowed the children to have more time exploring the topic outside of the large group time during individualized centers. As the children played the games independently, Miss. Villarreal could have been available to assist those who were struggling to understand the comparison concept or have differentiated materials accessible to make accommodations for those who were ready to use more sophisticated strategies—e.g., counting on, subtraction, etc.—to determine the quantitative differences.

In addition to the unnecessary redundancy of content presentation that occurred in this classroom vignette, another notable place to reconsider how instruction occurred was the immediate transition from one subject area (mathematics) to another (social studies). There was no apparent forethought given to how comparison of quantities might be extended to make sense of the historical relevancy and significance of national symbols. Perhaps there was no real connection between these two subject areas, but the apparent

failure to help children see where what they were learning in one domain was connected to other aspects of their lives gives the impression that school is a place where you accumulate information and facts with no other purpose than to be more knowledgeable. Again, a central goal of UBD as well DAP is for children to see that what they are learning can be applied or transferred to other situations (Wiggins & McTighe, 1998; Kostelnick & Grady, 2009).

The social studies activity that immediately followed the math lesson in Miss Villarreal’s classroom continued along the same vein with no apparent effort to connect the learning objectives to what the children had just learned minutes before about comparing quantities as well as locating some relevancy of the concept to the children’s everyday lives and community. With Veteran’s Day approaching, the subject the children were exploring was the significance of national symbols, such as the flag, the eagle, and the statue of liberty. The state standard cited in the IPF and which Miss Villarreal had associated with this lesson is noted in Table 5.2:

Table 5.2: Focus standards for the Week of November 10-14, 2014 (as cited on the BISD Kindergarten 2014-2015 Scope and Sequence

Content Area	State Standard (TEKS)
Social Studies	<p><b>(1) History.</b> The student understands that holidays are celebrations of special events. The student is expected to:</p> <p><b>(A)</b> explain the reasons for national patriotic holidays such as President’s Day, Veterans Day, and Independence Day; and</p> <p><b>(B)</b> identify customs associated with national patriotic holidays such as parades and fireworks on Independence Day.</p>

The video that the children were watching in the annotated field notes below is about a girl who was going to send national symbols to a friend who has never been to the United States of America:

Before the class begins to watch the video, Miss Villarreal prompts the children to recall which national holiday has just past two days prior to the lesson. Natalia

responds immediately in Spanish, correctly identifying the requested information: “*El Día de los Veteranos*” [Veteran’s Day]. Miss Villarreal informs the children that after watching the video, they will complete a worksheet with symbols related to the United States of America. She helps the children identify some of the symbols on the paper—the flag, eagle, and statue of liberty. After seeing the eagle, Luisa tells Miss Villarreal that is the symbol on a passport. Miss Villarreal acknowledges Luisa’s comment by confirming that an eagle is on the cover of a passport. Miss Villarreal goes on to explain what a symbol is: “*A symbol is something that represents another thing.*” Then, she provides an example: “*A heart is a symbol of love, and a dove is a symbol of peace.*”

Miss Villarreal now proceeds with the video and complements children who are ready to listen: “*Bernardo esta sentadito [Bernardo is sitting nicely].*” As the video proceeds, each of the symbols that were on the worksheet subsequently appear on the screen. As the symbols are introduced, some children make comments about what they see. For example, the bald eagle prompts Esteban to shout, “*la policía! [police].*” Adalina makes a connection to her parents’ home country: “*Tambien hay una águila en la bandera de México [There is also an eagle on the Mexican flag].*” Miss. Villarreal makes no acknowledgement of these comments. Other than these few outbursts, the children quietly watch the video. Finally, the video concludes.

Miss Villarreal subsequently begins to debrief the activity. She announces, “*Vamos a repararlo rápido [Let’s quickly review].*” She goes into more detail about some symbols, most noteworthy the Statue of Liberty and the U.S. Flag, which were presented in the video but only cursorily. A teacher-led discussion ensues about the flag. Miss Villarreal tells the children that the flag has 50 stars, each of which represents a state. She reminds the children that one of those states is the state of Texas. Patricia interrupts, “*Yo quiero ir a Florida [I want to go to Florida].*” Notably aware that the activity has already extended into center time, Miss. Villarreal cordially acknowledges the comment, but moves on to conclude the discussion by reviewing why these symbols are important. (Classroom Observation Field Notes/ November 14, 2014)

Throughout the lesson, Miss Villarreal had intentionally introduced the concepts the children were expected to know and understand, such as what a symbol is and the relevance of each in the history of the United States. Moreover, she coherently sequenced the lesson by soliciting background knowledge from the students, reviewing past learning, and then framing the objective of the lesson. She then debriefed by reviewing

information introduced in the video with which the children were likely not familiar, such as the statue of liberty.

When looking at this lesson through the lens of CRT (Ladson-Billings, 1994), however, there were opportunities where Miss. Villarreal could have acknowledged children's funds of knowledge or probed deeper to unpack their responses and reactions to various national symbols presented in the video. For example, Esteban's association of the bald eagle to a badge worn by a policeman warranted further investigation to explore what experiences or interests he might have had with law enforcement in his community. Whether those experiences were positive or negative remains uncertain, but a conversation around that topic could have engendered a critical dialogue among the children to help them process issues salient to their community and daily lives, such as crime or police brutality (Kuby, 2011). Additionally, Adalina's reference to the eagle on the Mexican flag presented an opportunity for Miss. Villarreal to connect what the children knew about symbols that have meaning in their home culture to the current unit of study. Attention to the children's funds of knowledge in this way creates spaces of representation within the official curriculum for other, often marginalized ways of understanding and making sense of the world (Moll, Amanti, Neff, & Gonzalez, 2001).

Too often, however, others have shown how conversations that explore children's social cultural realities were neglected when teachers felt pressure to stringently adhere to a prescribed scope and sequence or scripted curriculum (Achinstein & Ogawa, 2006; Castro, 2010). In the following excerpt, Miss. Villarreal identified what obstacles hindered her ability to deeply pursue topics of interest to her students:

Just everything they need to learn and do. I guess just because you have blocks of times and this is my language arts time. This is my writing time. This is my science time, my math time, my this time, you know. Then it's like, okay, it's already been 15 minutes of this and we're still on this topic and I need to move

onto this, but I don't want to just leave this where it is. I need to finish this, so I was like balancing all that time with everything you need to do. (Final Interview/ June 3, 2015)

In her reflection, Miss Villarreal appeared notably conflicted on how to manage the time constraints that limited the extent to which she could meaningfully probe what the children's experiences were around issues that emerged in their daily lives. She also alluded to knowledge and skills that she believed the children needed to learn, which were presumably related to academic content from the core subject areas, such as reading, math, and science. Apparently, then, the coverage of academic subject matter ranked of higher priority in the daily schedule than attending to the socio cultural/ political content that influenced the children's home communities and realities. However, the privileging of academics to the socio-cultural dimensions of learning is an unnecessary tension. When framed through the lens of culturally relevant teaching (CRT), the socio-cultural milieu provides the contextual basis for orchestrating the students' acquisition of requisite academic knowledge and skills (Ladson-Billings, 1994).

In sum, the dissemination of the IPFs as separate documents classified by content area appeared to stratify the kindergarten teachers' daily schedules into disconnected blocks of instructional focus with greater priority dedicated to teaching literacy and numeracy. Moreover, the voluminous amount of information the teachers had to review to effectively plan for each subject area compromised the time the teachers could attend to effectively integrate the content in a way that engaged children's interests, inquiries, and socio-cultural needs. The end results of these effects were therein antithetical to the pedagogical constructs of DAP and CRT.

## **CONCLUSION**

To be clear, I recognize that the initial intent of the IPFs was not to essentialize knowledge and skill acquisition at the expense of other areas of development and

learning. To remain true to the principles of UBD, the IPFs were designed to guide teachers toward a more in depth analysis of how the state standards could be reimaged as a coherent set of enduring understandings that transfer to bigger ideas within and across the subject areas. These intentions, although inscribed in the IPFs, were never successfully translated by the kindergarten teachers and administrators at the two campuses selected for this study.

In this chapter, I have presented data that suggest how the actor network established by the Office of C&I to support these teachers and administrators in the implementation of UBD experienced incursions from competing discourses and material devices during the process of translation. In addition to a singular focus on children's academic achievement, which was especially entrenched at one of the campuses (e.g., Hernandez Elementary), other significant contributions to the demise of the network included 1) the lack of time the teachers reported to be able to effectively process the IPFs, 2) devices (e.g., lesson plan templates, internet access, adherence to basal teacher guides, etc.) that distracted teachers from planning critically and dialogically with their team members, and 3) a lack of pedagogical expertise among mostly novice teachers with little experience at locating material and activity resources appropriate for the grade level. Although the teachers appeared not to fully engage with the UBD framework inscribed in the IPFs, they nevertheless seemed to comply with the scope of sequence of state standards to perform a localized rendition rather than an exact duplication of what the district had envisioned for the documents' implementation. What is more, I discussed how the insertion of the state standards into the IPFs instantiated the former as an essential, non-negotiable conduit (an immutable mobile) that provided the teachers and their administrators with a sense of assurance for achieving high-stakes accountability markers set by a single, end-of-year exam. Ultimately, the apparent unsuccessful and

diluted uptake of the IPFs seemed to contribute to the teachers fragmented delivery of content into silos of discrete subject areas at the expense of the developmental, individual and socio-cultural needs of the children. In the forthcoming chapter, I discuss the implications and significance of these effects and other issues associated with the implementation of a standardized curriculum on the practices of early childhood educators and their teacher educators/ administrative support specialists.

## Chapter 6: Implications

### INTRODUCTION

Numerous studies (e.g., Bowdon & Desimone, 2014; Bassok & Reardon, 2013; Cooper, Batts Allen, Patall, & Dent, 2010) have documented a significant transformation in many of the nation's kindergarten classrooms where the traditional focus on addressing the needs of the whole child is being undermined by efforts to instantiate a standardized pedagogy predicated on readying young children for the rising academic standards of elementary school. This dissertation contributes to this body of research through its use of qualitative research methods and actor network theory (ANT) to understand how such a phenomenon might unfold at the district and individual campus level. First, I used ANT as a lens to trace the development of a large urban school district's standardized instructional planning guide (the IPFs), which were designed to align teachers' instructional practices to the state's officially mandated K-12 curriculum. Secondly, I continued to employ ANT to locate the effects of this document on the instructional decision-making of kindergarten teachers at two of the district's campuses. I selected ANT as a theoretical framework because it allowed me as a researcher to follow the effects of the IPFs as they passed through a series of negotiations among various actors (both human and nonhuman) trying to insert their interests and representative identities to procure the document's conceptualization, development, and eventual implementation.

When a structural assemblage of relationships such as the IPFs comes into being, "ANT asks: How has it been compiled? Where is it? Where can I find it? What is holding it together" (Fenwick & Edwards, 2010, p. 19). To that end, I used document analysis, classroom observations, and semi-structural interviews to interrogate how the teachers, administrators, and district officials in BSD conceptualized and implemented the document in relation to the discourses of DAP and CRT, which frame teaching and

learning through the lens of the individual, developmental, and socio cultural needs and interests of the young child. Hence, the questions that guided this inquiry are:

1. How are each of the individual actor networks who are bound together within a tenuous assemblage focused on the implementation of the IPFs conceptualizing this document in relation to their respective beliefs, responsibilities, instructional goals, and practices?
2. In what way does the kindergarten teachers' conceptualization of the IPFs impact their practices and how they frame their role as instructors who are to meet the socio-cultural, individual student needs as expressed in DAP while under the surveillance of their campus administrator or other district level officials and curriculum specialists?

What follows in this final chapter is a discussion of the implications and significance of the findings I presented thus far in my dissertation. First, I will briefly recapitulate what those findings revealed in relation to the research questions that guided this inquiry. Secondly, I discuss what the implications from these findings might suggest to policy makers, district and campus level administrators, and teachers who are trying to navigate similar projects that appear to deviate from the tenets of DAP in a response to align instruction to high-stakes accountability markers. Then, I compare how the literature problematizing the emergence of standardized kindergartens with respect to DAP and CRT has approached these findings and implications in ways that both concur and differ with what I have presented and suggested in my arguments. Finally, after a brief discussion of the limitations of what the findings from this study suggest, I resituate what this means in relation to the current literature base to postulate new spaces for exploring, challenging, and re-envisioning the dilemmas that emerge as kindergarten continues to reinvent itself through its on-going transformation in an age of standardization and high stakes accountability.

## RECAPITULATION OF FINDINGS

In Chapter 4, the findings I presented from interview data suggested that the IPF's development and eventual instantiation as BSD's official curriculum strongly hinged on the district officials' need to maintain compliance with the state's high-stake accountability standards. I also used interview data and document analysis to show how the IPFs underwent a series of translations as they moved from their conceptualization as a theoretical framework for the implementation of a constructivist rendition of Understanding by Design (Wiggins & McTighe, 1998) to their eventual deployment as an assemblage of multiple support documents. I explained how these ancillary documents, such as the Yearly Content Overviews (YCO's), and the exemplary lessons, were designed for ease-of-use that could withstand implementation variance, which district officials who monitored the curriculum's enactment attributed to a lack pedagogical expertise demonstrated by novice teachers being hired at predominately low performing campuses. Translation is a term originating out of ANT to describe how a tenuous assemblage of human and non-human entities (things) merge with other outside networks wishing to bring the former group of actors into the latter's fold as they intersect through various interactions and negotiations (e.g., problematization, interessement, enrollment, and mobilization) (Callon, 1986). In short, Chapter 4 traced the transformation of the IPFs as they passed through each of these four stages of translation.

Chapter 5 then continued to follow the IPFs during their precarious enrollment at the two campuses selected for this study. Through analysis of observational data gathered during weekly planning meetings at both campuses, I noted a tendency among the two teams of kindergarten teachers to use the IPFs as a device to help them align to the district's suggested scope and sequence of standards while still exercising some degree of freedom to self-select among activities that could adequately address these

outcomes. However, the decision-making process on how to navigate this compliance to the IPFs appeared to be unique to each campus. Whereas the teachers at Hernandez elementary approached their interpretation of the IPFs cautiously to show compliance with campus imposed standards that focused on first grade outcomes; the team of teachers at Wylie Elementary, who had less experience at the grade level and needed more guidance on knowing how to teach younger children, were appreciative of the ancillary documents, which provided greater specificity on how to implement lessons developmentally calibrated to the interests and cognitive level of five- and six-year old students. Moreover, although each kindergarten team utilized the IPFs in ways that would allow the teachers to insert their divergent interests and improvise within their local contingencies, this autonomy emerged through the teachers' interaction with other material devices (non-human actors), such as lesson plan templates, a standardized district report card, access to ready-to-use internet resources and materials, as well as teacher guides and standardized assessments.

What the observational data was unable to trace was the rationale that underscored these teachers' and their campus administrators' interpretation of the IPFs in relation to DAP and its philosophical opposition to a standardized approach to instructional planning. The semi-structured interview data was useful in this respect in that it allowed me to locate the human actors' conceptualizations of how to use the IPFs to plan for and teach to children's developmental, individual, and socio-cultural needs. The analysis from this data seemed to point to a common thread running through each teacher's and administrator's acknowledgement of the mandatory state standards as a non-negotiable point of passage inserted within the IPFs to ensure instruction would lead to the desired achievement outcomes measured on the state's standardized 3<sup>rd</sup>-5<sup>th</sup> grade end-of-year state exam. These standards, which I framed through ANT as an immutable

mobile (IM), meaning they have been encapsulated and reified within several networks, seemed to at least partially divert the teachers' attention away from the constructs of DAP and CRT. Devices such as obligatory passage points (OPP), which refer to devices that route actors through a network, and immutable mobiles (IM) are to what theorists who adhere to ANT methodology ascribe sources of power that can transcend space and time to achieve allegiance to a specific actor network (Callon, 1986). Thus, in this case study involving the teams of kindergarten teachers at Hernandez and Wylie Elementary, the network that eventually emerged through the contentious process of translation was a commitment to addressing the knowledge and skills designated by the state as essential outcomes and standards. Yet, accompanying the formation of this new network was a severance to other alliances promising possibilities for these teachers to more wholeheartedly embrace the constructivist ideals of UBD as well as the principles of DAP and CRT. Nevertheless, the effects of this rerouting of networks appeared to lead to what I noted in my analysis of field note observations as a piecemeal fragmentation of content areas within the school day with very little attention devoted to addressing the individual and socio-cultural interests of the children. What is more, the compartmentalized packaging of the IPFs as separate subject area documents afforded little opportunity for the teachers to thoughtfully consider how to integrate the content they were to teach through meaningful learning experiences for the children. I now turn to discuss what the implications of this type of network formation could hold for kindergarten teachers, policy makers, and district administrators who must navigate curriculum development and enactment within similar types of high-stakes contexts.

## IMPLICATIONS

To highlight what the implications from the findings of this study might suggest, I go back to the episode I cited at the beginning of Chapter 4 where Dr. Williams recalled a critique of BISD's prescribed curriculum given by a group of outside consultants with whom she was conducting walk-throughs of various classrooms in the district. After several visits, the consultants had commented on the proclivity of practice drill sheets they observed. Dr. Williams reported that she defended the district's curriculum with the following response: "That's not our curriculum. That did not come from us. We do not promote worksheets" (Interview, November 21, 2014). Perhaps what Dr. Williams and the consultants witnessed at the campuses they visited were teachers who decided not to follow the official curriculum. Or, on the other hand, maybe these teachers were implementing the mandated curriculum (the state standards) but using unsanctioned strategies (e.g., worksheets) in a way that would still address the requisite knowledge and skills. Whatever the rationale for what was observed in those classrooms may have been, the instruction was not aligned to the UBD model inserted in the IPFs.

Employing ANT to trace the development of BSDs IPFs and the document's effects on the instructional planning of two teams of kindergarten teachers has allowed me as a researcher to approach the dilemma that Dr. Williams encountered in the vignette I recounted in the above from a different perspective. Specifically, Edwards (2010) argues that ANT is useful in trying to understand how things (e.g., the preponderance of worksheets being used on a campus) come into being. This aim is in direct contrast to theoretical frameworks that seek to establish a priori distinctions for identifying root causes or ontological beginnings of a movement appearing to operate on a grand scale, such as implicating high-stakes accountability as the primary mover and shaker in the demise of best practices (e.g., DAP) within early childhood classrooms. This is not to

say that such macro discourses and ideologies do not influence the observed outcomes in some way. Rather, what other researchers have identified as macro causes, ANT treats as distinct devices (OPPs and IMs) that work at a distance by penetrating an assemblage of other actors and materials to produce a set of effects that are observed in real time. In this way, ANT concerns itself with what is occurring in the present instead of explaining the past and or predicting the future. Moreover, Fenwick and Edwards (2011) explain how these OPPs and IMs perform the work of delegation, which refers to “the ability to act at a distance through things”:

The network effects that produce these immutable mobiles and in particular, things and locations that become obligatory points of passage, are important dynamics in the power relations circumscribing education. The circulation and effects of these things can accumulate increasingly wider reaches of networks to hold them in place (p.18).

In other words, IMs carry the intentionality inscribed in them from a focal actor functioning within one network that has successfully attached itself to (through the process of translation) other networks and, in so doing, amasses a web of relations, which appear to have and exert power to structure and order the activity of others. Hence, the appearance of power is more likely an effect of several networks working in tandem with each other through the conduits of OPPs and IMs. Fenwick and Edwards warn, however, that the immutability of such devices and the power they accrue and exert is tenuous as other assemblages of human actors and material things are constantly circulating about issuing threats that could undermine allegiances to the network.

In this way, ANT helps to decenter one central discourse or entity from the researcher’s purview and refocuses her attention to other actors (both material and human) that could in fact be assisting to hold the former in its place of prominence. Thus, with respect to the focus of this dissertation, the findings from previous two

chapters help to locate an anomaly within the data where what appears to be the work of a standardized document (e.g., the IPFs) controlling the instructional decision making of two teams of kindergarten teachers is instead an assemblage of many actors that collaborate to perform an improvisation of a scripted guide for enactment. More importantly, this discovery might imply a cautionary message to policy makers, district officials/ administrators, and curriculum writers who are attempting to insert a script for explicit implementation within a curricular project or intervention, such as the IPFs. In short, these types of interventions, though well-intentioned, can experience multiple possibilities for enactment or lead to unintended outcomes.

To more thoroughly unpack this implication, I revisit specific examples in the data I presented in the findings documenting Dr. Williams's efforts to repurpose BSD's original planning documents from a prescribed scope and sequence of standards supplemented by daily lesson plans to a more open ended planning tool emphasizing instructional connections to big ideas and critical thinking. Unlike the reports from scholars who have documented a proclivity of scripted curriculum being developed and implemented in response to high-stakes testing and accountability (e.g., Au, 2011, De Lissovoy, 2013, & Pinar, 2004), the case of the IPFs is an exception to this trend. Dr. William's reconceptualization of how the new IPFs should be developed did not entail a standardized series of scripted lessons as did the planning documents that preceded them. Instead, the IPFs were intended to help teachers design instruction through the pedagogical approach of UBD, which focused on teaching to a core set of big ideas underscored by essential questions to guide students through the inquiry process to an end destination of deep conceptual understanding that would subsequently support successful transfer of the requisite knowledge and skills to other areas of application (Wiggins & McTighe, 1998). Despite the noble intentions that guided Dr. Williams in

developing the IPFs, the documents were not wholeheartedly embraced by other district officials who were responsible for monitoring campus implementation. Moreover, the kindergarten teachers at both Hernandez and Wylie Elementary did not consistently and faithfully adhere to the IPFs in the way Dr. Williams had intended the documents be utilized with UBD.

For the purposes of highlighting how interventions set forth to control the enactment of curriculum can incur obstacles, I now revisit three episodes I documented earlier in the previous findings chapters where translation was significantly precarious. First, I reported that Dr. Ochoa (Dr. William’s counterpart in the BSD’s Office of School Affairs) appeared to express conflicting sentiments and divergent points of view on how kindergarten teachers should approach the IPFs against the principles advocated in DAP and CRT. In Table 6.1 below, I highlight and juxtapose these opposing discourses, which appear to diverge along a fine line between what Dr. Ochoa identified as best practices for teaching young children and the realities confronting the campuses she had to supervise and monitor for academic progress in relation to the state’s accountability markers:

Table 6.A: Dr. Ochoa’s positionality on curriculum enactment and the implementation of BISD’s IPFs

Positionality	Statement
Supportive of DAP and CRT	Some children are very tactile; some are totally different. As they’re [teachers]adjusting for that, for the CRMs, they’re having to make sure they’re thinking about “Okay, if I think about my children, what is the best way? Is this the best story? Is there a way I can chose a piece of text to read to them to get this concept across that is more culturally relevant? Because I know what’s going on in Susana’s life or Joe’s life?” (Interview 6-5-2015)
Supportive of UBD	You have to help them [teachers] see the bigger picture of okay, what are those things, if you took all the [IPFs], all the [state standards]and [IPFs] and you looked at them. What are those

	things that, by month to month, what do you really want to see? What are the big things, the big ideas, the big skills that you need to see students master...? (Interview 6-5-2015)
Responding to Campus Needs	We have schools where everybody is in their first year or second year. That's why what we produce as a district, as a team, etc., has got to be really user friendly. It cannot be predicated on somebody needing for every lesson, needing 6 or 7 hours to be able to really understand that lesson (Interview 6-5-2015)
Responding to Accountability	My team is monitored more carefully, so that's what it looks like. Because you have to ensure that those children are able to master, get to that standard and left on their own, the school hasn't demonstrated an ability to get them there (Interview 6-5-2015).

Although Dr. Ochoa recognized and appreciated a space for teacher autonomy to address the individual and socio-cultural needs of children, the determining factors that caused her to disregard her theoretical positioning hinged on the presence of the state's punitive policies, which threatened to impose sanctions on campuses such as the ones she identified as being poorly staffed and on the verge of academic failure. In response to these high-stakes sanctions, Dr. Ochoa has selected to guide her team of support specialist in developing a template, the Essential 9 (See Figure 4.E), to help the novice teachers at the low achieving campuses she supervised understand and plan more rigorously to the state standards instead of the big ideas, which she has previously alluded to being important for making sense of the gestalt of the content embedded within the numerous knowledge and skill statements listed in the IPFs. At this point during the process of enrollment, the Essential 9 document, which was antithetical to achieving the goals of UBD, entered the repertoire of planning resources available to teachers and administrators in BSD and, consequently, became a potential counter devise that could minimize the optimal effects the IPFs were intended to have on instructional planning. Hence, at the administrative level, Dr. Williams's efforts to effectively intervene and mitigate the district's history of essentializing the state standards for the sake of reading

children to be successful on the end-of-year exam had already experienced one act of treason.

When analyzing what occurred at the campus level, the IPFs seemed to have impacted and were appropriated by the teachers in different ways. At Hernandez Elementary, for example, Ms. Mathers's failure to acknowledge the Language Arts IPFs (the content area for which she planned on behalf of the team) appeared to be attributable to the campus's higher standards for kindergarten's end-of-year reading benchmarks. To meet these expectations, which were set higher than what the district had established for the same outcomes, Ms. Mathers felt compelled to incorporate first grade state standards into her instructional plans. Consequently, adherence to kindergarten outcomes was not sufficient in helping Ms. Mathers design language arts lesson plans that would help her students leave kindergarten reading at the campus designated benchmark level. Ms. Mather's decision-making in this scenario further exemplified how even the state's kindergarten reading knowledge and skills outcomes, which I earlier identified as IMs, were ignored in response to a campus level contingency (a reading level score). In this moment of translation, allegiance was severed to the state standards that were inserted within the IPFs, a feature which many of the teachers and administrators seemed to identify as a non-negotiable passage point binding them to the district's prescribed curriculum. Thus, IMs can encounter resistance even though they have accomplished successful translations in their passage through numerous webs of relations to procure additional links to and within other networks (Munro, 2009).

Within the network being established at Wylie Elementary, variance in IPF implementation was also evident. At this campus, the teachers devised a common electronic lesson plan template, which they could populate quickly during their weekly planning sessions to cut down on the amount of time they would need to devote to lesson

preparation. Pollock (2005) calls this type of maneuver a work around, which he defines in relation to ANT “to explain how one actor is able to adjust a technology to meet his or her particular needs or goals” (p. 496). Thus, even though the Wylie kindergarten teachers seemed to follow the IPFs and its ancillary documents with reasonable fidelity, this electronic planning template device modified how deliberately the individual team members would focus on the principles of UBD during the meeting for the sake of accomplishing the numerous tasks that needed to be done to end on time and plan sufficiently for the following week of instruction. The effect of this expedited planning was a cursory enactment of instruction that compromised the teachers’ attention to big ideas, which could have helped each team member more coherently integrate content areas in a way that was meaningful and salient to the interests and socio-cultural/political realities of the children.

During pivotal moments of each of the three scenarios I presented in the above, there were opportunities for the actors working within their own local contingency to fully or partially ascribe to or forgo allegiance to the UBD foundations inscribed within the IPFs. In this way, controlling the behavior of others to achieve an ideal standard for a curriculum’s enactment through some type external mediation is altogether uncertain and problematic. This caveat is salient to those interventions that originate from both noble causes (e.g., Dr. William’s UBD project) and suspicious intentions (e.g., high-stakes testing). Dr. Rena Hudson’s observation of the difficulty the curriculum writers and support specialists she supervised in BSD’s Early Childhood Department encountered when developing the IPFs perhaps best underscores the implications of creating a standardized planning guide for all teachers: “Anytime you try and write curriculum for everyone then it doesn’t fit anyone” (Interview/ September 3, 2014).

This is not to say that the realization of beneficial outcomes is not possible. For example, if Dr. Ochoa had been in her final year of service before retirement, perhaps she would no longer feel threatened that she would lose her job if the campuses she supervised failed to make adequate progress on the state's accountability scale. Free of this pressure, she may have been more willing to adhere to her epistemological convictions about best practices and allow campuses to experiment with the new UBD model, even if doing so meant that there would be a dip in students' test scores. Likewise, had Ms. Mathers been reassigned a new content area for which she had little expertise, such as math; she might have referred to the IPF documents to help her plan for that subject rather than look exclusively at the basal teacher guide. Finally, the kindergarten teachers at Wylie Elementary might have analyzed the enduring understandings and essential questions more intently had the principal assigned an instructional coach to attend and facilitate their weekly planning sessions through guided critical dialogue.

Each of the alternative circumstances and positive outcomes I have suggested here are merely possibilities but, nevertheless, illustrate the implications of an ANT rendering of curriculum enactment being governed from a distance: That is, anticipating multiple improvisations as opposed to several standardized replications of implementation is likely a more suitable expectation, especially for those who wish to intervene within curriculum enactment. Moreover, IMs and OPPs such as the IPFs can make an impact on and influence decision making during the process of planning and instruction, but predetermining and controlling their precise effect on educational outcomes is elusive (Fenwick & Edwards, 2011).

A review of what has been accomplished in educational research about the development of curriculum, including its control and effects on instruction, is useful at this point in the discussion to situate what the findings in my analysis suggest in relation

to how to proceed in going forward to create spaces dedicated to the repurposing of and advocacy for DAP and CRT in kindergarten classrooms affected by the current context of high-stakes accountability. To do this, however, requires me to also confront the limitations in executing change through policy and eventually through curriculum and teacher professional development--two avenues of reform which I have suggested are problematic when they are approached through an ANT understanding that tries to decenter any privileging of human intentionality and agency. It is with respect to addressing the confounding nature of intentionality and agency for which I try to establish a new lens that is grounded in Freirean constructs of praxis and conscientization (Freire, 1970) but still tries to accommodate the reality of human and non-human symmetry inherent within ANT perspectives.

#### **RELATIONSHIP TO PREVIOUS RESEARCH**

Cuban's (1984) analysis of American public education from the turn of the century up until the 1980s suggests that there has been very little movement in transforming the instructional practices of teachers from traditional behaviorist strategies focusing on transmission of knowledge to a more progressive pedagogy promoting critical thinking and student engagement. Even in those classrooms where Cuban did see environmental attempts to comply with student-centered approaches (e.g., children seated at tables instead of desks arranged in rows), the instructional practices he observed still hinged on teacher-directed activities, such as rote drill exercises and the assignment of seatwork. I believe that this trend might speak to the complexity and difficulty in enacting reform in education through interventions, such the IPF project initiated by Dr. Williams in BISD. Hence, when viewed through Cuban's analysis, attempts to reverse the trend appear to be a slow if not almost impossible process. In this case, it is therefore

important to note that Cuban (1993) conceptualizes curriculum development and its enactment as a four-part linear trajectory, which begins with its designation as the official curriculum and then moves to its transformation into what is taught, learned, and eventually tested.

Edwards (2011), however, challenges these types of linear framings, which seek to compartmentalize curriculum into a priori classifications, such as what is described, prescribed, and enacted. Edwards argues that when conceptualized under these terms, curriculum implementation is reduced to a mere product of external manipulation—an intentionality or force exerted upon the former with the intent to change its trajectory. He therefore uses ANT as a solution to reframe this dilemma so that those interested in deconstructing the curriculum development/ enactment binary can conceive of it instead as a manifestation of multiplicity: “Here rather than reducing curriculum-making to a single ontology through explanation, its possible enactments are taken as multiple and heterogeneous, arising from the relating of the animate and inanimate in networks which have agentic effects” (p. 39). In other words, enactment is not a purely human endeavor but is instead realized through a symbiotic partnership with material things (e.g., textbooks, computers, learning objectives, high-stakes exams), which influence how instruction occurs in various contexts that present unique contingencies. The multiple possibilities for a curriculum’s implementation therefore presents opportunities for actors to resist, adapt, ignore, and take up components of what has been prescribed, which is what Edwards describes as agency.

The different manifestations of interpretation and planning with the IPFs that I observed the kindergarten teachers do at Hernandez and Wylie Elementary might substantiate what Edwards saw in the findings of two case studies he conducted of secondary teachers’ uptake of a curriculum designed to teach a unit on the topic of

hospitality. Implemented as two different courses—one occurring at the high school level and another in a college cookery class—the unit was understood and implemented by the instructors in ways that were conducive to their unique campus and course requirements. Likewise, the teachers at Hernandez Elementary utilized only portions of the IPFs that were useful for accomplishing the state mandated math and science standards but resorted to other resources to address the more rigorous language arts and reading expectations established by the first-grade teachers. The Wylie kindergarten team, however, did refer to all IPF content area documents but planned instruction according to the more explicitly laid out activity suggestions available in the ancillary exemplar lessons. At both campuses, however, more so at Hernandez than Wylie, the kindergarten teachers made minimal references to the tenets of UBD inserted within the IPFs. In both case studies, the one documented in this dissertation and the one conducted by Edwards, the findings suggest that “the prescribed curriculum in its translations has varying degrees of visibility as it is enacted” (p. 52).

While Edward’s study does provide some evidence to help substantiate the implications I am trying to make in my findings with respect to the variation of a curriculum’s enactment, it does little to shed light on peculiarities of kindergarten and its positioning in the current high-stakes environment. To address this aspect of the issue, I look to other qualitative case studies that have problematized the juxtaposition of prescribed standards and scripted curriculum with Kindergarten’s traditional focus on the developmental, individual, and socio-cultural dimensions of teaching young children. Although these case studies do not approach the dilemma through an ANT framework, they nevertheless do speak to teachers’ ability to negotiate within the confined spaces of standardization and subsequently push back to advocate for and implement aspects of DAP and CRT. More importantly, since these studies do provide counterexamples of the

types of teaching practices I presented in my findings, there may be hope to speculate how if perhaps this data were interpreted through the analytical methods of ANT in future empirical research, subsequent implications could highlight more appropriate ways for kindergarten teachers to perform their identities and responsibilities that respect the developmental, individual, and socio-cultural needs of their students.

Goldstein (2007) looked at how two kindergarten teachers in a suburban school responded to parents', first grade teachers', and administrations' demands to prepare their students to meet the higher academic expectations scripted in the state's mandated standards. Although these teachers did find and create spaces to continue implementing DAP in the face of such challenges, Goldstein acknowledges that their ability to do so hinged on their epistemological commitments and expertise rooted in early childhood best practices and pedagogy. Although two of the teachers in my study (Mrs. Caldwell from Hernandez Elementary and Mrs. Velasquez from Wylie) also had recollection of and experience in implementing the child-centered approaches that used to be more prominent in kindergarten, they (especially Mrs. Caldwell) had to acquiesce to stringent administrative surveillance that pervasively monitored their adherence to their district's curriculum--a contingency the teachers cited in Goldstein's study did not have to address. Moreover, Goldstein also noted that the teachers she followed nevertheless did have to make some concessions, such as providing worksheets, to placate the demands of parents and first grade teachers. While such practices are not endorsed by DAP, they do exemplify how an ideal enactment of a progressive curricular ideology can also be elusive. Goldstein nicely summarizes this complexity in the following:

Kindergarten teachers face many different challenges, each of which is characterized by multiplicity, intensity, and ambiguity. The changing expectations for kindergarten have amplified and magnified these challenges in ways that expand far beyond the boundaries of the DAP versus standards dilemma (p. 51).

I emphasize Goldstein's use here of the word *multiplicity*, which I reiterate is a concept ANT scholars (e.g., Mol, 2002, Fenwick and Edwards, 2010) use to describe how enactments of a standardized protocol are in fact heterogeneous and uniquely local. However, for the two teachers in Goldstein's analysis, multiplicity appeared to present itself as options for enacting their responses to the demands of the parents, first grade teachers, and tightly aligned K-12<sup>th</sup> grade standards--all of which could be framed as materiality competing for allegiance to actor networks opposed to DAP. These teachers nevertheless found ways to both resist and compromise to stay within the narrow boundaries available to them to enact their pedagogical principals and commitments. Whether such spaces for professional autonomy exist for kindergarten teachers who practice in more closely monitored environments like the ones characteristic of the campuses in my study is a contextual variable that deserves more consideration and analysis.

At present, Brown and Lee's (2012) case study of three exemplary public school pre-k teachers working with linguistically and culturally diverse children in a district employing a prescribed curriculum provides some examples of how to successfully incorporate DAP and CRT in teaching environments where accountability is more pronounced. These teachers were recognized by their school district specialists and administrators as exemplary professionals who exhibited best practices aligned to DAP and CRT and were consistently successful in helping their students achieve both academically and socially. In their analysis, Brown and Lee uncovered three overarching characteristics that underscored each of the teachers' practices. Specifically, the teachers demonstrated resiliency when confronting challenges endemic to their professional contexts (e.g., pressures related to high-stakes conformity), a respect for the children's socio-cultural worlds, and a general passion for teaching preschool. This latter

characteristic, passion for teaching, appeared to predispose the teachers with sensibilities that allowed them to remain attuned to the developmental needs and challenges unique to young children. With respect to the significance of these findings, Brown and Lee emphasize how the teachers' "statements and examples of their teaching illuminate the potential for spaces to be created for developmentally appropriate and culturally relevant teaching within a high-stakes learning environment" (p. 342).

Although Brown and Lee are suggesting that teacher educators can use the examples and experiences shared by the three teachers from their study to prepare preservice candidates to recognize and locate opportunities to intervene in their own future teaching contexts, I argue that how to achieve or realize this goal is not altogether clear. Again, the findings from my dissertation seem to imply that trying to impact or mediate instructional practices through external interventions, such as what Dr. Williams tried to accomplish through the IPFs, might prove to be too far removed from the classrooms and local spaces where on-the-spot, "street level" (Lipsky, 1980) decision making occurs in real time. In fact, in their case study analyzing the struggles teachers at two schools experienced while engaging in an on-going professional development on the implementation of the Next Generation Science Standards (NGSS), Allen and Penuel (2015) found that reflexivity and change was a difficult, tenuous process for many of the study's participants. The researchers nevertheless concluded from their findings that "teachers need opportunities to engage in collaborative and sustained sensemaking to see, understand, and work through incongruities they perceive between goals and strategies promoted in PD and goals and strategies promoted in their local educational contexts" (p. 174). In other words, change is not immediate or easily achieved without intensive, personalized support and coaching.

To understand how a professional development intervention may work in helping early childhood educators make sense of their socio-political positioning within the context of high-stakes accountability, I look to a case study conducted by Brown and Weber (2016) in a school district context closely resembling Hernandez and Wylie Elementary schools where I collected my data. Brown and Weber performed an on-going PD series aimed at helping a group of public school pre-k and kindergarten teachers find spaces within their instructional day, which was tightly regulated by their district's instructional pacing guides, to address the social, cultural, and political issues that were a part of their students' daily lives. Although these teachers did find ways to incorporate CRT within their instruction, they struggled in knowing how to do so and failed to see the academic value in the social-cultural content they were addressing. Brown and Weber subsequently surmised from their findings that although these teachers did have the opportunity to support each other and collaborate through on-going group discussions, their acceptance of and willingness to maintain engagement in CRT practices with their students might have been enhanced had the PD provided additional campus level support by including their administrators and other grade level colleagues within the dialogic activities.

Despite this limitation, I believe the lessons learned from Brown and Weber's research can contribute to the implications from my findings. That is, these researchers' study showcased an alternative approach that incorporated and introduced interventions targeted at classroom level decision making to circumvent the effects of a standardized prescribed curriculum on the instructional practices of kindergarten teachers situated in high-stakes accountability contexts. Again, based on what I surveyed in my findings, I contend that BSD's efforts to recondition its teachers' instructional planning habits via UBD and the deployment of the IPFs encountered resistance and dissention due to the

way the new framework was disseminated and packaged within a single prescribed document rather than being introduced through more dialogic and teacher inclusive practices.

However, before attempting to unpack what an alternative intervention might look like, it is important to address an anomaly that did surface, which has not been thoroughly explored either theoretically or empirically. That is, my findings showcased how the teachers I observed at Wylie and Hernandez Elementary complied to the district's standardized scope and sequence of topics and student performance outcomes as they performed their interpretation of this prescribed protocol with the material resources available to them (e.g., basal reading programs, lesson plans, Pinterest activities, etc.) and through the discourses (e.g., preparing children for a first grade reading level) and contingencies (limited grade level expertise) that defined and confined them. The result of this performativity was a rendition of the prescribed curriculum rather than a perfect replication of it. I argue that this single finding could serve as a contribution to the existing literature by challenging educational scholars to consider how curriculum enactment can produce multiple possibilities for its expression in varied contexts at different times.

While some researchers have pushed the boundaries of theory to speculate how this paradox of multiplicity could occur in real time and space (e.g., Munro, 2009), it has received little attention and treatment in educational scholarship (Fenwick & Edwards, 2010). Although her study did not pertain to education, the exception here is Mol's (2002) ANT-inspired analysis, which explored how doctors and nurses performed a protocol for amputation in different ways based on the context and needs and medical histories of the patient.

Again, Fenwick and Edwards have initiated a dialogue on how this act of multiplicity could occur in classrooms trying to implement educational standards, but the response to this issue has been minimal. Studies that have dealt with the dilemma of enacting a standards-focused curriculum in high-stakes ECE classrooms have framed the possibilities for responding accordingly with a binary menu of options. That is, either the teachers comply with standardization and sacrifice their instructional efficacy (e.g., Ede, 2006; Parks & Rhoades, 2011) or they resist and find ways to circumvent these limitations by negotiating compromises (e.g., Goldstein, 2007; Valencia et. al, 2006). Even though Goldstein did acknowledge the complexity and multiplicity of the kindergarten teachers' responses she analyzed, her theoretical lens and focus was not suited to unpack what was occurring during and behind the scenes of the negotiation process.

To deal with how teachers' enactments of curriculum could in one dimension appear standardized and locally unique in another, I allude to what Munro (2009) describes as *punctualization*. As he explains, those who study social phenomenon have "yet to understand how it is that power, for its very existence, might still require that vital quality of appearing when needed and yet disappearing when not" (p. 135). In other words, teachers can perform their identities as implementers of a prescribed curriculum when the occasion specifies they should do so--e.g., Miss Villarreal turning in the team's aligned lesson plan to the principal--and then at a different moment defy the same protocol--e.g., the Wylie kindergarten team spending more time on the living and non-living unit than what was stated officially on paper. Although this anomaly deserves more exploration to understand its significance on curriculum enactment in general, I now turn my attention to deal with some of the limitations of my study in its ability to adequately understand and situate the dilemma surrounding the precarious and elusive enactment of

DAP and CRT influenced practices of kindergarten teachers bound to a prescribed and standardized curriculum document.

## **LIMITATIONS**

The qualitative case study design (Yin, 2009) and ANT framework (Fenwick & Edwards, 2010) I used to collect and analyze the data for this research project do present limitations for interpreting the findings I have presented and the implications I have deduced from them thus far. These limitations pivot on my emic positionality (Lincoln & Guba, 1984) and restricted time spent in the field as well as ANT's problematic treatment and non-privileging of human agency. I begin by addressing the former, which has two implications related to reliability.

First, at the time I was collecting the data, I was an employee in BSD, serving as a curriculum specialist in the ECE department. Hence, I had working relationships with each of the district level administrators and specialists I interviewed in Chapter 4. Although my relationships with these participants and my 24-year historical background working as a teacher and district-level specialist provided me with easy access to procuring documents and interview data, such advantages also created a potential for me to insert bias into my interpretations. An outside observer/ researcher might have been drawn to pursue other questions or lines of inquiry or interpret the findings from an alternative perspective. Also, while I did perform member checking with participants to ensure their voices were represented accurately and fairly in the data, there is a possibility these individuals were hesitant to question or challenge my interpretations due to their respect for me as a colleague and a friend. Moreover, the teachers I interviewed and observed might also have felt intimidated or insecure in openly confiding in me how they conceptualized the IPFs out of concern that my authoritative position as a district-level

specialist would implicate them if the data were shared with administrators or other BSD personnel. Even though I established protocols (refer to Chapter 3) prior to gathering the data to ensure that any breach of confidentiality would not occur, the participants might have nevertheless been reluctant to provide full disclosure.

Secondly, as with all qualitative research, the data I did gather and interpret cannot be generalized to other similar populations (Yin, 2009). The accounts of the teachers' planning and instructional practices I documented in the field notes are representative only of what I observed at that point in time. In this regard, it is possible that the teachers did indeed abide more stringently to the UBD protocols inscribed in the IPFs at times during the school year when I was not present. Likewise, on the many days, I was not in the classrooms observing practices, there might have been instances when the teachers departed from what was prescribed in their lesson plans to pursue the children's individual and socio-cultural interests. That said, the intent of ANT is not to generalize or derive explanations from sources of data but rather understand how the effects of human and material associations occur (Latour, 2005).

This does not mean that ANT is free from critique in the sphere of social research (Fenwick & Edwards, 2010; Munro, 2009; and Shinga, 2007). It is in relation to this limitation, I address a theoretical dilemma that underscores the implications I have deduced from my findings. Specifically, studies such as mine, which attempt to problematize discourses and ideologies (e.g., high stakes accountability) that purportedly perpetuate structural conditions (e.g., standardized and prescribed curricula in kindergarten), run the risk of overstepping the boundaries of ANT. Such an incursion can occur on two levels. The first happens when ANT tries to disrupt the human/ non-human binary, which blurs how agency might work as a mediator to produce effects. The second arises when ANT shuts down attempts to spatialize 'the social' as two distinct

micro/macro levels where some researchers try to theorize about epistemology (how subjects make sense of things and act with intentionality) in one of these realms and about ontology (how things are) in the other.

The weaving together of these two critiques suggests that “agency must be recognized as a human property to differentiate true and false statements and to trace out the contours and consequences of human action” (Shinga, 2007, p. 51). Drawing from feminist perspectives, Casper (1994) tries to resituate this argument by problematizing any assumptions (whether originating from ANT or its critics) that attempt to ascribe human and non-human classifications to entities without considering how the term is being historically and politically constructed within a specific context. Casper’s empirical research has looked at how ambiguously defined beings—e.g., fetuses, animal, etc.—experience othering through similar ahistorical treatments of teleology. In other words, there are real consequences when responding to questions, such as, “When does a fetus become human?” Rather than dispute that material objects can be assigned agency, Casper therefore recommends humans (and this includes researchers) take responsibility for their epistemological standing whenever they “enforce the category of nonhuman onto other entities” (p. 853). Here, I believe Casper is trying to remind qualitative researchers to practice reflexivity. MacBeth (2001) defines reflexivity as “a deconstructive exercise for locating the intersections of author, other, text, and world, and for penetrating the representational exercise itself” (p. 35). For this exercise to occur, I argue that ANT must consider allocating a space for it to happen during the process of praxis somewhere in the web of network construction.

I should note here that Casper does not claim to resolve the debate occurring between ANT scholars and their critics. However, I do believe she has located a space where reflexivity can take place without relegating it to live somewhere inside a macro/

micro binary. I make this case so that I can confess my own epistemological struggles with ANT and proceed in rethinking possibilities for bringing DAP and CRT into the instructional purview of kindergarten teachers working in high-stakes contexts like Hernandez and Wylie Elementary.

## **REENVISIONING KINDERGARTEN**

Indeed, it is very possible that there were other BSD kindergarten classrooms besides the ones I observed for this study where teachers did consistently successfully incorporate DAP and CRT into their instructional decision making. However, the substantial absence of those instructional practices surfacing during the minimal time I spent at the two campuses in my study might suggest that implementation of any similar, externally imposed intervention would vary, most likely manifesting as an improvisation that bears some type of resemblance to whatever has been prescribed. However, I believe it would behoove district level officials wishing to curtail the use of scripted curriculum and the essentialization of standards to altogether abandon projects like Dr. William's UBD intervention.

Instead, I think what the findings from my study might suggest is that the potential for success to occur in such efforts is more of a question related to scale and conscious effort. That is, trying to rectify teachers' and administrators' insatiable appetite for instructional guidelines on how to help students succeed in learning as it is measured on a single end-of-year test is more likely ameliorated via multiple channels instead of through a single linear, top down dissemination method. The processes involved in trying to actualize this project would imply the involvement not only of teachers, campus administrators, and district officials, but all stakeholders (e.g., parents, policy makers, community leaders, etc.) who share the responsibility of educating

children. Moreover, this all-hands-on-deck approach/process would need to be dialogic and local with conversations occurring at all levels so that connections between these individual networks emerge rhizomatically and relationally rather than through a distributed, banking model.

The model I have described in the above is based on the Freirean construct, conscientization (1970). In this process, subjectivity (as opposed to the dehumanizing practice of objectification) is accomplished through discourse as the participant comes into an awareness of her humanity and socio-political positioning in relation to others and the world. For parents, educators and policy makers, this means becoming aware of the materiality and milieu that order our practices in the field and shift our identities in the process. De Lissovoy (2013) states “that accountability functions ideologically less through the beliefs it promotes, and more through the procedures it repeats” (p. 428). What he goes on to suggest is that to permeate and resist this deeply rooted neoliberal agenda, which he links to having emerged and strengthened through our complicit, unchallenged participation in its sanctioned educational practices (e.g., high stakes testing, scripted curriculums, etc.), we must disentangle ourselves from these networks through continuous interrogation and praxis. Interestingly, although De Lissovoy does not use ANT to frame his argument, his reasoning and conceptualization of the issue bears a striking resemblance to ANT sensibilities.

## **DIRECTIONS FOR NEW RESEARCH**

I foresee future qualitative case study research being able to ascertain how an exercise or movement, such as the one De Lissovoy has speculated about in the above, might occur. If this level of empirical work does emerge, I think an ANT framework would be compatible to manage and analyze the data it produces to understand how

networks emerge and deploy as the dialogic interventions and praxis transpire among and between the diverse interest groups (e.g., teachers, administrators, parents, district leadership, and policy makers). Understandably, however, this magnitude of analysis would require research teams conducting multiple case studies at different sites instead of an individual researcher employing a single case study similar in scale to my analysis. That is, trying to make sense of a messy and complex unfolding of events requires many eyes to keep track of all the shifting and network building occurring simultaneously in various regions of such a vast web.

Again, the role of intentionality--acting *upon* as opposed to *within*--comes into question here when considering an ANT rendering and critique of such possibilities. However, I posit that intentions 'get thought up' in the realm of imagination, which I believe does not reside in either micro and macro spaces. I also refrain from trying to postulate whether imagination is an inherently human or non-human capability. Rather, I concentrate on what imagination can accomplish. In this realm, the actor can create, replay, and redesign possibilities without having to adjust to consequences in real time. Granted, what happens in the real world is recapitulated in the mind--both realms capable of acting on and being acted upon each other (Vygotsky, 1978). Hence, in this way, imagination gets work done through its attachments with material things (Law, 2007).

## CONCLUSION

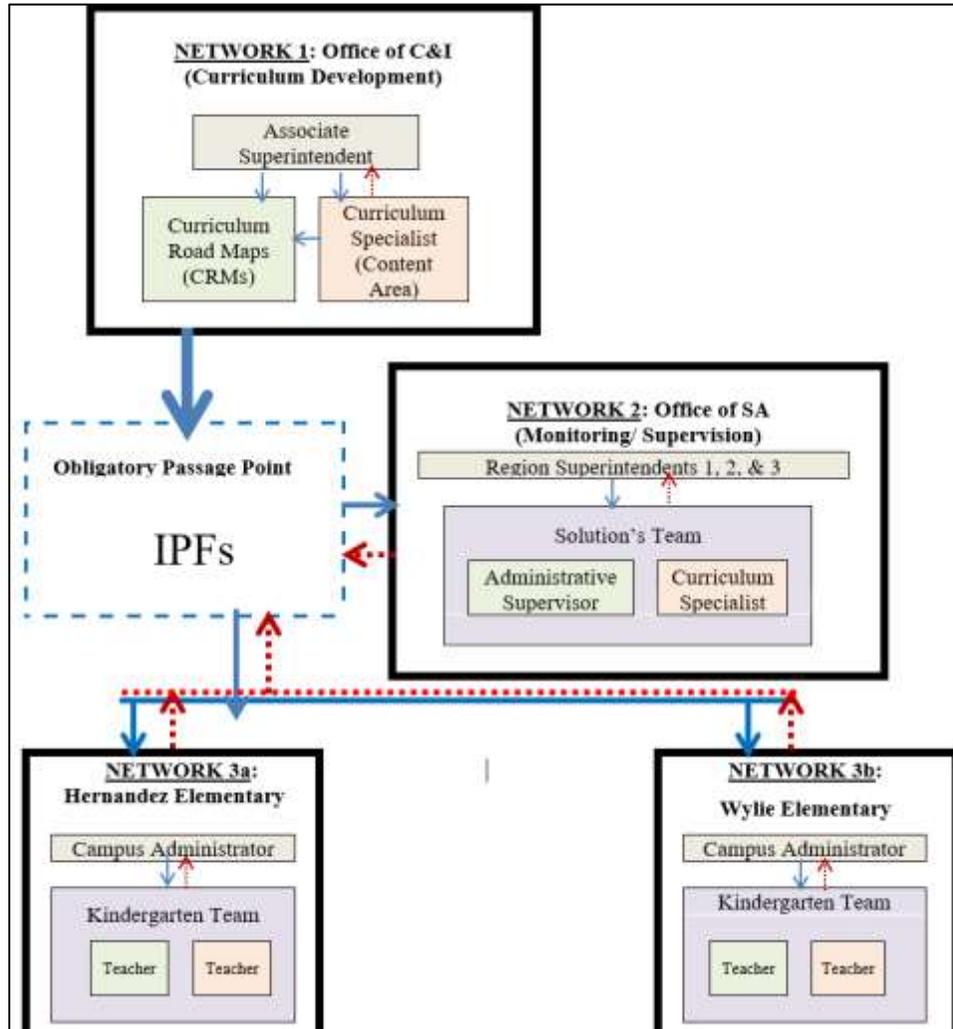
In the meantime, kindergarten will continue to evolve as it responds to shifting social dynamics. For example, based on Bassok and Latham's (2017) study, which compared two cohorts of children entering kindergarten--one in 2010 and the other in 1998--kindergarten teachers who responded to the survey data for the 2010 sample reported that more of their students began school with advanced academic knowledge and

skills due to the substantially greater number of these children having had prior preschool experience. This trend will likely have an impact on the future development of end-of-year kindergarten learning outcomes, which strongly influence what is included in the official curriculum. In other words, standards will continue to rise and kindergarten will need to respond accordingly.

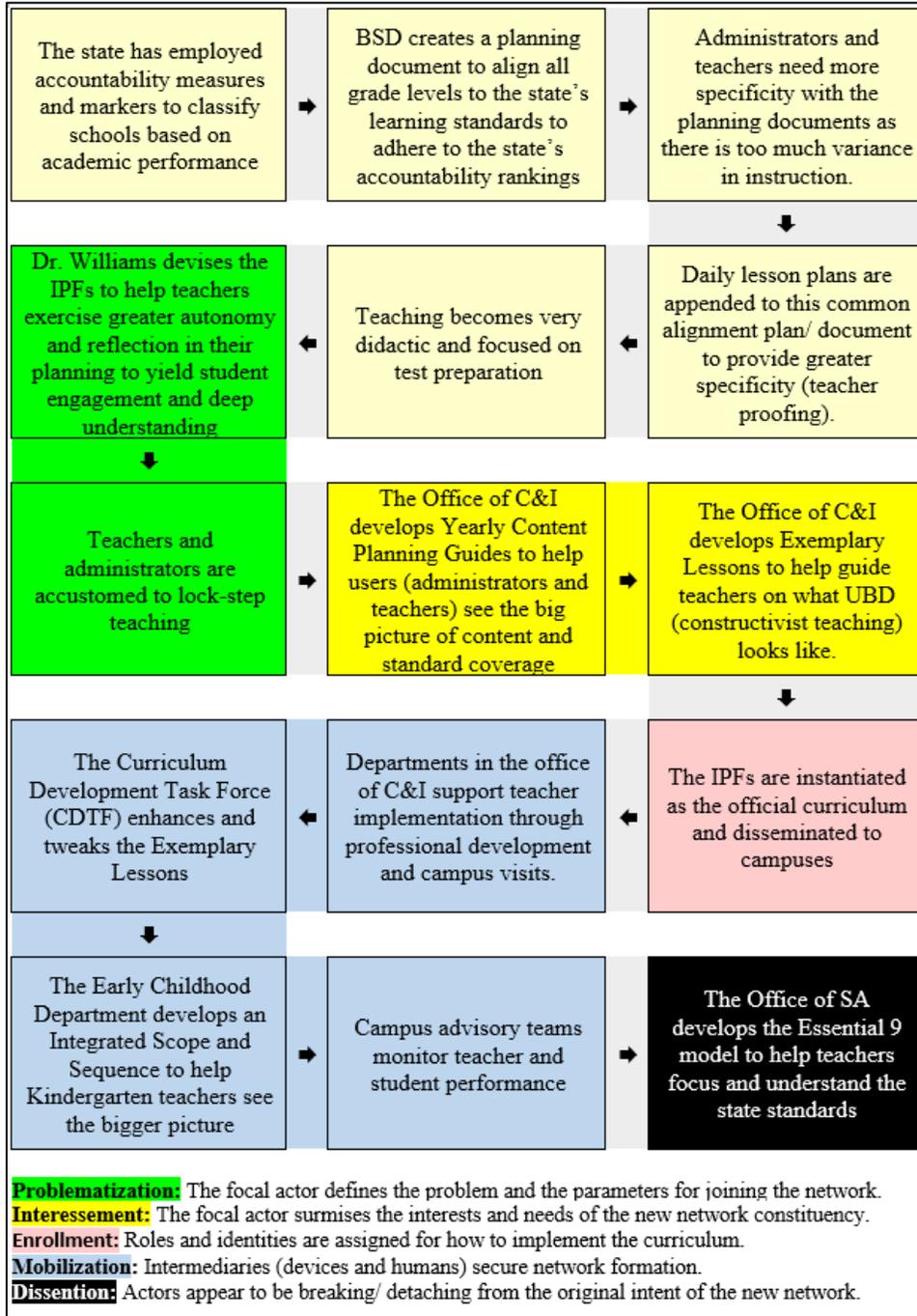
However, kindergarten's response to these changes does not need to entail any additional abandonment of DAP and CRT to make space for more academically rigorous learning experiences and standardized assessment. The supposedly incompatible coupling of academic rigor with DAP/ CRT may instead be a very conceivable possibility (Brown, Feger, & Mowry, 2015). Lastly, having a deep level of respect for the dedicated and responsive kindergarten teams I worked with at Hernandez and Wylie Elementary schools, I believe these teachers would very likely have responded positively to any type of intervention aimed at helping them come to terms with their socio-political positioning in the high-stakes accountability context where they were situated to make room for more child centered practices. These teachers and their administrators were nonetheless very cooperative, for which I am very grateful, and managed to put their students first in the best way they could in very difficult and complex circumstances.

# Appendices

## Appendix A: BSD Actor Networks Diagram



Appendix B: BSD's IPF Genealogy and Translation Process



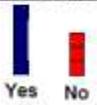
# Appendix C: Example of BSD's first iteration of IPFs (1<sup>st</sup> grade mathematics)

©2004		1 <sup>st</sup> Nine Weeks – August 17 through October 15 (42 days)							First Grade
Matrix #	Matrix Strand	TEKS Knowledge & Skill	Student Expectation	TAKS OBJ	Resource	Time/Pace	Student Work Products	Assessment	Teaching Notes
101	Number, Operation, and Quantitative Reasoning	Accurately count a set of 40 or more objects with the correct number sequence without skipping or recounting. (L)		1	Mathematical Thinking at Grade 1	Core Lesson (60 minutes)	★ Principles of Learning (POL): Clear Expectations Begin creating a "Good Works" chart that lists the expectations and criterion for using and caring for the materials that will be used throughout the year. The "Teacher Note" on p. 10 of <i>Mathematical Thinking at Grade 1</i> provides helpful suggestions on how to introduce new materials. Explore the materials yourself before introducing them to the students.	Informal Assessment: Throughout the Investigations resource, there are excerpts called "Observing the Students" that sometimes follow the synopsis of a few select Sessions. These excerpts list questions for assessing each student while he/she works on the tasks. Before conducting Investigation 1, read the "Observing the Students" excerpt on p. 6-7 to assess the students as they explore the cubes, pattern blocks, and Geoblocks. Also, pp. 13-14 list some student expectations for using the calculators.	Mathematical Thinking at Grade 1 is an overview and introduction to the mathematical content that the students will revisit in greater depth throughout the 1 <sup>st</sup> grade year. Do not expect the students to fully master or understand all of the concepts that are briefly addressed in this introductory unit. Instead, consider the unit as an opportunity to assess the wide range of levels of the students' conceptual knowledge, skills and disposition toward mathematics. When structuring and scheduling a math time for each day of the week, remember that the Investigations resource provides a skeleton pacing schedule within each investigation. For example, within investigation 1, there are 4 sessions that each last a minimum of 1 hour. That means that each Session in the investigation resource generally translates to one day of instruction in the IPF.
102		Use language such as before or after to describe relative position in a sequence of events, objects or numbers on a number line. (L)							
103		Name the ordinal positions in a sequence to determine ordinal numbers (such as using calendar dates up through the 31st day of the month). (L)							
105		1.1 The student uses whole numbers to describe and compare quantities.	Read and write numbers to 99 to describe sets of concrete objects (such as collect a set of objects and label it with the number card that tells how many objects are in the collection). (1D)						
305	Geometry and Spatial Reasoning	Use attributes to describe how two shapes or solids are alike or different (such as a square and a rectangle both have four edges). (L)		3	Investigation 1: Exploring Materials Sessions 1-4	4 days	★ Principles of Learning (POL): Accountable Talk Read the "Teacher Note" on p. 11 and the one on p. 22 of <i>Mathematical Thinking at Grade 1</i> . These excerpts summarize how to guide and encourage 1 <sup>st</sup> graders to share their discoveries and mathematical ideas.	Teacher Checkpoint: Throughout the week, allot time to complete the Teacher Checkpoint activity, "Counting 20," described on p. 17. There is a list of questions to consider at the bottom of p. 17 while assessing the students as they count the 20 cubes need to construct their design.	When creating a lesson plan format for each Session, consider dividing the hour of instruction into 3 segments—a.g. Introduction, Practice, and Review. During the Introduction, the teacher models expectations or provides a synopsis of the mathematical idea that the students will explore during Practice time. As the students are exploring and making discoveries and mathematical conjectures, the teacher is rotating around the room, assessing and asking the students questions to extend their thinking. When the students have completed the task, the students share what they have learned with the rest of the class during the Review time. During this first week of school, the instructional focus is to introduce the students to the materials that they will be using frequently throughout the year. Session 1 of investigation 1 focuses on establishing routines for using, caring for, and storing interlocking cubes, pattern blocks, and Geoblocks. Each student uses one of these materials to make a building or design. Debrief the session by reviewing what went well during the practice session and by allowing the students to share and talk about their designs to the whole class. Follow this same procedure when conducting Sessions 2-4. Consider spending one Session on introducing and allowing the students to explore the calculator. Allocate about 20 minutes of each school day for the daily routines referenced on pp. 145-152 of <i>Mathematical Thinking at Grade 1</i> . These routines recursively address mathematical skills, labeled as Numerical Fluency in the IPF. Consider introducing one of these routines per week. For this week, introduce the Calendar and Daily Schedule Routine described on pp. 151-152. Incorporate Lessons 9.2 and 9.3 from <i>Math in My World</i> to supplement the Daily Schedule routine in order to address Matrix # 404. The Daily Schedule provides a meaningful context for telling and measuring time on a clock. Create a number line on adding tape posted somewhere in the classroom to keep track of the number of days that the students have been in school. Use the number line to teach Matrix #s 102 and #103.
309		1.6 The student uses attributes to identify, compare, and contrast shapes, and solids.	Combine geometric shapes to make new geometric shapes using concrete models (such as using triangles to make a square). (6C)						
404	Measurement	1.8 The student understands that time and temperature can be measured.	Describe time on a clock using hours and half hours (such as showing 2:30 on any given model). (8B)	4	Math in My World Lessons 9.2 and 9.3 (pp. 300–310) Do not cover all of the activities suggested in these lessons. Instead, integrate these lessons with the Daily Schedule routine from Investigations.		★ Principles of Learning (POL): Accountable Talk Read the "Teacher Note" on p. 11 and the one on p. 22 of <i>Mathematical Thinking at Grade 1</i> . These excerpts summarize how to guide and encourage 1 <sup>st</sup> graders to share their discoveries and mathematical ideas.	Teacher Checkpoint: Throughout the week, allot time to complete the Teacher Checkpoint activity, "Counting 20," described on p. 17. There is a list of questions to consider at the bottom of p. 17 while assessing the students as they count the 20 cubes need to construct their design.	
405		1.8 The student understands that time and temperature can be measured.	Describe time on a clock using hours and half hours (such as showing 2:30 on any given model). (8B)						
610	Underlying Processes and Tools	1.12 The student communicates about Grade 1 mathematics using informal language.	Explain and record observations using objects, words, pictures, numbers, and technology (such as introducing the use of pictures and simple word problems to determine if you must add or subtract). (12A)	6			★ Principles of Learning (POL): Accountable Talk Read the "Teacher Note" on p. 11 and the one on p. 22 of <i>Mathematical Thinking at Grade 1</i> . These excerpts summarize how to guide and encourage 1 <sup>st</sup> graders to share their discoveries and mathematical ideas.	Teacher Checkpoint: Throughout the week, allot time to complete the Teacher Checkpoint activity, "Counting 20," described on p. 17. There is a list of questions to consider at the bottom of p. 17 while assessing the students as they count the 20 cubes need to construct their design.	
610		(Introduction) Problem Solving, Language and Communication, Connections, and Reasoning	Problem solving, language and communication, connections within and outside mathematics, and formal and informal reasoning underlie all content areas in mathematics. Use these processes together with technology and other mathematical tools such as manipulative materials to develop conceptual understanding and solve problems as they do mathematics. (43)						

NOTES/FEEDBACK: (This section is provided for your use and feedback. You may write your comments below and submit to the CamScanner online at CAC or you may comment online – URL is given below. The boxes will expand. [Hyperlink](#) is enabled to allow website use from within the document.)

How many days have we been in school?

# Appendix D: Sample Kindergarten Daily Lesson Plans Prior to current IPFs

Mathematical Thinking in Kindergarten, Investigation 4, "Today's Question" (Counting/ Collecting Data/ Exploring Materials) IPG page: 4					
Holiday	Core Content: Focus Time, "Today's Question"	Core Content: Focus Time, "Representing Our Yes/No Surveys with a Blob Graph"	Core Content: Focus Time, "Representing Our Yes/No Surveys with a Bar-Type Graph"	Core Content: Focus Time, "Representing Our Yes/No Surveys with a Pie-Graph"	
<p>This week the students will be introduced to the final classroom routine—Today's Question. This lesson plan suggests using a TEXTEAMS adaptation of this routine. 3 different data representations are introduced one at a time, each on a different day.</p> <ul style="list-style-type: none"> <li>Day 1—the Blob Graph</li> </ul>  <ul style="list-style-type: none"> <li>Day 2—the Bar-type Graph</li> </ul>  <ul style="list-style-type: none"> <li>Day 3—the Pie-Plate Graph</li> </ul> 	<p>Before: You may want to refrain from using the question—"Are you a girl or a boy?"—that is suggested in the Investigations resource. This type of question may raise sensitive issues for some children. The following survey routine is an adaptation of the "Plate Graphing" routine from the TEXTEAMS resource.</p> <p>Introduce this session with the book <i>The Bear Vacation</i> by Stuart Murphy, which models the process of gathering data in an authentic, meaningful way. After reading the story, tell the students that you will be conducting a survey to figure out a solution to an important question. Gather some examples from the students as to what a question is. Pose a question that can be answered with a "yes" or "no" response so that there can be no more than 2 categories created from the data—e.g. "Do you have a dog at home?"</p> <p>During: Direct the students to select a choice time activity exploring manipulative materials. During choice time, individually ask each child the question of the day developed during circle time. Such privacy is intended to prevent the students from choosing a "winning" category that is gaining more votes or from feeling pressure from peers to choose a particular answer. This also ensures the confidentiality guaranteed in authentic surveys. Write down the students' responses on a clipboard. Show them how you are indicating whether they respond "yes" or "no"—a happy face for "yes" and an 'X' for "no."</p> <p>After: Gather the students to the meeting area. Show and discuss the information you gathered on the clipboard. Ask the students how they could figure out how many of them do or do not have dogs. Also, discuss how they can be sure that everyone responded to the survey. If no one suggests, show the students how they can use the attendance stick to check. Tell the students that tomorrow they will help to think of ways to show the results of the survey to other people.</p> <p>Numerical Fluency:</p>	<p>Before: Review the question that the students responded to yesterday. Consider copying the survey exactly as it was on the clipboard onto chart paper so that the students can easily see the information. Also consider what to do with students who were absent yesterday and never had an opportunity to respond to the survey. Tell the students that for the remainder of the week they will be examining ways to show how many students said "yes" or "no" to the survey question. Begin by distributing blue cubes to students that said "yes" and red cubes to students that said "no." Tell the students with blue cubes to stand in a "blob" at one side of the circle meeting area, and the students with red cubes to move to the other end. Ask the students if they can tell if there are more "yeses" or more "nos." If there is a near equal amount on both sides, the students may have difficulty answering this question.</p> <p>During: Gather the cubes from the students as they sit back down on the carpet. Inform the students that they will be working with a partner to show how they think the "blob" graph they just made would look like on paper. Gather ideas from the students as to how they could show this information and how they could make sure that they have counted each student. Set out paper, red and blue markers, or dot labels at various stations around the room. Do not insist or expect that the representations be accurate. More important than the product is how the students perceive and count the data. As they finish, dismiss them to a choice time activity.</p> <p>After: Allow some partners to share their "blob graph" representations to the class. Allow others to discuss their observations of these representations. Some students might make observations that have little or nothing to do with the data, such as, "I notice that the paper is white." Nevertheless, bring to the students' attention the different totals that various pairs came up with. Use this discrepancy as an opportunity to review strategies for counting data.</p> <p>Numerical Fluency:</p>	<p>Before: Review yesterday's "blob graph" activity. Make adjustments to the data to accommodate students who were not present for yesterday's activity or who missed Tuesday's survey. Tell the students that today you would like to find a better way for showing how many more/less students responded to the "yes/no" survey. Redistribute the red and blue cubes used in yesterday's activity as they correspond to those who said "yes" or "no." Instruct the students with blue to make a straight line on one side, and those with red to form a straight line together on another side right next to the blue line. Instruct the students in the blue line to take the hands of one corresponding partner in the red line. Ask the students if they can determine how many children in the blue/red line do not have a partner. State the difference to the students—e.g. "3 more students said yes than students who said no."</p> <p>During: As you dismiss the "yes" students to sit down on the carpet, collect their cubes and compile them one at a time to create a stick that represents the number of students in that category. Do the same for the "no" students. Show the two "bars" to the students and remind them that each cube in both bars represents one of them. Similar to yesterday, set out paper, blue and red markers, and/or dot stickers for the students to work in pairs to show what today's "bar-type" graph looked like. As they finish making their representations, allow them to choose among the manipulative materials for continued free exploration.</p> <p>After: Gather the students' attention to the bar-type graph constructed with the blue and red cubes. Allow the students to discuss what they notice about the graph. Again, some observations may have little to do with the actual representation. Nevertheless, direct the students' attention to how the cubes do indeed represent each one of them. This connection would be easier for the students to visualize with a photo showing them as they were in the "yes/no" lines.</p> <p>Numerical Fluency:</p>	<p>Before: Review yesterday's "bar-type graph" activity. Allow the students to share some of their representations of the bar-type graph that they made with partners. Next, redistribute the blue and red cubes once again as they correspond to those who said "yes" or "no" to Tuesday's survey question. This time, instruct all the "yes" students to join hands together. The "no" students will do the same. Then, let both groups, still together, to join to form a circle. Ask a child standing in the circle to find the middle. Stand in the middle and locate the place where the blue and red groups begin and end in the circle. Hold a string from those end points to the middle of the circle so that the students can see where the partition between red and blue lies in the "pie graph." Fill in the space between the partition lines with red and blue construction paper. Discuss what the students see and notice.</p> <p>During: As the students go back to their spot on the carpet, distribute paper plate pie graphs to each student. (To construct these pie graphs, collect blue and red paper party plates. Place the red plate on top of the blue plate and cut a straight line down the middle to the center point of the two plates. Fit one plate into the other.) Allow the students practice moving and adjusting their plate graph so that it resembles the "kid" pie graph they made as a group with construction paper on the carpet. If time permits, allow the students to trace around their plates on paper and color in the blue and red parts to look proportional to the class pie graph.</p> <p>After: Compare this representation with the bar graph representation they created yesterday along with the "blob" graph they made on Wednesday. Ask the students how both representations are alike and different—each show the same information but have different shapes. Also draw the students' attention to how all the red parts on each representation are proportionally and quantitatively the same. This is also true for the blue parts.</p> <p>Numerical Fluency:</p>	
	<p><b>Daily Routines:</b> (Set aside a separate time during the day to integrate mathematics into the daily routines)</p> <ul style="list-style-type: none"> <li>Attendance Stick: Each day, continue counting how many students are present and how many are absent. See ideas for varying this activity on pp. 65-67 in <i>Mathematical Thinking in Kindergarten</i>.</li> <li>Counting Jar: Choose a new material and amount to put inside the counting jar. Some teachers like to have students practice this activity every day as they come into the classroom in the morning. Other teachers have spread the activity out for the entire week, working individually with small groups of students each day so as to observe the children's counting strategies and abilities more closely.</li> <li>Calendar: Continue introducing characteristics about the calendar, especially its use as a tool for measuring time and keeping track of the number of days that have passed.</li> </ul>				

Appendix E: Sample IPF (Kindergarten Mathematics)

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Kindergarten Mathematics Curriculum Road Map (CRM)		2 <sup>nd</sup> Nine Weeks
CRM 8: Compose and Decompose Numbers 1-10 and Compare Numerals to 10		<b>Pacing</b> <ul style="list-style-type: none"> <li>• 5 days</li> <li>• December 1 – December 5</li> </ul>
<b>DESIRED RESULTS</b>		
<b>Transfer:</b> In Kindergarten, students engage in activities that build on their familiarity with counting, comparing, and ordering sets to 10 by conceptualizing each of these quantities as a whole in relation to their constituent parts—in other words, how 10 can be put together from (composed) and taken apart (decomposed) into smaller sub quantities—e.g., $10=4+6$ , $3+7$ , etc.		
<b>Making Meaning</b>		
<b>Enduring Understandings</b> <ul style="list-style-type: none"> <li>• A number can be understood and represented as a sum of smaller quantities.</li> <li>• A set of objects represented as a whole number retains its value regardless of how those items are arranged or partitioned.</li> <li>• A numeral’s position on a number line corresponds to its value—e.g., as you go down the number line, each number is one-more than the number before it.</li> </ul>	<b>Essential Questions</b> <ul style="list-style-type: none"> <li>• <b>What does it mean to have part of a set of objects?</b></li> <li>• <b>How is a part different from its whole?</b></li> <li>• <b>How do you determine what is missing when you only have part of a whole set of objects?</b></li> <li>• How many different ways can you show/represent 10?</li> <li>• How is the numeral 10 different from the numerals 1-9?</li> </ul>	
<b>Vocabulary</b> Part, whole, set, total, combination, partition, representation, missing, numeral, compare, greater than/ less than/ equal <a href="#">Link to supporting Vocabulary</a>		
<b>Student pre-requisite knowledge</b> <ul style="list-style-type: none"> <li>• Students should be able to accurately count, generate, represent, and compare quantities to 10.</li> <li>• Students should be able to identify and name numerals 0-10.</li> </ul>		
<b>Resources:</b> Texas Go Math, Unit 2, Module 10, Lessons 10.1—10.8; Investigations in Number Data and Space (2 <sup>nd</sup> Edition, 2012), Unit 4, Investigation 4, Sessions 4.1-4.5; Exemplar Lessons; ETA Hands-On Standards (Pre-K and K), Number and Operations Lesson 11 (Counting On, p. 36); Teaching Student-Centered Mathematics: Grades K-3, Activity 2.4 (p. 40), Activity 2.5 (p. 41), Activity 2.6 (p. 41), Activity 2.7 (p. 41), and Activity 2.16 (p. 48); TEA Side-by-Side; connecting links or cubes; counters; color tiles; double-sided counters; Go Math <i>Think Central</i> <a href="http://www.thinkcentral.com">www.thinkcentral.com</a> , <a href="#">Math on the Spot Video and Tour</a> , <a href="#">Online Assessment System</a> , and <a href="#">UR Code Professional Development Videos</a>		
<b>Pre-AP and AP:</b> <a href="#">Advanced Placement Vertical Teams Guide and Pre-AP Resource Bank</a>		
<b>Gifted and Talented:</b> <a href="#">Exemplar Lessons, GT Scope and Sequence, GT Performance Reports</a>		
<b>ELPS:</b> Mandated by Texas Administrative Code (19 TAC §74.4), click on the link for <a href="#">English Language Proficiency Standards (ELPS)</a> to support English Language Learners.		
<b>TEKS Knowledge &amp; Skills</b>		
<b>Acquisition</b>		
STAAR: RC = Reporting Category; DC = Dual Coded Skills; <b>Readiness Standard</b> ; <b>Supporting Standard</b> Concepts are addressed in another unit.	<b>Students Will Know</b>	<b>Students Will Be Able To</b>
K.2 Number and Operations: The student applies mathematical process standards to understand how to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system. The student is expected to:		
<b>K.2A count forward and backward to at</b>	<ul style="list-style-type: none"> <li>• Each numeral represents a value</li> </ul>	<ul style="list-style-type: none"> <li>• Count forward and backward to at</li> </ul>

<p><b>least 20 with and without objects;</b></p> <p><b><i>K.2D recognize instantly the quantity of a small group of objects in organized and random arrangements;</i></b></p> <p><b><u>K.2G use comparative language to describe two numbers up to 20 presented as numerals;</u></b></p> <p><b><i>K.2I compose and decompose numbers up to 10 with objects and pictures.</i></b></p>	<p>that is one more than the numeral before it as you proceed left to right down a number line.</p> <ul style="list-style-type: none"> <li>Quantities 1-10 can be partitioned into smaller quantities or combined to make a larger whole (up to 10).</li> <li>A quantity can be represented as a combination of two or more smaller quantities.</li> </ul>	<p>least 10 with and without objects.</p> <ul style="list-style-type: none"> <li>Recognize instantly the quantity of up to 10 objects presented in organized and random arrangements.</li> <li>Compare numbers presented as numerals (0-10) using language, such as more, less, equal to, and greater than/ less than.</li> <li>Compose and decompose numbers up to 10 with objects and pictures.</li> </ul>
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**ASSESSMENT EVIDENCE**

**Student Work Products/Assessment Evidence**

Performance Tasks	Other Evidence (i.e. unit tests, open ended exams, quiz, essay, student work samples, observations, etc.)
<ul style="list-style-type: none"> <li><b>1-10 Number Line:</b> Instruct the students to create a number line with a set of numeral cards 1-10. Optional: Allow the children to create their own personal number line by gluing Xerox copied 1-10 numeral cards on a sentence strip.</li> <li><b>Shake and Spill:</b> Direct the students to count 6 to 10 pennies into a paper cup, shake it, and then spill pennies to determine how many fall on heads or tails. Then, have the students use numbers and pictures on a recording sheet to show how many of the pennies (out of the total, 6 to 10) are heads and tails. Allow the children to repeat this shake, spill and record process for a total of 5 spills.</li> <li>Refer to the <b>Session 4.9, End-of-Unit Assessment and Arrangements of 7</b>, on p. 165 of <u>Investigations 2<sup>nd</sup> Edition, Unit 4</u>. Instruct the child to open his/her book, My Favorite Arrangements, which they constructed during Session 4.4 (p. 138) of Unit 4 in the Investigations 2<sup>nd</sup> Edition resource. Have the child refer to the '7' page and chose one of those arrangements to describe using numbers and words—e.g., <b><i>"It looks like a person. I see 3 for the body, 2 for the arms, and 2 for the feet. That is 7 altogether."</i></b></li> </ul>	<p><b>Short Cycle Assessment</b></p> <ul style="list-style-type: none"> <li>Refer to the AISD Kindergarten Assessment Rubrics for the 2<sup>nd</sup> Nine Weeks.</li> </ul> <p><b>Additional Suggestions for Assessments</b></p> <ul style="list-style-type: none"> <li><b>Comparing Numerals:</b> Take anecdotal records as you observe pairs of children playing the card game, Compare. Each player draws from a deck of numeral cards 1-10, turns one card over at a time, and compares to determine which numeral is greater. The player with the greater of two cards takes both cards. When all cards have been played, the player with the most cards wins.</li> <li><b>Hiding Assessment:</b> Work individually with each child to probe her/his understanding of part-part-whole relationships. Based on the child's fluency with numbers to 5, move to any number 6-10. <b>(NOTE: If the child is not fluent with numbers to 5, you should not go any higher than 6).</b> Show the child a set of 6-10 cubes, allowing her/him to count them to be sure that there are 6-10. Then, hide different parts of the set—e.g., 3 cubes/ 1 cube/ 4 cubes/ 2 cubes/ 5 cubes/ 6 cubes/ 7 cubes/ 8 cubes/ 9 cubes/ 10 cubes missing. Ask: <b>How many are hiding? How many are showing? How many in all?</b> Make note of the following: <ul style="list-style-type: none"> <li>Is the child accurate in determining each missing part—e.g., <math>2 + \triangle = 10</math>, <math>4 + \triangle = 10</math>, <math>7 + \triangle = 10</math>, <math>3 + \triangle = 10</math>, and <math>5 + \triangle = 10</math>, <math>8 + \triangle = 10</math>, <math>6 + \triangle = 10</math>, <math>1 + \triangle = 10</math>, <math>9 + \triangle = 10</math>, and <math>10 + \triangle = 10</math>?</li> <li>What strategy does the child use to figure out the missing total—e.g., instant recall, counting on from</li> </ul> </li> </ul>

Appendix F: Sample Kindergarten YCO (Yearly Content Overview)

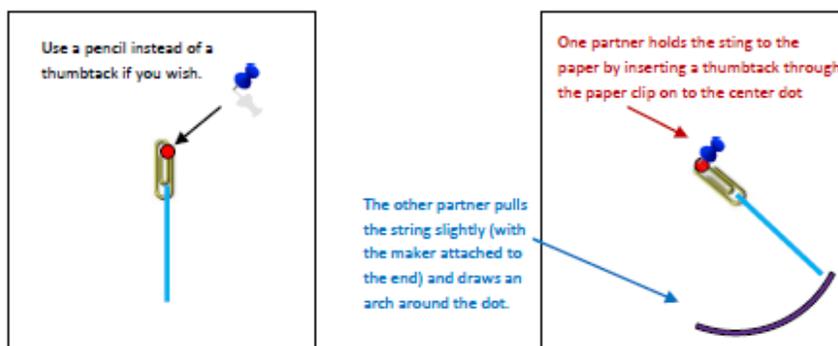
Math Grade		2014-2015
Grading Period Assessment	Pacing Guide	Texas Essential Knowledge and Skills
STAAR : RC = Reporting Category; DC = Dual Coded Skills; <u>Readiness Standard</u> ; <u>Supporting Standard</u> ;		
<b>1<sup>st</sup> Nine Weeks</b> <b>38 Days</b>  <b>August 25 – October 17</b>	<b>CRM 1</b> Rote Counting to 30/ Counting and Sorting Collections (9 days) August 25 – September 5	TEKS: <u>K.2A</u> , <u>K.2B</u> , <u>K.2C</u> , <u>K.5A</u> , <u>K.8A</u> , <u>K.8B</u> , <u>K.8C</u>
	<b>CRM 2</b> Counting, Writing, and Representing Numbers Through 5 (10 days) September 8 – September 19	TEKS: <u>K.2A</u> , <u>K.2B</u> , <u>K.2C</u> , <u>K.2D</u> , <u>K.2E</u>
	<b>CRM 3</b> Comparing Numbers Through 5 (10 days) September 22 – October 3	TEKS: <u>K.2B</u> , <u>K.2C</u> , <u>K.2D</u> , <u>K.2G</u> , <u>K.2E</u>
	<b>CRM 4</b> Two-Dimensional Shapes (9 days) October 6 – October 17	TEKS: <u>K.6A</u> , <u>K.6D</u> , <u>K.6E</u> , <u>K.6F</u>
<b>2<sup>nd</sup> Nine Weeks</b> <b>40 Day</b>  <b>October 20 – December 18</b>	<b>CRM 5</b> Represent, Count, and Write Numbers Through 10 (10 days) October 20 – October 31	TEKS: <u>K.2A</u> , <u>K.2B</u> , <u>K.2C</u> , <u>K.2D</u> , <u>K.2E</u> , <u>K.2H</u>
	<b>CRM 6</b> Measurement/ Comparing Numbers Through 10 (9 days) November 3 – November 14	TEKS: <u>K.2B</u> , <u>K.2C</u> , <u>K.2D</u> , <u>K.2F</u> , <u>K.2G</u> , <u>K.7A</u> , <u>K.7B</u>
	<b>CRM 7</b> Compose and Decompose Numbers up to 5/ Compare Numerals up to 5 (7 days) November 17 – November 25	TEKS: <u>K.2A</u> , <u>K.2D</u> , <u>K.2H</u> , <u>K.2I</u>
	<b>CRM 8</b> Compose and Decompose Numbers up to 10/ Compare Numerals to 10 (5 days) December 1 – December 5	TEKS: <u>K.2A</u> , <u>K.2D</u> , <u>K.2H</u> , <u>K.2I</u>
	<b>CRM 9</b> Count, Write, and Represent Numbers Through 15 (9 days) December 8 – December 18	TEKS: <u>K.2A</u> , <u>K.2B</u> , <u>K.2E</u> , <u>K.2C</u> , <u>K.2E</u> , <u>K.2F</u>
<b>3<sup>rd</sup> Nine Weeks</b> <b>48 Days</b>  <b>January 5 – March 13</b>	<b>CRM 10</b> Sorting and Identifying Coins (5 days) January 5 – January 9	TEKS: <u>K.2G</u> , <u>K.2H</u> , <u>K.2I</u> , <u>K.4</u> , <u>K.8A</u>
	<b>CRM 11</b> Count, Write, and Represent Numbers Through 20 (9 days) January 12 – January 23	TEKS: <u>K.2A</u> , <u>K.2B</u> , <u>K.2C</u> , <u>K.2E</u> , <u>K.2F</u> , <u>K.2H</u>
	<b>CRM 12</b> Count to 100/ Compare Numerals to 20 (10 days) January 26 – February 6	TEKS: <u>K.2A</u> , <u>K.2B</u> , <u>K.2C</u> , <u>K.2E</u> , <u>K.2H</u> , <u>K.5A</u>
	<b>CRM 13</b> Three-Dimensional Solids (14 days) February 9 – February 27	TEKS: <u>K.6A</u> , <u>K.6B</u> , <u>K.6C</u> , <u>K.6D</u> , <u>K.6E</u> , <u>K.6F</u>
	<b>CRM 14</b> Measurement (10 days) March 2 – March 13	TEKS: <u>K.2B</u> , <u>K.2C</u> , <u>K.2G</u> , <u>K.7A</u> , <u>K.7B</u>
<b>4<sup>th</sup> Nine Weeks</b> <b>51 Days</b>  March 23 – March 27	<b>CRM 15</b> Addition Up to 5/ Subtraction Within 5 (5 days) March 23 – March 27	TEKS: <u>K.2A</u> , <u>K.3A</u> , <u>K.3B</u> , <u>K.3C</u>

## Appendix G: Sample Kindergarten Exemplary Lesson

<b>Lesson Name: Straight and Round</b>		<b>Estimated timeframe: 120 Minutes</b>	
<b>Grading Period/Unit(CRM): 1<sup>st</sup> Nine Weeks</b>		<b>Grade level/Course: Kindergarten</b>	
Lesson Components			
<p><b>Lesson Objectives:</b> The child will be able to identify attributes of 2-dimensional figures based on the shape of their constituent line segments—etc. round, straight, etc.—and classify them accordingly by a coherent sorting rule.</p> <p><b>Language Objectives:</b> The child will be able to identify and describe 2-dimensional shapes using formal vocabulary—e.g., straight, round, vertical, horizontal</p>			
<p><b>Prior Learning:</b> The child should be able to use informal and formal language interchangeably to identify and describe the attributes of basic 2-dimensional figures—e.g., <i>a circle is round like a ball.</i></p>			
<p><b>Standards(Texas Essential Knowledge and Skills):</b>  <b>K.6D</b> The child is expected to identify attributes of two-dimensional shapes using informal and formal geometric language interchangeably.</p>			
<p><b>Essential Questions:</b></p> <ol style="list-style-type: none"> <li>How are these two shapes (e.g., a square and a trapezoid) alike and different?</li> <li>Why does this shape (e.g., a triangle) belong /not belong in this group?</li> </ol>			
Vocabulary		Lesson Preparation	
shape, line, curved, straight, closed, center, circle, rectangle, triangle, round, horizontal, vertical, diagonal, alike, different		<ul style="list-style-type: none"> <li>Tie a 5"-6" string to a paper clip. Make one paper clip string for demonstration use and one per pair of students.</li> <li>Locate chart paper for model demonstration of how to make a circle as well as vertical, horizontal, and diagonal lines</li> <li>Gather snap cubes, drawing paper, dot stickers, markers, and straight edge rulers, a thumbtack (or pencil) for each student pair</li> <li>Make sets of the Make-A-Shape Cards (M10-M12) from the Investigations 2<sup>nd</sup> Edition 2012 Resource Materials CD.</li> </ul>	
Lesson Cycle			
Engage			
<ul style="list-style-type: none"> <li>Invite the children to stand and use their finger to illustrate the movements as they sing the following song about a square to the tune of "If You're Happy and You Know It."               <ul style="list-style-type: none"> <li><i>Put your finger in the air and draw a square</i></li> <li><i>Put your finger in the air and draw a square</i></li> <li><i>4 straight sides all the same</i></li> <li><i>Like a picture inside a frame</i></li> <li><i>Put your finger in the air and draw a square.</i></li> </ul> </li> <li>Invite a volunteer to find an object in the classroom that they could trace to make the outline of a square. Review the attributes of a square—e.g., four straight sides, all the same size; always stands up straight whenever it is resting on one of its sides—before sending the volunteer on his/ her shape hunt.</li> <li>Trace around the edges of the objects on a sheet of chart paper. Confirm that you made a square.</li> <li>Discuss the orientation of each line segment—e.g., which line goes up and down, left to right, etc.</li> </ul>			
Mathematics Department		8/12/2014	

Introduce the formal geometric vocabulary mathematicians use to describe lines that run up and down (e.g., vertical) and left to right (e.g., horizontal). If time permits, use a straight edge ruler to demonstrate how to make a line that slants (e.g., diagonal).

- Challenge the children to think about why the edges on the object the volunteer found would not be useful for making a circle. Lead the children to understand that circles are round and, therefore, do not have straight edges.
- Display another sheet of chart paper and place a dot sticker in the center. Take a string that has been attached to a paper clip. Grasp the string at the paper clip and hold it adjacent to the dot sticker on the chart. Invite another volunteer to insert a pencil (or a thumbtack) through the opening in the paper clip so that the string hangs down from the designated center point dot on the paper. Attach a pencil or a marker to the opposite end of the string and begin to rotate the marker around the center point (the paper clip/dot sticker) so that there is a continuous curved line. Once you go around the entire center, you will have made a complete circle. See illustration below:



- Make a cube tower that is equal to the radius (the distance between the center and any point on the circumference of the circle). Turn the tower around the dot sticker to illustrate that any location (point) on the line of a circle is always the same distance from its center.

#### Explanation

**Dual Language Activity 1:** *(This activity is also appropriate for all classrooms)*

- Distribute straight edge rulers, dot stickers, a set of Make-A-Shape Cards (M10-M12) from the Investigations 2012 2<sup>nd</sup> Edition Resource CD, and a paper clip attached to a 6" string to pairs of students.
- Encourage partners to work together using these drawing tools to make circles and straight edge figures—triangles, rectangles, etc.—on the sheet of drawing paper.
- Remind the student pairs to work collaboratively. For example, when making a circle, one child can hold the paper clip at the center of a sheet of paper while his/her partner moves a marker attached to the opposite end of the string around the dot.
- Emphasize how first attempts at constructing and tracing shapes might not be successful, but how with repeated practice, persistence, and effort; the figures they are drawing will begin to more closely resemble the target examples. *(\*\*\*Refer to the 21<sup>st</sup> Century Skills below.)*

#### Explanation

- Debrief the practice activity as a whole group. Use student samples to illustrate examples and non-examples of various shapes.
- If time permits, sort the drawings by shape—triangle, circles, squares, straight sided figures, etc. Consult the Anchor of Support suggestion in the above for more information on how to extend this

activity for future lessons.

- Discuss drawing strategies that worked/ did not work.
- Plan for more successful executions of this task as the children revisit this activity during future center/ math station activities.

#### Elaboration

#### Dual Language Activity 2: *(This activity is also appropriate for all classrooms)*

- Pair children with partners. Give one child a straight edge ruler and the partner a Wikki stick or piece of yarn.
- Each partner takes turns acting out what object his/her line would represent—e.g., the straight edge ruler can be a road, which the child would act out by using his finger to run along the edge and making a car ‘vroom’ ‘vroom’ sound; the pipe cleaner might be a wave, which the child would dramatize by gripping the ends and alternating his hands up and down in an undulating motion.
- Encourage the children to use the following sentence stem: “My line is a \_\_\_\_\_. It goes \_\_\_\_\_”
- Extend the activity by having the children trace along the edges of their line to draw and represent the object it represents.



#### Evaluation (check for understanding)

**Formative:** Refer to and make notes on the Investigation 1, Session 1 Assessment Checklist, “Describing Shapes” (M7 on the Investigations 2<sup>nd</sup> Edition, 2012 Resource CD) as you observe the children engaged in drawing shapes activity described in the above lesson.

**Summative:** Transfer the information from the Describing Shapes Assessment Checklist to the students’ portfolio to share at parent/ teacher conferences.

#### English Language Proficiency Standards

2.1 demonstrate listening comprehension of increasingly complex spoken English by following directions, retelling or summarizing spoken messages, responding to questions and requests, collaborating with peers, and taking notes commensurate with content and grade-level needs;

#### Anchors of Support

After the class has generated a variety of shapes using the tools (e.g., rulers, paper clip strings) introduced in the lesson, gather the children in a whole group and construct a criterion chart for how to make various types of shapes—e.g., how to make a circle, triangle, rectangle, etc. Allow the children to consult the criteria chart as they continue the unit of study.

#### Sample Anchor Chart

How to make a circle ○	How to make a triangle ◁▽	How to make a rectangle □□
1. All points around the circle are the same distance from the center. 2. The line around the center is round.	1. There should be 3 straight sides that meet at three corners. 2. The shape is closed—a dot inside cannot escape.	1. There should be 4 straight sides. 2. None of the sides slant when the shape is resting on one of its other sides. (all right angles)

Post samples of student generated examples below each category. Make a separate category for non-examples.

#### College and Career Readiness

III. Geometric Reasoning, A.1 Identify and represent the features of plane and space figures.

III. Geometric Reasoning, D.1 Make and validate geometric conjectures.

#### 21<sup>st</sup> Century Skills

- Assume shared responsibility for collaborative work, and value the individual contributions made by each team member.
- Deal positively with praise, setbacks, and criticisms.

#### Differentiation strategies

**Special Education:** Allow the students with fine motor difficulties to use shape stencils instead of straight edge rulers or the paper clip stings. Tape the stencil on the sheet of paper so that it does not move around as the child is tracing.

**English Language Learners:** Provide opportunities for the children to incorporate Total Physical Response (TPR) as they make each shape. For example, have the children draw a circle in the air, on the palm of their hand, or around the edges of a stencil as they say the attribute—e.g., “round”—or recite a complete sentence—e.g., “A circle is round.”

**Extension for Learning:** Place rulers, stencils, and architectural references (e.g., blueprint layout of a house) in the block center. Encourage the children to build a block structure and then use the drawing materials listed in the above to represent their 3-dimensional construction on paper.

## Appendix H: Sample Curriculum Development Task Force (CDTF) Summer Schedule

<b>WEEK ONE</b>		
<b>Monday, June 8</b>		
8:15-8:30 a.m.	Morning Tech Snack - Kahoot	Library
8:30-9:30 a.m.	Whole Group Session	Auditorium
9:45-11:30 a.m.	Writing Session Day 1	See Room Assignments
11:30 a.m.-12:30 p.m.	Lunch - See Food Truck Schedule	On Your Own
11:30 a.m.-12:30 p.m.	Technology Lunch and Learn - Code Studio Unplugged	Library
12:30-4:30 p.m.	Writing Session Day 1	See Room Assignments
3:30-3:45 p.m.	Afternoon Tech Snack - Google Classroom	Library
<b>Tuesday, June 9</b>		
7:30-8:15 a.m.	YMCA Yoga	Gym
8:15-8:30 a.m.	Morning Tech Snack - Socrative	Library
8:30-9:30 a.m. Advocacy Sessions	Whole Child, Every Child - Take a Break and Make it Count	156
	Whole Child, Every Child - Ignite Your Creativity	154
	Whole Child, Every Child - Culturally Responsive Lesson Design	163
	Differentiation - UDL	150
	Differentiation - Introduction to Language Acquisition	137
	Differentiation - Tiered Assignments	162
	Technology - Components of PBL	152
	Technology - Writing to Learn	139
	Technology - Writing Across the Curriculum Using Digital Tools	145
	Assessment - Checks for Understanding	135
	Assessment - The Learning Record	146
	Assessment - Performance Assessments/Cornerstone Tasks	144
10-11 a.m.	Writing Session Day 2	See Room Assignments
10:15-10:30 a.m.	Relaxation	166
11:30 a.m.-1 p.m.	City Limits Chiro	166
11:30 a.m.-12:30 p.m.	Lunch - See Food Truck Schedule	On Your Own
12:00-12:30 p.m.	Technology Lunch and Learn - Pickers	Library
12:30-4:30 p.m.	Writing Session Day 2	See Room Assignments
2:15-2:30 p.m.	YMCA Relaxation	166
3:30-3:45 p.m.	Afternoon Tech Snack - Google Forms	Library
4:45-5:30 p.m.	YMCA Zumba	Gym
<b>Wednesday, June 10</b>		
7:30-8:15 a.m.	Blue Honey Yoga	Gym
8:15-8:30 a.m.	Morning Tech Snack - Video Notes	Library
8:30-11 a.m.	Writing Session Day 3	See Room Assignments
10:00-11:30 a.m.	Principal Strand	
10:15-10:30 a.m.	Relaxation	166
11 a.m.-1 p.m.	Absolute Life	166
11:30 a.m.-12:30 p.m.	Lunch - See Food Truck Schedule	On Your Own

 Advocate Session (required)	 Wellness Session (optional)	 Technology Session (optional)
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Appendix I: Sample BSD Kindergarten Scope and Sequence

Kindergarten Scope and Sequence 2014-2015											
20 TPM/Tejas Lee & DRA/E DL Jan 20- Feb 13 4 days	Jan 19-23	How Animals Change and Grow/Story Structure Classify and Categorize/Text Structure/Text Features	Unit 2 Black History	CRMS- Organisms & Environment s Animal/ Characteristic/Part s TEKS K. 10A, K.10B	Through 20	/f/i, o	play	on	/f/i	sobre/ encima	estamos, dentro
21 5 days	Jan 26- 30 U.S. Coins and Counting to 100 by ones and tens	Animal Homes/Recognize Story Structure/Identify Plot and Character/Text Feature/Using Photographs	Unit 3 February Holidays, Unit 1 Community Workers: Types of Jobs, Tools for Jobs	CRMS- Organisms & Environment Living/No living TEKS K.9A	CRM 11 Count, Write, and Represent Numbers Through 20	/o/o, /f/i, Family words at, am, an, ap, m, k, t, a	h, play	yes	/b/v, /f/i	erasi	este, para
22 5 days	Feb 2-6 NEIGHBORHOOD	NEIGHBORHOOD - Our Neighborhood/Summarize/Identify Main Ideas and Details/Text Features/Using Maps	Unit 1 Goods and Services, Unit 2 Why People Work, Needs and Wants, Money	CRMS- Organisms & Environment Living/No living TEKS K.9A	CRM 12 Count to 100/Compare Numerals to 20	/h/h, /f/i, family word sad, at, an, ap, am	are		/b/b		
23 5 days	Feb 9-13 Counting Units to Quantify Length	People and Places/Summarize/Identify Main idea and Details/Literary Elements/Word Choice/Figurative Language	Unit 3 Jobs Around the World, February Holidays	CRMS- Organisms & Environment Basic Needs TEKS K.9B	CRM 13 Three-Dimensional Solids	/d/d, /f/i, /h/h	for, you	did, love	/f/i/	amor	por, gusta
24 4 days	Feb 16-20	Neighborhood Workers/Summarize/R	Unit 4 Presidents- What is a	CRMS- Organisms &	CRM 13 Three-	/d/d, /f/i, /f/i	are, for, you	if	/b/b, /f/i/	tu	con, quien

Appendix J: Sample BSD Kindergarten Report Card Rubric

Kindergarten Assessment Rubric 2 <sup>nd</sup> Nine Weeks				
Reading				
Overarching Idea: Children use the relationships between letters and sounds, spelling patterns, and morphological analysis to decode written English.				
Texas Essential Knowledge and Skills	1 Needs Improvement Student has very limited understanding of subject of study and concepts on grade level.	2 Emerging Understanding Student is beyond beginning learning the subject of study and concepts on grade level.	3 Proficient Student has strong understanding of subject of study on grade level.	4 Mastery Student has full understanding of subject of study on grade level and is able to make connections to other areas.
<b>Tasks/Student Samples/Evidence of Understanding:</b>				
K.1(B) Identify upper and lower case letters	Identifies 20 or fewer letter names (upper &/or lower case)	Identifies 21 - 40 letter names (upper &/or lower case)	Identifies 41 - 51 letter names (upper &/or lower case)	Identifies 52 letter names (upper & lower case)
<b>Tasks/Student Samples/Evidence of Understanding:</b>				
K.2(C) Orally generates rhymes and response to spoken words (e.g., "What rhymes with hat?")	Cannot generate a rhyme to given words. Nonsense words are acceptable.	Generates rhymes to 1-2 given words. Nonsense words are acceptable.	Generates rhymes to 3 given words. Nonsense words are acceptable.	Generates rhymes to 4 given words with automaticity. Nonsense words are acceptable.
<b>Tasks/Student Samples/Evidence of Understanding:</b>				
<b>Ongoing checklist - Identify 52 letter names</b>				
<b>Ongoing checklist - Identify 26+ letter sounds</b>				

Sample portfolio pieces are included and/or may be substituted with teacher's activities provided it assesses the stated TEKS.

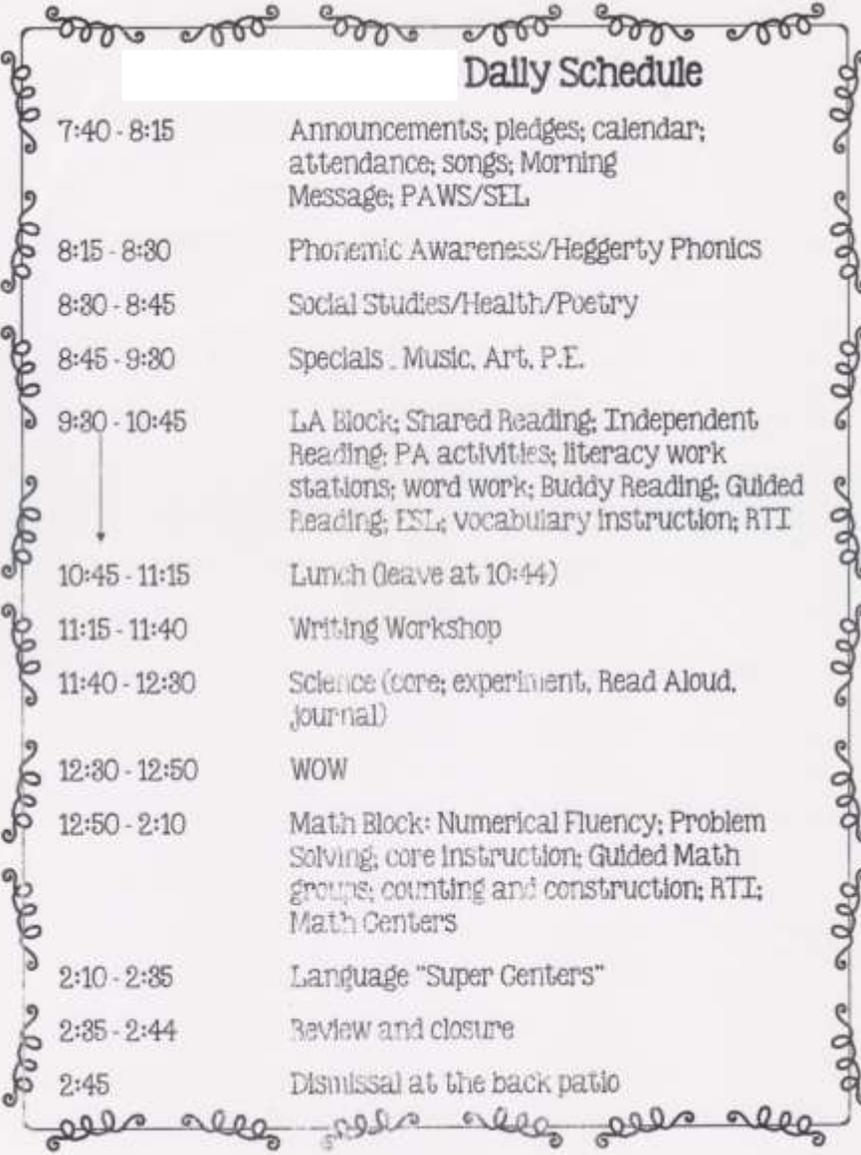
Rhyming: Five words - TPRI PA- 1

Appendix K: Sample BSD Essential 9 Planning Document

Aligning Curriculum, Instruction, and Assessment			
Content Area _____	Teacher _____	Grade Level _____	Date _____
<p><b>Knowledge &amp; Skill Statement &amp; SE</b></p> <p><i>Formative Assessment: What is the teacher using to ✓ for understanding of the TEKS/SE throughout the lesson?</i></p> <p><i>Summative (Common) Assessment: What is the teacher using to determine mastery of the TEKS/SE and is it aligned?</i></p> <p><input type="checkbox"/> cognitive/verb    <input type="checkbox"/> concept/context    <input type="checkbox"/> vocabulary</p> <p><b>Models/Anchors to Support Student Understanding of TEKS/SE: How are models/anchors used &amp; built upon by teachers and students?</b></p>	<p><b>Academic Vocabulary: Are the teacher and students using academic vocabulary from and related to the TEKS/SE?</b></p> <p><i>Instruction: How is the instruction explicitly aligned to the depth (thinking - cognitive/verb) &amp; complexity (concept, context &amp; vocabulary) of the TEKS/SE?</i></p>	<p><b>Academic Vocabulary: What guiding questions and/or stems are being used to promote the use of academic vocabulary by students?</b></p> <p><i>Questions that Promote Higher-level Thinking/Rigor: What questions are being asked by the teacher that addresses the rigor of the TEKS/SE?</i></p>	<p><b>Student Task: Are the students engaged in work aligned to the TEKS/SE?</b></p> <p><input type="checkbox"/> cognitive/verb    <input type="checkbox"/> concept/context    <input type="checkbox"/> vocabulary</p> <p><b>Implications for Instruction: What are the components of an aligned lesson?</b></p>

Based on the work of Elmore, R., et., al., and English, F.

Appendix L: Mrs. Mather's Daily Kindergarten Schedule



**Daily Schedule**

7:40 - 8:15	Announcements; pledges; calendar; attendance; songs; Morning Message; PAWS/SEL
8:15 - 8:30	Phonemic Awareness/Heggerty Phonics
8:30 - 8:45	Social Studies/Health/Poetry
8:45 - 9:30	Specials . Music, Art, P.E.
9:30 - 10:45	LA Block; Shared Reading; Independent Reading; PA activities; literacy work stations; word work; Buddy Reading; Guided Reading; ESL; vocabulary instruction; RTI
10:45 - 11:15	Lunch (leave at 10:44)
11:15 - 11:40	Writing Workshop
11:40 - 12:30	Science (core; experiment, Read Aloud, journal)
12:30 - 12:50	WOW
12:50 - 2:10	Math Block: Numerical Fluency; Problem Solving; core instruction; Guided Math groups; counting and construction; RTI; Math Centers
2:10 - 2:35	Language "Super Centers"
2:35 - 2:44	Review and closure
2:45	Dismissal at the back patio

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