Working in Boundary Practices: Identity Development and Learning

In Partnerships for Inclusive Education

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Abstract

There has been an increasing trend to promote partnerships for inclusive education that share responsibility for teachers' and students' learning. Yet, the complexities of collaborating across institutions and professions as well as the identity work that goes with it has been under theorized in inclusive education partnerships. Drawing from Cultural Historical Activity Theory (CHAT) and the literature on boundary practices, this paper advances theoretical tools to examine and further understand the work of inclusive education partnerships. We conceptualize partnerships as a fertile ground for learning and identity development as professionals work across institutional boundaries and face tensions and contradictions created by the overlap of different communities of practice and their respective policies and mediating tools. We illustrate theory with examples from our own work in a professional learning school for inclusive education and provide recommendations for teacher learning in teacher education programs.

Keywords: Inclusive education, professional development, boundary practices, partnerships, teacher learning, teacher identity, Cultural Historical Activity Theory

1. Introduction

Inclusive education is a global movement that emerged in response to systemic exclusion of students who are viewed as *different* (e.g., students with disabilities, ethnically and linguistically diverse students, and students from low socioeconomic backgrounds) from meaningful access and participation in education. We define inclusive education by synthesizing previous definitions (e.g., Ainscow, Booth, & Dyson, 2006; Artiles, Kozleski, Dorn, & Christensen, 2006; Corbett & Slee, 2000) with Fraser's exploration of justice (Fraser, 1997, 2008). Inclusive education is a continuous struggle toward (a) the *redistribution* of quality opportunities to learn and participate in educational programs, (b) the *recognition* and value of differences as reflected in content, pedagogy, and assessment tools, and (c) the opportunities for marginalized groups to *represent themselves* in decision-making processes that advance and define claims of exclusion and the respective solutions that affect their children's educational futures. This notion of inclusive education as a continuous struggle reflects the notion that we exist in dynamic contexts. The margins and centers of our work are in continuous flow producing new margins and centers (Artiles & Kozleski, 2007).

The Education for All report (UNESCO, 2010) pointed out that 72 million children do not yet have access to education, and that still millions of children leave school without having acquired basic literacy and numeracy skills. In England, for instance, issues of equity for students with special needs were found to be tightly bound to broad social, economic, geographical, and educational inequities (Dyson, Jones, & Kerr, 2011). In India, the development of an inclusive agenda still encompasses a range of exclusionary practices that deny access to education and marginalized students with disabilities, particularly females from lower cast background (Singal, 2006). In Uganda, lack of professional development in inclusive education, lack of a wide range of resources, high teacher-student ratios, and negative teachers' attitudes towards inclusion contribute to creating

barriers for educational access and participation for students with special needs (Kristensen, Omagor-Loican, & Onen, 2003).

Students in many settings across the globe experience multiple layers of difference. Examples of these students may include but are not limited to Latino students whose first language is Spanish and are identified for special education in the United States (U.S) (Artiles, Rueda, Salazar, & Higuera, 2005), immigrant students with disabilities in Germany (Werning, Löser, Urban, 2008), indigenous students identified for special education in Australia (Sweller, Graham, & Van Bergen, 2012), female students with disabilities from a lower caste background in India (Singal, 2006), Gitano and Moroccan students with disabilities in Spain (Arnaiz & Soto, 2003), and students with special needs from ethnic and religious minorities in Bosnia and Herzegovina (Pasalic-Kreso, 2002). Students in these and other contexts need complex services and practices in order to dismantle the barriers that keep them from learning and participating from the general education classroom. In these cases, disadvantage or exclusion is exacerbated by the interaction of multiple factors (Crenshaw, 1995).

Intersectionality (Crenshaw, 1989, 1991) was first introduced in feminist critical theory as a way of uncovering the effects of multiple forms of discrimination such as being female, African-American, and disabled in the United States. Intersectionality helps to explain how students who are identified as learning disabled and whose first language is Spanish may experience complex forms of exclusion because of the ways in which schools address or fail to address the intersection of these layers of difference and, instead, respond to either the learning disabilities or the student's language needs. Identity and capability may be subsumed by markers of difference that lead to monolithic and deficit views of individuals. These monolithic views of students that are embedded in educational policies and teacher preparation narrow the lenses that educators, and the institutional contexts in which they work, employ to support and nurture learning, marginalizing groups of students marked

as different for one reason or another. When a student is seen as needing specialized supports, other aspects of student support may be less emphasized because services for learning, behavioral, and language supports may be structured separately and teacher skill sets are often distributed across roles and personnel that are categorized by student differences. In the U.S, for instance, English language learners (ELLs) identified for special education are less likely to receive instruction in their home language than their general education peers, and districts serving these students have reported not having the services to provide quality opportunities to learn for these students (Zehler et al., 2003).

While there are teacher preparation programs that have worked intensively to foreground inclusive education through integrated structures and curricula (e.g., Florian & Rouse, 2009; O'Neil, Bourke, & Kearney, 2009), universities in many countries still reflect bifurcation in their personnel preparation programs. Special education may be assigned its own department, embedded in Educational Psychology (e.g., Leibnitz University in Germany) or Curriculum and Instruction departments (e.g., University of Pretoria in South Africa). There are many other organizational permutations that have been adopted. In any event, general, special and bilingual and other teacher education programs can be found across the globe in separate specialized silos governing specific teacher preparation programs with little coordination across programs (Hausstätter & Takala, 2008; Pugach, Blanton, & Correa, 2011).

As a result, educators who provide specialized services for students may be prepared in a variety of departments that include social work, psychology, and education. Particularly in the U.S, teacher education communities (e.g., special education, bilingual education, social justice education) have tended to produce conversations within them rather than across them (Pugach, Blanton, Florian, 2012). Even when there are efforts to merge special and general education teacher programs in a dual certification format, attention to disabilities trumps attention to other students' identity

markers such as race, class, language, and gender (Pugach & Blanton, 2012). This is due, in part, to the disparate disciplinary and pedagogical traditions of these communities (Cochran-Smith & Dudley-Marling, 2012). This separation diminishes the potential for nurturing teachers who have the attitudes, dispositions, understandings, and skills to teach all students, particularly students who experience intersecting forms of exclusion. Further, educators need to be able to work across professions, fields, and disciplines to develop school and teacher capacity for inclusive education. Partnerships between universities, schools, and school systems are a vehicle for interdisciplinary education.

Drawing from cultural historical activity theory (CHAT) (Engeström, 1987, 2001) and the literature on boundary practices (Akkerman & Bakker, 2011; Star & Griesemer, 1989), we explore theoretical tools to examine and understand the work of inclusive education partnerships. In this paper, we theorize practitioner partners as boundary workers who cross institutional boundaries to engage tools from other communities of practice. Boundaries are fertile grounds for identity development and learning since boundary workers face tensions and contradictions in the overlaps and challenges to institutional boundaries. These concepts are applied to our own work in a professional learning school for inclusive education in the U.S. In the conclusion, we advance recommendations for teacher learning in teacher education programs.

1.1 Partnerships for Inclusive Education

There has been an increasing global trend in education to promote partnerships for inclusive education. UNESCO's Dakar Framework for Action (UNESCO, 2000), for instance, has emphasized the significance of partnerships in improving access and educational experiences for all students. This speaks also to building teacher capacity for inclusive education. As McIntyre (2009) argued in his review of partnerships in western countries, partnerships between schools and universities are crucial for the development of teachers and inclusive education. These partnerships

are important for bridging the theory-practice gap and for innovating inclusive pedagogies in collaboration with teachers in schools (McIntyre, 2009). In the U.S, the latest report of the Blue Ribbon Panel on Clinical Preparation and Partnerships for Improved Student Learning (National Council for Accreditation of Teacher Preparation [NCATE], 2010) recommended that “teacher preparation program and districts have to start thinking about teacher preparation as a responsibility they share, working together”(p. 3) and that “partnerships between school districts and teacher preparation programs need to be intentional about the district problems they seek to address” (p. 14). Partnerships composed of schools and universities, non-governmental organizations (NGOs), and other services (e.g., social work and speech pathology) have the potential to apprentice teachers in practices that can dismantle compounding barriers that keep certain kinds of students from learning in schools. Teacher development, in this vision, is a part of a larger partnership agenda that focuses on student learning.

Considering this movement towards a shared responsibility for students’ and teachers’ learning, it is critical to understand what happens when professionals from multiple professions and with various kinds and levels of expertise, different tools, understandings, and commitments to task at hand, come together to improve the education of students who experience multiple layers of difference. A recent international review of the literature on professional development for inclusive education has shed some light to this use (Waitoller & Artiles, under review). For instance, between 2000 and 2009, 53% of published research on professional development for inclusive education was based on action research projects (Waitoller & Artiles, under review). Avalos (2011) also noted that professional development efforts (not only those with an inclusive education focus) have moved away from traditional in-service training towards collaborative action research projects. Research on action research projects for inclusive education evaluated the impact of this form of professional development effort on teacher learning and school practices (e.g., Ainscow, Booth, & Dyson, 2004 ;

Deppeler, 2006; Dyson & Gallannaugh, 2007; Robinson & Carrington, 2002). In these studies, faculty and teachers worked together in inquiry-based projects to improve inclusive practices, providing information about the sequences of actions taken by the participants, and how the local understandings of inclusion shaped local practice. The findings from these studies suggest that action research projects in which entire school communities work together with university partners to transform schools are a promising approach to professional development for inclusive education (Waitoller & Artiles, under review).

As Avalos (2011) noted inquiry-based professional development research recognizes that teacher learning and collaboration are complex processes in which teachers are subjects and objects of learning. Unfortunately, research on professional development for inclusive education relied heavily on descriptive accounts of the process teachers and researchers went through while engaging in action research; there was little theoretical interpretation and conceptual refinement (Waitoller & Artiles, under review). Concepts such as teacher learning and identity were neither clearly theorized nor defined, resulting in a lack of understanding about the complex interactions between the participants, policies, practices, and the larger institutional and historical forces that shaped the daily inclusive or exclusionary practices of the school (Waitoller & Artiles, under review).

This research, in addition, tended to present a cursory view of the process of building an inclusive school culture. Yet, partnerships are far from having monolithic cultures (Artiles et al., 2006; Bartholomew & Sandholtz, 2009; LePage et al., 2001). For instance, research conducted in the U.S demonstrated that a disjuncture exists between some universities' and schools' practices and knowledge (see Grossman, Smagorinsky, & Valencia, 1999; Smagorinsky, Cook, Moore, Jackson, & Fry, 2004). Conflictive perspectives about teaching and the purpose of professional development create conflicts among school-university partnerships and shapes teachers' learning experiences (Bartholomew & Sandholtz, 2009). Pre-service teachers and beginner teachers deal with and

develop their teaching identities in the midst of the tensions created by the mismatch of what they learned in their university program and what actually is practiced in schools (Oyler, 2011). For example, teachers may be trained in universities that teaching should be student-centered, but many schools in the U.S mandate teacher-centered practices. These educators may lose motivation or become conflicted as they observe and reflect on the practices they employ in schools, even considering leaving the profession (Smagorinsky, Lakly, & Johnson, 2002).

Furthermore, university programs are assumed to transmit homogeneous and well-bounded concepts and practices that are modified only when implemented by teachers in their school practice. As a result, little is known about how teachers may be exposed to concepts and practices that leak meaning and that, even when they may have the same label, have slightly different meanings across contexts and individuals. Indeed, the work of partnerships is fraught with tensions and conflicts. It is critical, thus, to develop a line of research to understand how school professionals, families and students, administrators, and faculty from teacher development programs negotiate their expertise, their common goals, and their identities when engaging in partnership work. Understanding more about these issues will give a nuanced picture about the complex work that takes place in partnerships for inclusive education.

Rather than a traditional review of the literature about partnerships for inclusive education or presenting the findings of our research, our purpose in this paper is to outline a set of analytical tools to address the shortcomings of previous research on school-university partnership for inclusive education. To achieve this task, we draw from research on CHAT (Engeström, 1987, 2001) and boundary practices (Akkerman & Bakker, 2011; Star & Griesemer, 1989). Principals, teacher residents, general education teachers, special education teachers, families and students, and other school professionals are theorized as boundary brokers who cross institutional boundaries, engaging with the tools of different communities of practice. Boundaries are explored paying particular

attention to identity development and learning as boundary workers face tensions and contradictions created by the overlap of communities and efforts to sustain and challenge the boundaries of institutions. We illustrate theory with examples from our own work in an urban initiative for teacher education (UITE), paying particular attention to the experiences of site professors and teacher residents who were engaged in the task of developing teacher capacity. Finally, we advance recommendations for teacher education programs for inclusive education. First, however, we describe the UITE from which we draw examples to illustrate theory throughout the paper. Our purpose in this paper is not to examine the impact of the UITE but rather to draw from the themes that emerged from our research on this program to illustrate the analytical tools that we proposed to study partnerships for inclusive education. Furthermore, by explaining the program, we aim to help the reader to understand the context in which our participants faced and navigated the tensions of the partnership.

2. The UITE

The UITE merged two approaches to teacher education— professional development schools and professional learning communities (PLCs) (see Kozleski & Waitoller, 2010 for a full description of the program). Three school sites and their university partner were situated in a large urban area in the southwestern US. The three urban schools became home to the UITE and the teacher residents. The three schools were located in Grass Valley School District (GVSD), which served almost 12,000 students in 20 schools: 14 elementary schools from Pre-K-5, and three middle schools. High schools were supported by another district. The GVSD served predominantly Latino students, who composed more than half of the school district enrollment (52%). A large portion of Latino students were English Language Learners. The GVSD was facing budget cuts and a decrease in student enrollment which cause the merge and closing of schools. In addition, for several years GVSD did not meet their annual yearly progress goals. As a result, principals, instructional coaches

and teachers felt immense pressure to meet escalating accountability demands from district headquarters and the state department of education.

The three schools served different communities (see Table 1), although they were close to one another geographically. Coppermine was administered by Grass Valley although the school was located on tribal lands that were surrounded by the Grass Valley municipality. Coppermine and Zuni served predominantly Latino students and ELLs coming from low socioeconomic background. Ocotillo Elementary was the only school in which White¹ students composed the majority of the school body. This school, however, received funds under Title 1 provision of the NCLB act (as the other two schools did) as a large portion of its student body came from low socioeconomic backgrounds.

<Insert Table 1>

The partnership was designed to simultaneously transform schools for inclusive education and prepare general and special education teachers through on-site mediated practice as the schools engaged in their own transformation. The design concept resulted in creating learning communities within each school as well as in the university program. The within context learning communities were networked across the three schools and university program to enrich learning across the various levels of expertise with the common goal of providing access, participation, and positive academic and social outcomes for *all* students in the school. Each school was assigned a university faculty member working as a *site professor*. Once a week this university faculty member worked alongside the schools' staff in classrooms, working with students, discussing with teachers their practices, and building an understanding of inclusive education. Part of this partnership also involved full-time *site coordinators* in each building who served as instructional coaches for each

¹ White is one of the Federal racial categories used by the U.S Census Bureau. We use the term White as our demographic data is collected from this Federal entity.

school and who also supported the work of the teacher residents, clinical teachers, and coordinated the UITE activities in each school.

Working together, the site coordinator and site professor identified problem issues that could be resolved with brief conversations, classrooms where careful observation and coaching of the teacher resident or clinical teacher was needed, and finalized plans for the regularly scheduled afternoon meeting with all the teacher residents. These brief morning meetings also served as a way of deepening understanding about the practice challenges in moving towards more inclusive practice in the building. Site professors not only recorded field notes from their weekly visits, they debriefed their rounds with the university team on the following Monday. This meeting was used to better understand what was happening at all three schools and to develop longer range strategies for deepening the work.

Initiated by the university, the grant application for the UITE was jointly designed by university and district personnel, who subsequently left prior to the grant award. Once funding was received, partnership was renegotiated with new district leadership who did not have the same ownership as the original crafters of the project. When the grant was implemented, leadership for the project came from the university with periodic involvement of the district to sanction continuation of the work in the schools. In retrospect, to describe the working relationship as a partnership was probably a stretch; it was a relationship with periodic moments of collaboration, overlapping efforts, and different interpretations about the meaning of the partnership. As a result, people who were asked to carry out the grant had different levels of commitment and understanding of the intellectual and applied tasks that were intended. The schools and university maintained agendas with some shared tasks. One of the major tasks that maintained the partnership together was a Masters' Program that was embedded in the partnership. The conceptual tools we advanced in this paper helps researchers and school professionals to make sense and visible these conflicts.

2.1 The Masters' Program

Teacher residents worked towards a Master of Arts in Special Education in a four-semester program. The coursework in the program was designed to engage residents in critical learning and analysis of both theory and instructional methodologies. The coursework lasted four semesters (i.e., spring, early summer, late summer, and fall) that were organized respectively around four themes—*identity, culture, learning* and *assessment* (see Kozleski & Waitoller, 2010 for a full description of the semesters). As teachers moved through these semesters, they developed a portfolio of performance based assessments (PBAs) that reflected their learning related to these four themes. The accumulation of the PBAs comprised the culminating applied project that teacher residents defended in front of a committee of university and district personnel in order to graduate. The contents and emphases of each theme carried through to subsequent semesters as teachers implemented their cumulative knowledge in classroom practices and in the thesis seminar activities. The teacher residents' weekly schedules included both practice and theory. During the week, teacher residents worked in their respective classrooms receiving various kinds of learning supports. Site professors mentored, coached and assisted teacher residents in developing culturally responsive, inclusive classrooms and teaching practices. On Thursdays, site professors observed teacher residents while they taught or co-taught a lesson plan. After this observation, the site professor gave feedback and engaged in a discussion with teachers about the lesson. The purpose of these encounters was to help teacher residents translate into practice what they were learning in their seminars.

Teacher residents also worked with the principal, clinical teachers and site coordinators to support professional learning and school transformation towards increasingly sophisticated forms of culturally responsive, inclusive teaching and learning. Site coordinators collaborated with site professors, also mentoring and coaching teacher residents and clinical teachers to develop their

technical expertise in designing and delivering high quality, culturally responsive, inclusive learning contexts and interactions. Further, the site coordinators were instrumental in helping clinical teachers become conscious of their mediating role in making research and practice connections for the teacher residents. The school principals ensured that teacher residents were fully included in classroom teaching and school wide citizenship and provided ongoing leadership for school improvement. More than half of the teacher residents, site professors, site coordinators and principals were White. One third of the adults centrally involved in the program identified themselves as Latina. Also included in the group were individuals who self-identified as biracial, as a citizen of India, and as a Muslim who had been born in central Africa.

In addition, on Monday evenings teacher residents attended an in-person thesis seminar in which they engaged with and read about issues of identity, culture, learning, and assessment according to the semester. These seminars were a combination of lectures, group work, and class discussions. Teacher residents also took two additional online classes each semester about inclusive education and related content, such as co-teaching, research and inquiry, instructional methods for diverse students, among others.

3. Working at the Boundaries: Advancing a Lens for Examining Partnerships for Inclusive Education:

In this section, we advance analytical tools that have influenced our work in teacher education partnerships. In particular, we focus in the following sections in the concepts of activity systems as informed by CHAT, boundaries, boundary brokers, identity, and boundary objects. To ground these analytical tools, we draw on the themes that emerged in our analysis of interviews and observations made during the two-year study of the UITE project to illustrate the role of boundary practices in the work of partnerships. In this project, we used a convenience sampling based on the schools participating of the UITE. Using a constant-comparative method (Strauss & Corbin, 1990),

we coded and themed 24 sets of data including video tapes and transcriptions of teachers, site professors, principals, and site coordinators. All interviews were taped, transcribed, and coded independently by at least two members of our research team. Weekly meetings were used to resolve coding issues that emerged. A total of 104 codes were merged into a set of themes. Member checks on memos that emerged from initial coding and theming were conducted to ensure that our codes and themes closely aligned with participant experiences. In this article, we inform our discussion of boundary crossing with data from those themes.

3.1 Activity Systems

Cultural historical activity theory (CHAT) (Engeström, 1987, 2001) provides a theoretical framework for understanding the work of teacher learning and education in partnership contexts. In particular the concept of activity system embedded in this theory can expand understandings of socio-cultural, historical, and political contexts of partnerships. Activity systems are a way of describing the ways in which participation is organized and mediated by rules, divisions of labor, and tools that can serve to orient human activity towards objects or outcomes (Engeström, 1987). While rules prescribe the kinds of behaviors that are sanctioned, tools *mediate* the ways in which actors in an activity system interact. Physical space is a kind of tool that brings people into proximity, signals certain kinds of engagement, and simultaneously makes other kinds of activity less likely. Imagine a classroom with no desks or chairs. Learners will use the available space to create specific practices that will enable engagement and interaction. If rules proscribe conversation, space can be used to separate learners and decrease the likelihood of conversation. In a digital learning space, blogs and discussion boards are tools that engage discourse and questioning. Short answer exams focus learners' attention on getting correct answers. Tools can be physical objects, concepts, or design elements that shape interaction and daily practice.

In schools, many kinds of activity systems operate simultaneously. Classrooms are one kind of collective activity in which learning outcomes broadly defined might be considered the object of such activity. In classrooms, like other activity systems, students and teachers are situated in a collective experience in which their activities are shaped by purposes that lie beyond a particular outcome like getting through a chapter, finishing math on time to go to music, or figuring out how to negotiate for space with other students. Activity theory helps to explore the organization and transactions that happen in everyday human life. How these transactions change in response to the individuals who participate, the histories and knowledge ontologies that individuals contribute, and how tools change participation is a crucial aspect of the learning well that is cultural historical activity theory.

In CHAT, learning comes from changes in participation. For example, teachers and students in classrooms parlay their individual understandings of schooling and everyday classroom life into the culture and practices of the classroom they inhabit. They are constrained by the rules and assumptions of the institution and also by the rules and assumptions that each individual brings to the classroom. It is through negotiation itself that a new and particular activity system is forged with its own nuances, rules, and order. Over time, teachers and students respond and interact, producing activity that accomplishes particular outcomes or goals (Engeström, 1999). In the UITE, teachers, teacher candidates, site professors, and site liaisons belong to many activity systems beyond the classrooms where they practice. They cross over into multiple activity systems which means that information and cultural practices are being transported across activity systems. As they travel, they inform and influence new practices in other activity systems.

In this way, CHAT helps us to integrate anthropological/sociological views of social organizations and psychological and cognitive models. Communities can ask questions and devise strategies for change and renewal that draw from both traditions to act in ways that recognize the

whole community, understand the division of labor, identify the organizational outcomes for work, make rules for engagement explicit, engage the participants, and use tools and participant structures to mediate the work (Engeström, 1999). Using CHAT, thus, helps participants understand the current structure of interaction and activity as well as understand the gaps between what currently exists and what might be imagined outcomes. The distance between the current and imagined activity arena can be viewed as what Vygotsky called the zone of proximal development (Engeström, 1999). Engaging classroom communities, school communities, and districts in examining their work requires that the participants engage with information and data about the current status of their arena and then facilitate careful analysis of what emerges so that the myths and conventional wisdom about why things occur as they do are troubled and reassembled so that the participants can better understand the hidden and obvious forces at work. The ongoing engagement in this task facilitates the expansion of knowledge, tools, and the goal of the partnership. In CHAT, this is called *expansive learning* (Engeström, 2001).

An example of this approach to expansive learning happened at the beginning of the project. The site professors, site coordinators, principals, clinical teachers who had teacher residents in their classrooms, and principal investigators from the university took a three day trip to another university partnership site in another state. The team of 18 individuals stayed together in the same hotel, and followed similar agendas through the day and evening. Visits to partner schools, interviews with key boundary crossers (site professors) and teacher residents, discussions with building principals, and classroom observations filled the days. Three teams of six people each, formed across roles embarked on these site visits. In the evenings, we shared our observations and interpretations of the sites. These conversations were facilitated by leaders of the partnership that we were visiting. On the third evening, a large group meeting gathered to look for themes across the schools that had been visited. A set of questions for the hosts were posed. The long discussion that ensued created a

set of principles for our own work. These principles informed the monthly expansive learning meetings that we held with the site professors, site coordinators, principals, and principals investigators for the five years of the project.

3.2 Boundaries

According to Akkerman and Bakker (2011), “a boundary can be seen as a sociocultural difference leading to discontinuity in action or interaction. Boundaries simultaneously suggest a sameness and continuity in the sense that, within discontinuity, two or more sites are relevant to one another in a particular way” (p. 133). Alsup (2006), for instance, pointed out that although schools and teacher education programs may have different perspectives on preparing teachers, they are still concerned with the development of teachers, which contributes to the continuity of boundary practices. What is interesting of boundaries is that continuity in action and participation -to certain extent- is established despite sociocultural differences (Akkerman & Bakker, 2011). Schools’ and universities’ boundaries, for instance, can overlap during shared practices despite the different institutional cultures of each community. As the work of individuals becomes increasingly specialized and specific, boundaries become increasingly crystalized. Therefore, partners (people and organizations) need to locate process that connect and align effort and outcomes to avoid fragmentation and disconnection (Hermans & Hermans-Konopka, 2010). A challenge for university, schools, and organizations alike is to strive for these points of confluence to ensure that systems can operate fluidly (Akkerman & Bakker, 2011). In the case of the UITE, the confluent point was the development of teachers for inclusive education. The masters’ program and the visit of site professors contributed keep this confluent point. Yet, as we indicate later in the paper in section 3.6, this confluence point had different meaning across institutions as the concept of inclusive education had a situated meaning.

3.3 Boundary Practices

From a CHAT perspective, school-university partnerships can be understood as the overlap of two activity systems. This overlap occurs in a *boundary practice* which is a practice in which two communities (e.g., a university program and an elementary school) engage and that has “become established and provides an ongoing forum for mutual engagement” (Wenger, 1998, p. 114). In the case of the UITE, for instance, site professors visited teacher residents once a week to provide feedback and in-classroom support. These encounters could be understood as a boundary practice since the activity systems of teacher preparation programs and the activity system of schools overlapped. Furthermore, the university and school communities both drew from the same tool set and later, the data from these visits, for improving classroom practice. And yet, the unit of analysis was different. For the university, the focus was on the teacher skill set; for the school, the resulting impact on student performance. Of course, both teacher and student performance interact, react, and produce change.

In particular, this boundary practice can be seen as the opening of a periphery, in which site professors were offered a legitimate access to the practice (e.g., classroom teaching) without subjecting them to the demands of full membership (e.g., being responsive for teaching or complying with school and district policies). Peripheries, no matter how narrow, reflect continuity, an overlap in connection, and a meeting place offered to outsiders and insiders (Wenger, 1998). As Wenger (1998) pointed out, this can extend observation and involve actual forms of engagement, as it was the case for teacher-trainers or professors who not only observed but also provided feedback to teachers. From this perspective, “the periphery is a very fertile area for change because it is partially outside and in contact with other views and also partially inside so disruptions are likely to occurred” (Wenger, 1998, p. 118).

Indeed, tensions are ubiquitous in boundary practices. CHAT provides a set of useful analytical tools to understand these tensions. Consider the kind of tensions that may emerge when teacher educators and school administrators look for different kinds of performance indicators in the classroom or code teacher and student performance differently. Meaning making requires scaffolded practice in which mistakes as well as successes improve understanding, generalization, and fluency. Yet, where test performance is the single measure of learning, mistakes may be seen as failures rather than opportunities to learn. Teachers may be reluctant to allow observers to view imperfect performance and, in doing so, blunt important aspects of student learning. Teacher educators and school administrators may view these teaching episodes differently creating tension for the teacher resident. In UITE, we frequently encountered concerns from our teacher residents. They wanted to try new techniques but if they did and were visited during a session where they were learning to use a new approach, their observers would comment, critique, and suggest dropping the new skill. For instance a site professor stated:

You have school site people, administration coming through, and writing it up as an evaluation. They're like, "If we're trying something new for the class, that's not what we want to be evaluated on," but here come the evaluation forms. There was a real struggle between the site professors, you know on the university side and the school side going and trying to gently remind them, "You promised not to evaluate them when coteaching."

(Interview with Margot, site professor, May 24, 2010)

Engeström (1987) referred to this kind of tension as *secondary contradiction*. That is, when new elements enter from outside an established activity (e.g., teacher residents' lesson in the classroom) creating contradictions between the elements of the activity system. In this case, co-teaching practices were introduced as a part of the master's program, creating conflict with the districts' teacher evaluation procedures. Site professors would handle these kinds of concerns weekly. On the

other hand, opportunities for expansive learning exist within these tensions, if teacher educators and school administrators are able to take the time to review, explore and uncover hidden assumptions in their coaching. In the UITE, a compromise was reached.

3.4 Boundary Brokers

Suchman (1994) used the term *boundary crossing* to describe social actors (e.g., site professors and teacher residents) that enter unfamiliar territories in which they may not be fully qualified and in which they need to negotiate the tools of the overlapping communities in boundary practice. These actors have been called in previous studies boundary crossers or boundary workers (Akkerman & Bakker, 2011). Here we refer to them as boundary brokers since, in a boundary practice such as the visit of teacher-trainers or site professors to teachers' classrooms, these subjects become *brokers* of their communities' understandings and tools. Because boundary brokers work at the heart of discontinuities, they deserve a close examination. Analyses of brokers' work can assist in opening windows into the work that occurs in boundary practice (Akkerman & Bakker, 2010), providing a robust understanding of how partnering institutions engage (or not) in expansive learning.

The key role of the broker is to create connections between the practices of the overlapping communities and to facilitate the transactions between them by introducing elements of one practice to another (Wenger, 1998). As Wenger pointed out,

The work of brokers is complex and it involves translation, coordination, and alignment between perspectives. It also requires the ability to link practices by facilitating transactions between them, and to cause learning by introducing into a practice an element of another.

(Wenger, 1998, p. 109)

In the UITE, site coordinators, principals, clinical teachers, and site professors were boundary crossers- both in theory and practice. In this paper, however, we focus on the role of site professors as boundary brokers as they crossed and came to practice in a different setting (e.g., schools); they

visit teachers in their classroom to provide professional development, for instance, aim to link what teachers learn in their classes or workshops with teachers' actual practices. Site professors may introduce concepts or practices to the teachers and help them to translate that concept or practice to the particular context of the teachers' classroom. The work of the site professors in the UITE, thus, was key in that they aimed to translate, coordinate, and align tools associated with inclusive education such as co-teaching, cultural responsiveness, and differentiated instruction with teacher residents' daily instructional practices.

The experiences of boundary brokers illustrate the ambiguity and tensions of boundaries. For instance, Williams, Corbin, and McNamara (2007) pointed out how this ambiguous role can lead to conflicted narratives. These authors described how teachers in their role as school numeracy coordinators felt a conflict between collegial and accountability discourses that positioned them as colleagues but also supervisors. Similarly, in the UITE, site professors encountered discontinuities and challenges when negotiating cultural tools from both institutions. Site professors, for instance, struggled with their outsider role. This outsider position was an obstacle in mediating teachers' implementation of the tools introduced in the masters' program. Marlene, a site professor at the UITE working in Coppermine Elementary, commented on her discussion with a teacher resident about a special education student in his classroom who was disengaged and unsupported during a reading activity: "I was really gentle. I was really gentle with that because what I don't want to do is criticize" (Interview, November 30th, 2010). The site professor was trying to mediate the teacher's implementation of differentiated instruction to provide access for a special education student to the general education curriculum. Yet, she was a new site professor who did not want to be regarded as coming into classrooms to criticize. As an alternative, she raised the issue with the teacher and then she went and modeled how to work with the student herself. Marlene saw herself as someone who was trying to make teachers aware: "I like to think I am helping the teachers become aware or help

talk to the teachers about, you know, ‘Are you making sure—how I can help you to make sure that everybody’s accessing the curriculum?’” (Interview, November 30th, 2010)

This idea of being someone who raised awareness was a resource that she used to negotiate her position from the periphery in the schools. She did not want to be seen as a critic, but as someone who raised awareness. She saw her role as a broker as one who brings awareness. By bringing awareness, she attempted to insert differentiating instruction as a tool into teacher residents’ practices without creating conflict that would impact her acceptance as part of the school community.

Boundary brokers (e.g., site professors) experience the risk of being marginalized in a community, as they are thought to be part of another community, but they are also valued as they bring new and innovative perspectives. Research on boundary crossing, for instance, consistently suggested that boundary-crossing individuals (e.g., site professors) run the risk of not being accepted (e.g., Edwards, Lunt, & Stamou, 2010). Edwards et al. (2010) demonstrated how welfare managers who were in charge of coordinating the work of multiple agencies that partnered to improve the social inclusion of disadvantaged youth in England were not completely afforded full membership in any of the participating communities. On the other hand, Jones (2010) found in a historical analysis of boundary-crossing architects that architects with a background in a different field were valued for their creative role in challenging established professional practices. In our own work in the UITE, we found that site professors were also valued for the funds of knowledge that they brought to the classroom. As Debbie, a teacher resident at Zuni Elementary, mentioned: “I like having them [site professors] come in because I feel like I’m going to get positive constructive feedback” (Interview, March 12th). Using analytical tools from boundary practices and activity theory affords the opportunity to examine and understand how insiders that work in boundary practices negotiate their position and identity amidst the ambiguities they face.

One way to examine how insiders resolve the ambiguities of boundary practice is to provide insight in what Landa (2008) called *personal fortitude* or Walker and Nocon (2007) called “boundary-crossing competence,” which is the “ability to manage and integrate multiple, divergent discourses and practices across social boundaries” (p. 181). Similarly, Fortuin and Bush (2010) stressed the importance of boundary skill. This skill includes the capacity to have dialogues with the actors of different communities and also to have inner dialogues between the different perspectives they are able to take on (Akkerman, Admiraal, Simons, & Niessen, 2006). Fisher and Atkinson-Grosjean (2002), for instance, demonstrated how managers in industry were required to translate research results into existent commercial applications. To accomplish this, managers needed to be skillful in using and translating tools and finding a balance in the ambiguity of boundaries. Marlene efforts should be understood in light of this previous research. In the UITE, the site professors’ boundary crossing competence (Walker & Nocon, 2007) repertoire included their own biography and their own developing understandings of the tools that they brokered (e.g., differentiated instruction and cultural responsiveness). Urma, the site professor at Zuni Elementary, commented during an interview.

I think my understanding [of cultural responsiveness] has changed, almost every week. I feel like I have a new definition of what it is. Part of that comes from just the way I was trained as a coach in my district, coming into this program... because, I think, when I started, at the beginning of the semester, I was focusing on what is being done in the classroom, I guess those more technical aspects. I have really—I mean, this is been a learning process for me.

(Interview, December 22, 2010)

In this quote, Urma acknowledged that her understanding of cultural responsiveness was developing and changing. She stated that, at the beginning, she drew from her experience as a coach in her school, which had similar demographics to the UITE schools, to focus more on the technical issues

of this tool. As she engaged with the work at the UTTE, she noticed that being culturally responsive demanded teachers to go beyond technical aspects. Urma's understandings of the cultural tool (i.e., cultural responsiveness) she was introducing changed over time, and therefore her work as a broker changed as well when helping teacher residents to understand and implement this tool. She also drew from her background as a coach in her school, which was a resource for her to negotiate her role in boundary practice.

Yet, the resources used by insiders are never used in a vacuum. The larger challenge for boundary workers is to exercise their competence in culturally and politically charged contexts. As we mentioned earlier in this paper, the schools were fraught with their own issues of accountability and curriculum policies, which created challenges for site professors and teacher residents. For instance teacher residents complained about the challenges of being asked to comply with the curriculum and assessment policies of the schools, while simultaneously practicing what they were learning in the masters' programs. Debbie mentioned:

I think more than anything it's my school stuff and wondering am I meeting my criteria for that and trying the new co-teaching... I sometimes feel like they're not looking at the co-teaching aspect, they're looking at your reading block. Are you doing what you're supposed to be doing during reading block? (Interview, March 12th)

On the one hand, teacher residents were asked to be master's students and act accordingly. On the other, they were asked to be teachers who complied with their school district's reading policies. Looking at the work of people working partnerships from this prism, allows for the exploration of how boundary workers use their resources in culturally and politically charged contexts to become certain kinds of people (e.g., certain kinds of teachers).

3.5 Fluid Identities in Boundary Work

Learning and identity development are closely interrelated. As boundary workers participate in boundary practices, they are always becoming someone else (Lave, 1996). In this regard, Holland et al. (1998) advanced the concept of *heuristic development*. Heuristic development is the process in which individuals (e.g., teacher residents) reform themselves through the appropriation and reformulation of cultural tools (e.g., co-teaching, differentiated instruction, cultural responsiveness, understandings about inclusion, etc.) that have been created by past generations (Holland, et al., 1998). It is through heuristic development that “culture and subject position are joined in the production of cultural resources that are then subjectively taken up” (Holland et al., 1998, p. 18). The process of heuristic development does not mean that teacher residents, for instance, are free to transform the cultural resources as they please. Teachers’ and site professors’ identities are “the sediment from past experiences upon which improvises, using the cultural resources available, in response to the subject positions afforded one in the present” (p.18). The appropriation of cultural tools becomes for teacher residents and site professors the basis of becoming certain kinds of teachers – the basis for their identity development – as these cultural resources are taken up by teacher residents and site professors to position themselves and signal that they are certain kinds of identities. Teachers’ and site professors’ identity, thus, develop through and around cultural tools, which are identified and associated with certain communities (e.g., an elementary school), places (e.g., classroom) and activities (e.g., a lesson in the classroom). There is a “codevelopment of people cultural forms and social positions in particular historical worlds” (Holland et al., 1998, p. 33) and a codevelopment of identities among the people working in boundary practices.

Through heuristic development, for instance, site professors and teachers appropriate tools that have been historically attached for struggles for inclusive education. In the UITE, teachers needed to appropriate tools associated with inclusive education (e.g., co-teaching, cultural

responsiveness, differentiated instruction) introduced by site professors. The appropriation of these tools was mediated by the elements of the activity system in which teachers worked every day (e.g., a lesson in the classroom), including the policies regulating both communities of practice (i.e., school and university). For instance, the appropriation of a cultural tool such as differentiated instruction was mediated by the assessment and reading policies operating in the school (i.e., rules of the activity system of a lesson in the classroom). Teachers differentiated instruction by segregating students into ability profiles according to their school districts' classification framework for reading performance. By differentiating instruction in this way teacher residents were able to signal that they were both a student at the masters' program and a full-time teacher at their schools. They were able, thus, to resolve the identity demands of working in boundary practice. From a CHAT perspective, this was the resolution of a *secondary contradiction* (Engeström, 1987). Teacher residents, thus, experience identity development through the resolutions of tensions created in boundary practices in which the tools introduced by the masters' program (e.g., differentiated instruction) overlapped with assessment and reading policies operating in the school.

The concept of heuristic development provides analytical tools to understand the identity projects in which boundary brokers engage in boundary practices. Using this prism, one can examine the ways these actors appropriate and change cultural tools that have been associated to the inclusive education movement. In doing so, they co-participate in the historical trajectories of those tools and are able to become certain kinds of professionals. From our projects and the examples

3.6 The Role of Boundary Objects in Partnership Work

Boundary objects are mediating tools that are shared across communities of practice (e.g., university and schools) and that shape the work done in partnerships (Star & Griesemer, 1989). They can be material such as a lesson plan or ideal such as the concept of inclusive education. Boundary objects themselves help to maintain the existence of boundaries. Boundary objects are

flexible enough to adapt to different situated activities (e.g., a thesis seminar or a lesson about suffixes) while also maintaining a recognizable structure (Star, 2010; Star & Griesemer, 1989) to enable the coordination of goals (even when they were disparate) and actions of the actors involved in the partnership.

In our work in the UITE, an important boundary object was the development and use of PBAs that required the development of explicit planning document like interventions plans for students that served both as official documents of the school site in terms of service delivery to students as well as evidence of exemplary practice for progress towards graduation in the teacher education program. In terms of understanding and mapping pedagogies, the lesson plan included in these PBAs served as a critical artifact for reflection and refinement for the master's degree. For the school, it served as an accountability measure to determine whether the teacher was meeting critical pathway dates for covering the curriculum in preparation for state assessments. Norma, a teacher resident at Coppermine Elementary, told us:

At least that's what we're supposed to be doing [lesson plans] and that's what grade level does. We'll sit there together with all of our manuals out and we'll type in our objectives and our lessons and email it and everybody has the same thing. It doesn't always look the same in every classroom but we plan it together. (Interview, March 12th)

Thus, the boundary object, in this case lesson plans, has a similar structure for each organization in the partnership such as objectives and activities, but the individual institutions regulate and shape behavior in very different ways because of the function and role of the boundary object itself.

Boundary objects also serve to make the boundaries pliable and allow for transportability back and forth across the boundaries (e.g., Finlay, 2007; Lutters & Akkerman, 2007; Star & Griesemer, 1989). Boundary objects also serve as coordination tools that allow work done on each side of the boundary to modulate learning and understanding (Star & Griesemer, 1989). For

instance, as teacher residents, site professors, and site liaisons worked together the definitions for inclusive education began to expand from a focus on disability to a focus on difference and more importantly, to the notion of voice and identity. The principal at Coppermine Elementary stated:

It's hard to kind of let those outside cultural influences in, especially when you feel like you have so much to get done and you can't deviate and you can't—but giving the kid some voice and letting them have some ownership of the classroom, I would say that's part of being inclusive. (Interview, June 4th)

As Star and Griesemer (1989) explained, boundary objects are subject to situated translations. This flexibility allowed members from both institutions to engage with inclusive education and its tools while they continued to work on how to accomplish inclusive practice while continuing the work the partnership even at novice and, sometimes, superficial levels. Lutters and Akkerman (2007) found that the malleable nature of boundary objects reflected situated realities that varied across objects and relationships among group members. For instance, both residents and faculties worked in politically and culturally charged institutions. Without sufficient background information about a concept like inclusive education including its inception, history, and purpose implementation could become so distorted that it might lose its structure and principles while the label remained. Thus, mediation and interpretation of boundary objects is not static. Some researchers have suggested that how boundary objects are interpreted and used can vary across time, people, and activities, sometimes facilitating communication and collaboration and other times erasing their boundary features (Barrett & Oborn, 2010; Pennington, 2010).

4. Recommendations for Partnerships and Teacher Learning Efforts

For partnerships to succeed, tools, rules, and objects have to be explicitly communicated and negotiated among all members, including teachers. We echo UNESCO's recommendations and the NCATE's blue ribbon report in that student and teacher learning should be a shared responsibility

in partnerships. From CHAT's prism, the learning trajectory of teacher and their development as inclusive teachers needs to be a joint object in order to facilitate learning at both the individual and the administrative levels. To facilitate this, we recommend that partnerships bring forth a boundary zone in which the learning trajectories of teacher residents are explored. Drawing from Gutierrez (2008), Kozleski (2011) suggested that collaborative programs for developing teacher capacity for inclusive education should create third spaces in which the narratives of each institution converge in ways that challenge and change each other. As Kozleski (2011) stated:

This third space produces generative dialogue among individuals and groups who may hold conflicting understandings of (a) the way that teachers come to know their practice; (b) the way that problems are resolved through policy, research, and/or practice; (c) the nature of the kinds of teacher education problems worth solving (e.g., alternative vs. university-based programs); and (d) the ways in which representations of reality are expressed through the specialized, professionalized language that we use. (p. 251)

These generative dialogues should result in expansive learning (Engeström, 2001) as partner institutions negotiate the object of their joint activity expanding them into new and more robust ones. Edwards, Lunt, and Stamou (2010), for instance, demonstrated that the negotiation of a joint object might involve in the more effective redistribution of labor among the partnering communities. Max (2010) also pointed out that boundary crossing tools (i.e., boundary objects) enhance collaboration, and the development of joint expanding objects. According to Max (2010), the co-development of boundary tools and practices is of crucial importance for the transformation and long-term benefit of the partnering communities. The goal would be the emergence of a shared expanded object and tools as a distributed achievement between the partnering communities. An ensuing system of distributed expertise would enable partnerships to be fluid and flexible to address

complex problems such as the exclusion of certain students from meaningful access and participation in quality education.

This is what Edwards (2007) called *relational agency*, which is the capacity to engage with others to expand the object of the activity at task (e.g., developing teacher capacity for inclusive education) by recognizing motives and resources that others bring to the partnership and by aligning one's responses with the responses of others to act upon the expanded object of the partnership. Relational agency is also important for the co-development of tools in partnerships. Mediation tools such as boundary objects need to be constantly revised and negotiated in light of emerging equity constructs and inquiry about who is excluded as mediational tools are implemented. In the UITE, mediational tools such as cultural responsiveness, co-teaching, and differentiated instruction traveled to the classroom where they got appropriated according to the institutional contexts in which they were used. While these concepts would not be expected to stay homogenous and well-bounded as they crossed boundaries, their use to constrict inclusive education when they were designed to afford it is problematic. Observing this kind of distortion occur in practice offers the opportunity to better understand how such distortions and permutations occur. Where collective ambitions exist to expand social, creative and intellectual capital as in the outcomes of inclusive education, care must be taken to co-development of mediational tools that afford educators and researchers to work together on such projects. Partnerships, thus, should engage in a careful inspection of their shared tools to surface assumptions that may constrain and/or afford including all students.

The inspections that based on collective inquiry will also contribute to invest heavily on the preparation and development of brokers (e.g., site professor) as their understandings of key concepts such as inclusion, equity, and cultural responsiveness (among others) and their capability to translate them to institutional contexts will mediate how teachers appropriate these tools and

therefore the educational experiences afforded to students. Teachers' appropriation of these tools needs to be mediated because the complex and ubiquitous forms of exclusion that takes place in schools that sometimes goes invisible to the eye and needs to be brought to surface. Engaging site professors, administrators, and teachers in the examination and expansion of goals, tools, and motives (i.e., in expansive learning) will create spaces for nurturing skill brokers and for bridging the theory-practice and school-university divides.

5. Conclusion

Despite the increasing movement towards clinical based experiences in teacher preparation programs and towards a shared responsibility between university and districts for teachers' and students' learning, little is known about the kinds of tensions, learning, and identities that develop when two professional communities engage in partnership work. Relationships between schools and universities may be strained by the dynamics of power, assumptions about privilege, and what kind of knowledge is valued. The roles of participants in school-university partnerships tend to be ambiguous (Avalos, 2011). One way to better understand how partnerships evolve and experience the inherent tensions is to examine the boundary practices that occur when various professionals from different communities come together to serve all students. This is of particular significance for students who experience multiple layers of difference around the world. Exclusion for these students is based on the interaction of multiple factors rather than just one. Thus, inclusive education demands the construction of meaningful partnerships that encompass overlapping kinds of expertise, including the expertise of families and students.

Drawing from CHAT and the work on understanding and crossing boundaries that has been explored in education in various countries, we advanced a set of analytical tools to examine and understand the work of people working in partnerships. We paid close attention to their identity development and learning amidst the demands of working in boundary practice and to the boundary

objects that mediate their work. Boundaries between institutions are crystalized when the work of partnerships becomes specific and different motives become evident. Yet, boundaries are also places in which motives, tools, understandings, and discourses can be challenged and expanded. They are fertile ground for learning and identity development- for expansive learning. The complex work done by boundary brokers provides insights about the tensions and learning that occur in boundary practices. The largest challenge for these brokers is to exercise their competence in culturally and politically charged contexts.

An examination of boundaries practices may look different in Uganda, Bosnia, India, or the U.S. Yet, the analytical tools advanced in this paper contribute to identify common threads among partnerships for inclusive education working amidst diverse sociocultural, political and historical contexts. After all, as Avalos (2011) noted in an international review of professional development research, there are similarities in the process in which teachers learn and change their practice across national contexts, though they manifest in different ways. An analysis guided by the concepts advanced in this paper provides tools not just for researchers, but for the people working at the boundaries across national contexts to engage in an inspection of their own work, moving towards expansive learning. These include people engaged in ongoing efforts to collaborate across professional expertise to foreground inclusive education in teacher preparation programs (e.g., Florian and Rouse, 2009; O'Neil et al., 2009) as well as professionals in schools and other partnering institutions.

Engaging in this kind of analysis, we argue, will contribute to building capacity in teacher preparation programs, and schools and districts towards the redistribution of quality opportunities to learn, the recognition and value of differences as reflected in content, pedagogy, and assessment tools, and increasing the opportunities for marginalized groups to represent themselves in decision-

making processes that advance and define claims of exclusion and the respective solutions that affect their children's educational future.

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Table 1

Partner Schools Demographics

	Coppermine Elementary	Ocotillo Elementary	Zuni Elementary
Total # Students	750	350	852
% American Indian	22	3	3
Asian/Pacific Islander	1	3	2
% Black	9	12	17
% Latino	60	28	74
% White	8	54	4
% English Language Learners	46	8	59
Free and Reduced Lunch	84	42	89
% Students on IEPs	11	15	7