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Co-designing Transformative Teacher Learning Ecologies

By

Arthur Jason Cortez

A dissertation submitted in partial satisfaction of the

requirements for the degree of

Doctor of Philosophy

in

Education

in the

Graduate Division

of the

University of California, Berkeley

Committee in charge:

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Professor Thomas M. Philip
Professor Christian Paiz

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Co-designing Transformative Teacher Learning Ecologies

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Abstract

Co-designing Transformative Teacher Learning Ecologies

By

Arthur Jason Cortez

Doctor of Philosophy in Education

University of California, Berkeley

Professor Kris D. Gutiérrez, Chair

A significant challenge confronts the design of teacher education: how to leverage an expansive theory of teacher learning of which equity is central in the context of historically entrenched institutional norms and practice. Following Engeström (1991), these norms and practices have contributed to an encapsulation of schooling that makes it difficult for teachers to understand the importance of everyday practice in expansive forms of learning. To understand teachers' co-learning and co-design, this study examined how teachers develop new pedagogical conceptualizations as they attempt to leverage youths' everyday cultural practices.

In this social design-based study (Gutiérrez & Jurow, 2016), teachers' sense-making was documented across a range of teacher practices: collaborative inquiry in several activity settings, and in cognitive ethnographies, to capture shifts in how teachers came to see students as competent meaning-makers. Through the participation framework (Goodwin, 2007), I saw the various stances that teachers deploy in their co-operative action (Goodwin, 2017) as they made sense of new pedagogical conceptualizations that seek to build with youth. In this study, teacher learning was conceptualized as collective activity, which provided a window into the various commitments that were still evolving in the collective space of the teacher education classroom.

Findings show that teachers in this study shifted in their pedagogical approaches, subsequently generating theoretically informed conjectures about the social organization of learning in their classrooms. One teacher initially conceived of his role in the classroom as a peripheral participant, as he was expected, as a student teacher, to help youth stay on task. However, as he appropriated course theories, specifically those on third space (Gutiérrez, 2008) and socio-spatial repertoires (Cortez & Gutiérrez, 2019), this teacher began to attend to specific features of the broader classroom environment; in effect, he began to turn away from solely focusing on individual students' who he believed were disengaged. In addition, by using critical discourse analysis as an analytical lens, the participant was able to see classroom discourse patterns as opportunities for leveraging the everyday cultural practices of youth and connecting them to a larger structural analysis of power.

This study further highlights the co-operative action (Goodwin, 2017) of two teachers as they experimented with course theories in their reflections on their pedagogical practices. Through

this experimentation, the participants began to center their meaning making on the everyday practices of youth, as well as imagine new possibilities for their practices. Through their collective actions, we see changes in how they participate with one another and their peers as they struggled to move beyond more general prescriptions for teaching toward more specific approaches that were oriented toward leveraging the everyday through the design of the elements of learning. In particular, the teachers in my study focused their efforts on the possibilities that can emerge in the design of more flexible and open-ended discursive classroom practices. In this respect, shifting in their critiques of students, schools and their cooperating teachers toward examining the possibilities in their role in the classroom and their pedagogical approach.

Through the use of theoretical and technological tools, this study contributes to a theory of learning in which youths' everyday practices are an inherent part of teachers' transformative learning. But, more importantly, the study offers implications for the design of pre-service teachers' conversations about practice and theory. As the field begins to shift toward examining teachers' learning and development in the context of collaborative reflection, we need to know more about the affordances and constraints in how teachers jointly make meaning of pedagogical practices and theories on learning.

Dedication

For José

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- c/s

Chapter 1: Introduction

Schools tend to be designed in ways that exclude or limit engagement of youth, particularly youth from nondominant communities, in robust, equitable, and consequential learning activity (Gutiérrez, 2008; Gutiérrez & Jurow, 2016; Jurow & Shea, 2015). In addition, teachers often are not prepared to address the range of issues that would ensure a just and worthy educational experience for their students. However, teacher learning ecologies tend to be organized to deprivilege everyday forms knowledge, owing to a long history of inequality in schools of which the knowledge of non-dominant people is not made central. At the same time, pre-service teachers are rarely provided sufficient opportunities to (1) develop deep understandings of consequential and robust forms of learning and the importance of leveraging students' repertoires of practice in learning activity and (2) design for such learning in their classrooms. To address these concerns, this study examines how pre-service teachers learn to appropriate and leverage theories of cultural-historical learning and development and to design for learning such that expansive forms of learning and equity are linked. Yet, this is a hopeful study—one that examines the possibilities of how University-based teacher education can serve as a mediating site of transformation to re-organize learning in schools, by creating new learning ecologies that reconfigure the geographical (physical, social, corporeal, real, and imagined) boundaries that circumscribe how schooling operates today. Building such new geographies requires a re-examination of how to support teacher learning and new pedagogical imaginaries (Dominguez, 2014) in schools and classrooms.

The motivating thrust of this study is to examine the formation of teachers' pedagogical imaginaries and their attendant design practices that are oriented toward leveraging youths' everyday cultural practices. Supporting teachers in such an endeavor requires making visible the broad spectrum of everyday cultural practices, such as hybrid language production (García, 2009; Gutiérrez, Bien, Selland, & Pierce, 2011), theoretical exchange (hooks, 1994), and resistance mobilization (Pacheco, 2012), that youth and their communities engage across their everyday lives. In particular, the sites of the everyday—places like the sidewalk, church, schools, homes, bakeries, taquerías, public parks, among others—are identity making spaces rife with political activity (Scott, 1985) that have the potential to grow into larger collective practices. Such perspectives, I believe, are critical to teachers' understandings of youths' learning and possibility. In these spaces, youth and communities develop new notions of space, time, community, and solidarity (de Certeau, 1984; Foucault, 1967; Haymes, 1995; Kelley, 1994; Lugones, 2003; Massey, 2005). As we learn from previous literature (Gutiérrez & Vossoughi, 2010; McDonald, Tyson, Brayko, Bowman, Delport, & Shimomura, 2011), when teachers learn to see the cognitive benefit of these practices and employ them as resources, the potential for engaging youth in the processes of becoming historical actors is expanded (Gutiérrez, Becker, Espinoza, Cortes, Cortez, Lizárraga, Rivero, Villegas, & Yin, in press).

Designing for teacher learning in this way is consequential not only for youths' everyday life outside of school, but also within schools. The intervention I designed in this study was to provide teachers opportunities to design expansive learning environments that are anchored in principles of equity and justice. Building on scholarship on the design of such learning environments (Gutiérrez & Vossoughi, 2010; Gutiérrez, at al., 2017), I wanted to examine how a teacher education classroom could be designed with robust mediational tools to support teachers' learning and development as they aimed to leverage the everyday practices of youth.

Specifically, the central focus of this study is on teachers' inquiry oriented toward building on youths' valued cultural practices and to support youth in the development of critical sensibilities for encountering, overcoming, and re-imagining everyday contradictions, an important implication for equity and a central practice often ignored in schools. As others before me have argued, these practices allow for youth to re-write themselves into the present and to re-write their own history, a process of social transformation that involves the development of a historical actor (Espinoza, 2003; Gutiérrez, 2008; Gutiérrez et al., in press).

In this regard, the focus of this study was to empirically examine the evolution of pre-service teachers' understandings of designing for equity in their classroom interactions. Specifically, I analyzed how teachers engaged in mediated praxis, creating "opportunities for reflection and examination of informal theories developed over the course of participants' experiences as students and teachers in apprenticeship" (Gutiérrez & Vossoughi, 2010, p. 101). Here, I argue about the need to support teachers in developing a professional vision (Goodwin, 1994) that foregrounds expansive and transformative forms of learning of which youths' everyday life experiences are fundamental. In designing this teacher learning environment, it was critical that the development of teachers' agency was made central. Thus, I examine how teachers' appropriate cultural-historical theories of learning, critical geography, and socio-critical literacies (Gutiérrez, 2008). An important goal of this approach is to help teachers generate new understandings of learning and its purpose in schooling, which necessarily involves conceptual departures from long-held normative and traditional notions about teachers' pedagogical role in schools as well as their relationship with systems of power.

In designing a teacher learning ecology with these commitments, I specifically aimed to re-mediate (Cole & Griffin, 1986; Gutiérrez, Hunter, & Arzubiaga, 2009; Gutiérrez, Morales, & Martinez, 2009) how teacher education tends to be organized to maintain divisions between the university, community, and K-12 schooling. For example, one approach to the design of teacher education is to offer or give teachers a repertoire of practices (Loewenberg Ball & Forzani, 2009). Often, the design of such approaches is informed by theories of teacher learning that decontextualize or encapsulate, as Engeström (1991) notes, the classroom such that it becomes hard for teachers to develop a pedagogical imagination. Here, teachers are usually placed into classes with black boxes that they are then tasked to recreate. This type of teacher education reinforces the rigid boundaries that have become so entrenched in today's classrooms that separate schooling from the everyday life experiences and real world practices in which learners engage.

In making teachers' learning central to this study, I take an ecological perspective (Cole, Hood, & McDermott, 1994) to the design of a set of robust mediational tools in order to make connections across the multiple sites of learning and practice that teachers traverse. One way to think about how to support teachers in the development of ecological forms of learning is the recognition that teachers are aware of the general sense, not of the specific sense, of youths' everyday cultural repertoires of practice. I contribute to scholarship that designs with intentionality for locating and expanding learning in everyday spaces (Gutiérrez & Rogoff, 2003; Moll, Amanti, Neff, & Gonzalez, 1992). Inspired by these cultural-historical approaches to learning and development, I am interested in how equity emerges relationally (DiGiacomo & Gutiérrez, 2016) as people draw upon their previously developed expertise in new learning contexts to transform the present context as dilemmas arise. My study builds upon this scholarship to examine the learning and development of pre-service teachers as they design for

pedagogical interactions and spaces that centralize equity as combining both everyday cultural practices with the demands of academic settings. This phenomena, in particular, is understudied, especially within the context of traditional university-based teacher education, and is a contribution to scholarship on teacher learning.

To support the design and study of expansive teacher learning ecologies, prior work has addressed the persistent challenge to rupturing the encapsulation (Engeström, 1991) of schooling by offering a variety of conceptual, analytical, and pedagogical tools. Here, my approach to rupturing encapsulation contributes to a theory of expansive learning (Engeström, 1987) and transformative agency (Engeström, 2011; Haapasaari, Engeström, & Kerosuo, 2016; Sannino, 2015) in which youths' everyday practices are an inherent part of teachers' transformative learning. Part of the design of my study is to examine empirically what particular kinds of tools and practices are generative in helping teachers discover, test, and generate new pedagogical conceptualizations and small "t" theories. In this tradition, I am also interested in the role of technological tools as mediational supports for the development of teachers' practices of reflexivity. As part of my examination of teacher learning, I employ two distinct analytical frameworks. The first, transformative agency, helped make visible (1) the learning processes of teachers as they generated new pedagogical concepts (i.e., small "t" theories) and (2) the approaches that they employed as they drew on the mediational tools of the designed teacher education learning environment. In addition, I draw on Goodwin's (2007) participation frameworks to illuminate the interactional contributions of participating teachers' engagement in face-to-face and online activity to see how they made sense of valued pedagogical practices and were positioned relative to one another. I highlight how teachers engage in co-operative action (Goodwin, 2017) in a learning environment saturated with a variety of pedagogical and meaning-making tools.

In the following dissertation, I will present research that aimed to address the aforementioned tensions in teacher education. The literature review will examine scholarship in teacher learning, with a specific focus on how scholars have worked to design learning that centers culture and youth's everyday practices. This review will continue with and exploration of teacher education interventions that center the potential of reflection and mediated praxis. I will conclude this section by highlighting literature that has deeply and robustly examined the necessity of centering youth's everyday cultural practices in teacher education. The theoretical framework will outline my orientation toward learning and practice which animates this study. Specifically, I will establish a framework that leverages Cultural Historical Activity Theory (Engeström, 1999), *transformative agency* (Engeström, 2011; Haapasaari, Engeström, & Kerosuo, 2016; Sannino, 2015), and participation (Goodwin, 2007). In Chapter 2, I will outline a social design experiment that was intended to closely examine the intricacies of a teacher education classroom that centered . Chapters 3 and 4 outline findings which highlight, respectively, teachers' learning processes in the context of individual reflection and how teachers learn to work together in their reflections on practice. I will conclude this dissertation with the implications that this study suggests for research in teacher education.

Literature Review

In what follows, I will provide a review of the literature on teacher learning and development as it relates to the design of expansive learning environments wherein teachers

leverage youths' everyday cultural practices. In the first section, I will situate my work in the teacher learning literature. As part of this initial review, I will discuss how scholars have conceptualized and studied teacher learning for preservice and inservice teachers. I will continue by reviewing the literature on mediated praxis to establish a precedence for scholarship that has examined the importance of reflection and design in the process of transforming teaching practice.. Finally, I will briefly review how youths' everyday cultural practices have been conceptualized and leveraged in the classroom. As part of this initial review, I will outline

Teacher Learning

The sociocultural and cultural-historical turn in education research opened up opportunities for examining the relationship between culture and learning, especially for research on learning to teach (Grossman, Smagorinsky, & Valencia, 1999; Putnam & Borko, 2000). In particular, Cole (1996) conceptualizes culture as "human being's 'social inheritance'...[that] is embodied in artifacts [or] aspects of the environment that have been transformed by their participation in the successful goal-directed activities of prior generations" (p. 291). In this respect, learning is central to everyday human activity as we use artifacts and tools, both material and ideal, to make meaning of the world around us. These lenses for conceptualizing learning and culture have offered new pedagogical, methodological, and theoretical insight in the preparation of teachers.

In particular, early concerns regarding learning to teach pointed to the disconnectedness across the various contexts of teacher learning ecologies. Specifically, Grossman, Valencia, and Hamel (1997) identified differences in the types of practices that occur in university-based teaching education and in K-12 schools, especially with respect to the concepts teachers learn and what they actually put into practice. Research offers several explanations for this disjuncture, including the idea that preservice teachers think that university-based teacher training is not practical enough (Fagan & Laine, 1980) or that K-12 schools tend to be more organized to control the work of teachers (Au, 2007). Building on these insights, learning to teach is tied to context and the tools, people, and motives that are present within activity. In this regard, how teachers learn and toward what ends their learning is oriented is contextually dependent.

Teachers move across various settings that may conceptualize learning differently such that theories of learning might build on, contradict, or even undermine the work of learning to teach. In particular, given that schools tend to control the work of teachers, learning is typically conceptualized as occurring when specific outcomes emerge from the work of teaching, such as student scores on tests or the demonstration of specific pedagogical practices. This stands in contrast to examinations of learning that, in addition to outcomes, privilege the process of learning that occurs in everyday activity. Here, the activity that teachers are engaged in are just as consequential as the outcomes that may emerge. This acknowledgement within the field of teacher learning has led to the revision of previous views. Within the field, learning to teach is broadly understood as contextual, occurring across the lifespan, as well as within institutions like university-based teacher education program (Feiman-Nemser, 2001). By and large, however, there exists a divide in how policymakers, practitioners, and researchers use theories of learning to prepare novice teachers; teachers, in many cases, are still seen as vessels waiting to be filled with knowledge. This leads us into thorny terrain, especially given the widely-held beliefs the field has assumed regarding how youth learn (Gutiérrez & Rogoff, 2003; Moll, Amanti, Neff, &

Gonzalez, 1992; Pacheco, 2012). If we expect teachers to learn how to build on and leverage youths' previously developed cultural practices, shouldn't we also expect that the same theory of learning would apply for teachers? This is a central tension the field that has yes to be resolved: are there different theories of adult and child learning?

One fact orienting the study of teacher learning for preservice teachers is that the majority of teachers are white, middle-class, and native speakers of Standard English (Sleeter, 2008). Underlying this framing is the assumption that the cultural and demographic makeup of this group affects how they make sense of preparing for a diverse group of learners in their classrooms, especially given that structural forms of inequality and inequities such as neoliberalism (Harvey, 2005) and white settler colonialism (Tuck & Yang, 2012) are now made central in our understanding of the historical legacy and present-day role of schooling. As the field of teacher education has become increasingly concerned with how to prepare teachers for diverse populations, the dominant approach to supporting how teachers learn to teach involve conceptualizations of learning that centralize how teachers' beliefs, attitudes, views, and/or perspectives can be altered (Cochran-Smith, Villegas, Abrams, Chávez-Moreno, Mills, & Stern, 2016).

For example, McDonald, Tyson, Brayko, Bowman, Delport, and Shimomura (2011), analyzing teacher interviews, studied the role of community-based field experiences in supporting preservice teachers to generate more favorable attitudes toward young people who had backgrounds different than their own. This three-year project was undertaken at the University of Washington and was designed to support elementary teacher preparation for non-dominant youth. Of importance, the study examined teacher learning across five separate education courses, which were each designed to leverage teachers' experiences in community-based settings, of which non-dominant youth were the primary participants. This has important implications for design because, traditionally, the design of teacher education reserves one courses dedicated to learning to teach non-dominant youth. In addition, along with earlier work (Gutiérrez, 2008; Gutiérrez & Vossoughi, 2010; Zeichner & Melnick, 1996) and more recent work (Zeichner, Bowman, Guillén, & Napolitan, 2016), McDonald and colleagues call attention to the role of university-community partnerships in supporting teacher learning.

I highlight the work of McDonald and colleagues (2011) as it is offers a typical approach—altering teachers' beliefs—to studying teacher learning, leaving unexamined the types of practices that teachers might generate in the context of inquiry in community-based settings. Of importance, insight into the development of pedagogical practices would be a significant contribution in the field, especially in the design of pedagogical practices that are aimed at leveraging non-dominant youths' everyday practices, an important implication for equity. However, with its explicit focus on teachers' beliefs about non-dominant youth and their communities, it offers a typical approach to the study of teacher learning. Importantly, the study offers design implications for organizing linkages within a university-based teacher education program; in this respect, the design and findings of this study focus attention to a much needed area of concern in teacher learning ecologies: intentional design university-based teacher education to foster linkages within coursework. My study, as a traditional teacher education program, was not designed to foster linkages across the coursework of the preservice teachers. In this respect, my study offers important implications for how to design a traditional teacher education learning environment that does not have linkages across coursework.

A less common approach in examining teacher learning involves studying the development of preservice teachers' practices in the context of university-based teacher education (Cochran-Smith et al., 2016). One exception, Anderson and Stillman (2010), focused their inquiry on two separate teacher education programs that were designed to prepare preservice teachers for working with youth in urban environments. In particular, they were interested in identifying the features of student teaching placements that enabled or constrained the development of teachers' pedagogical practice. Analyzing written observations of teachers and individual teacher interviews, Anderson and Stillman noted that teachers were largely encouraged to engage in pedagogical practices to prepare youth to do well on accountability tests. Of note, this study was conducted after teachers had completed their teaching placement assignments, therefore the findings are drawn from a post hoc analysis of the development of teachers' practices. In this regard, the authors did not have an opportunity to support teachers' learning over the course of their student teaching placements. However, the study illuminates the affordances and constraints in the development of teachers' pedagogical practice in the context of student teaching; importantly, if offers implications for the design of teaching placements at schools serving non-dominant populations, especially with respect to the role of mentor teachers and supervisors. In addition, the use of supervisor reports to make visible teachers' pedagogical development is a methodological innovation that illuminates teacher learning from the perspective of a supervisor.

Of importance, Anderson and Stillman's study highlights how teachers' learning of pedagogical practice for non-dominant youth develops, thus offering implications for the design of teacher learning environments in the context of student teaching placements. In particular, we learn from this study that preservice teachers need intentionally designed support and scaffolds from supervisors, mentor teachers, and other teacher education faculty as they navigate student teaching. In addition, as will be discussed later, teachers need to learn how to bring together theories on learning and pedagogy as they are engaged in student teaching. Further, the study offers a window into how to design for the learning and development of teachers' pedagogical practices in their work with non-dominant youth. In this respect, the study offers an opening into designing for teacher learning ecologies, in which non-dominant youths' learning is made central. This paves the way for future work that aims to leverage youths' everyday cultural practices in the context of student teaching placements. Like most studies of teacher learning, Anderson and Stillman (2010) focus on the learning and development of individual teachers. Such a focus conceptualizes learning as an individual phenomenon and is in part an outcome of dominant methodological and analytical tools we use to study teacher learning.

However, recent work (Horn & Little, 2010; Little, 2003) has centralized the role of teacher learning within the context of teachers' collaboration. In particular, learning to teach is conceptualized here as a collective activity involving opportunities for teachers to learn together as they make connections between theory and their pedagogical practice. One such study that builds on this line of inquiry is Horn and Little's (2010) examination of conversational routines across two professional learning communities in two separate urban high schools. In their analysis of video- and audio-taped recordings of teachers' group interactions, the authors showed how the structure of conversations about pedagogical practice enabled or constrained learning opportunities for these in-service teachers. Of relevance here, the study offers theoretical, methodological, and pedagogical insight for designing teacher learning.

First, the study makes teacher learning visible as a co-constructed process. By analyzing how conversations are mediated by routines, the authors provide a methodological and theoretical innovation for examining how learning unfolds in the moment-to-moment. Building on Jurow, Tracy, Hotchkiss, & Kirshner (2012), Horn and Little (2012) provide support for examining teachers' learning at the micro-interactional level to influence the future learning opportunities for teachers. Second, while this study centralizes the learning of in-service teachers, it offers implications for how preservice teacher learning can be designed for in the context of joint inquiry in teacher education coursework. In particular, preservice teachers tend to be provided with few opportunities to collaborate in their examination of practice, especially in the generation of new pedagogical concepts. In this respect, by providing preservice teachers with robust mediational tools to study the local context of their classroom, my study would be an important contribution for examining preservice teacher learning as a social process.

As illustrated above, scholarship on teacher learning has provided us with examinations of how to make visible the processes of learning that occur within broader teacher learning ecologies. However, these studies have largely focused on altering teachers' beliefs or conceptualizing learning as an individual accomplishment (McDermott & Raley, 2011). These studies offer theoretical, methodological, and pedagogical implications, opening up opportunities for examining how teachers learn to leverage youths' everyday cultural practices. In particular, examining teacher learning as shifts in practices and approaches in the context of joint inquiry is a much needed contribution in the field of teacher learning, especially in the context of university-based teacher education. In the following, I will pick up this thread by reviewing empirical work that has moved towards designing teacher learning environments that are anchored in principles of equity, in the opportunities for teacher learning, as well as for youths' learning.

Mediated Praxis

As pedagogical, methodological, and theoretical innovations have opened up new opportunities for studying teacher learning, the divide between theory and practice remains ever present in the design of our work with teachers. In the following section I examine the role of mediated praxis as teachers appropriated theory in their reflection practices. Mediated praxis is defined as teacher learning that is organized around active reflection and collaborative inquiry rather than surface level application of theoretical concepts–where students use mediational tools to make consequential connections to their everyday lived experiences and practices (Gutiérrez & Vossoughi, 2010)

Gutierrez & Vossoughi (2010), offer considerations for how teacher education can be designed to foster mediated praxis in a social design experiment (SDBE) that "provides new avenues for rethinking what teacher learning looks like, where there are persistent opportunities for reflection and examination of informal theories developed over the course of participants' experiences as students and teachers in apprenticeship" (Gutiérrez & Vossoughi, 2010, p. 101). Of important relevance to this study, the mediated praxis advanced by this work helps teachers envision new pedagogical arrangements for their students that are informed by an interrogation of their own histories with teaching and learning, and concomitant assumptions.

Relatedly, Mendoza (2014) examines how novice teachers learn to complicate their common sense notions of teaching and learning in the context of inquiry on the pedagogical

interactions with youth. Mendoza's work is especially salient for examining the insufficiency of teachers'' "good intentions" in the development of teachers' equity-oriented pedagogies, positing that "common sense is so grounded in social practices and dominant ideologies that good intentions alone are not a guarantee that equity work will be done" (p. 159). Empirically, Mendoza argues that it is through the design of "mediated praxis" that novice teachers can come to understand their underlying assumptions that are informed by normative (and oftentimes deficit) notions of what good teaching and learning are.

The site of teaching practice, which is instrumental as as a site of mediated praxis, can also help rupture these common sense notions, specifically when teachers and young people work side by side. Philip, Olivares-Pasilla, and Rocha (2016) examine how teachers produce and co-construct narratives about race and place in these teaching contexts. By proposing *racial-ideological micro-contestations* "as an explanatory construct that allows us to see the complex contestations over meanings of race in interactional spaces" (p. 363), Philip et al. (2016) highlight how learning environments are social spaces where non-dominant youth resist dominant frames imposed by teachers. Here, Philip and colleagues offer some pedagogical, conceptual, and methodological tools that can inform the design of teacher learning environments that can support teachers' examination of the discursive patterns that enable and constrain whole group discussions involving social analysis. This work holds promise for thinking about how to design for teacher learning (as a site for mediated praxis) that focuses on this micro-genetic plane of learning (Rogoff, 2003). In addition, this work makes central how teachers' learning necessarily involves a variety of mediational tools, including critical discourse analysis and course theories, especially as teachers appropriate theories and develop new socio-political understandings as part of their own pedagogical and reflection practices.

DiGiacomo and Gutiérrez (2016) further center design considerations for mediated praxis in the context of teaching practice. Specifically, their empirical study of a making and tinkering program revealed that, by design, novice teachers' practices disrupted common hierarchical relationships and "[...] often positioned themselves as novices and learners, asked youth for guidance in activity, and developed a meaningful relationship through fluid conversation over time" (DiGiacomo & Gutiérrez, 2016, p. 17). Of note here is how the teachers in DiGiacomo and Gutiérrez's study transformed their practice by virtue of a designed learning environment that privileged (a) consistent feedback, (b) the availability of multiple roles, (c) personal contribution, and (d) sense of social belonging (DiGiacomo & Gutiérrez, 2016, p. 7). Importantly, these design considerations center the social organization of learning. In later work, DiGiacomo & Gutiérrez (2017) further posit:

> Pre-service teachers, as well as more experienced teachers and educational researchers, should have ongoing opportunities to examine their own assumptions about culture and its intricate yet complex relationship with the social organization of joint learning activity in carefully mediated praxis. We believe such opportunities hold potential not only to disrupt the default script, but also to rupture reductive notions of culture and what is cultural about learning that persist within even the best intentioned of designed learning environments (p. 54).

The necessity of intentionality in the design of teacher learning environments, following the findings of these studies, provides opportunities for teachers to: attend to the social

organization of learning, explicitly interrogate default teacher scripts, and center the practices of young learners. Of specific relevance to this dissertation study, mediated praxis facilitates equitable opportunities for teachers to learn together. In addition, this process of reflection opens up possibilities for teachers to develop new pedagogical practices that are grounded in principles of equity, providing teachers with tools for learning how to leverage the everyday practices of youth toward consequential ends.

Attending to the Everyday

Theoretical and historical explorations of the everyday (de Certeau, 1984; Deutsche, 1996; Kelley, 1994; Lefebvre, 1991; Lugones, 2003; Scott, 1985) offer lenses to illuminate the ingenuity (Gutiérrez, Cortes, Cortez, DiGiacomo, Higgs, Johnson, Lizárraga, Mendoza, Tien, & Vakil, 2017) of place making (Cortez & Gutiérrez, 2019; Haymes, 1995; Kinloch, 2010) that non-dominant communities engage in as they develop, deploy, and revise cultural repertoires of practice (Cortez & Gutiérrez, 2019; Gutiérrez & Rogoff, 2003) over the course of their daily lives. In this respect, everyday activity is a cultural-historical production of space (Soja, 1989), place (Massey, 2005), and culture drawing upon and contributing to learning and development occurring across the socio-cultural, ontogenetic, and micro-genetic planes (Rogoff, 2003). In other words, humans depend on the "cultural inheritance" (Cole, 1996, p. 291) accumulated by previous generations (Cole, 1996; Cole & Wertsch, 1996) as they navigate the dilemmas, tensions, and constraints of their everyday lives. As people move within and across contexts and jointly-overcome these constraints, their learning and development become inner and outer transformations of the world (Cole, 1996); that is, these interactions are the traces of the evolution of expansive learning (Engestöm, 1987) in everyday human activity.

Human activity is always a spatial, cultural and historical process (Soja, 1989; 1996). The literature I draw on here begets new ways of examining how youth are beneficiaries of and producers of space. The spatial turn in social research has opened up new methodological and conceptual terrain for examining the role of space in educational research. In particular, Gulson (2011) argues that two types of studies have emerged in the study of space in education: (1) examining how space explains educational geographies and (2) exploring how schools (re)produce space. This literature is vast and "ranges from discussions of school architecture (e.g., Burke & Grosvenor, 2008; Ellsworth, 2005; Seaborne, 1971), power in classrooms (e.g., McGregor, 2004), teacher education, pedagogy, and rural and urban education (e.g., Popkewitz, 1998); literacy (e.g., Leander & Sheehy, 2004); globalization, cyberspace, and education (e.g., Usher, 2002)" (p. 8) and education policy (Ford, 2017; Gulson, 2011). Critical educational geography provides a broad conceptual terrain for examining the relationship between structure and agency in the process of place-making, specifically in urban environments. I draw on these insights from these to advance new explorations of youths' everyday practices in places, including resistance and their agentic practices as necessarily tied to broader structural, political, and historical processes.

However, schooling tends to be encapsulated (Engeström, 1991), such that physical and conceptual boundaries are created between the everyday practices of youth and the demands of academic preparation. These boundaries are often reified in familiar dichotomies like in-school and out of school practices, home and school life, and everyday and scientific knowledge. Present both in the broader discourse and localized activities, these boundaries are reinforced in

the pedagogical practices emerging under accountability reform (Au, 2007). Yet, scholarship has provided conceptual openings (Gutiérrez, Baquedano-Lopez, & Tejeda, 1999) and pedagogical innovations (Gutiérrez & Vossoughi, 2010) that foster the development of robust learning environments where everyday cultural practices can be combined with academic genres (Gutiérrez, 2008) toward transformative ends. This study is designed to heighten teachers' sensibilities toward a whole set of moves, explorations, inquiries to develop understandings of youths' everyday practices as productive sites of learning.

Youth's everyday cultural practices. In this section, I draw on theorizations of the everyday (Gutiérrez & Rogoff, 2003; Kelley, 1994; Pacheco, 2012; Scott, 1985) and youth resistance to advance the concept of socio-spatial repertoires (Cortez & Gutiérrez, 2019), an analytical lens that has been particularly useful in helping teachers make sense of youths' everyday cultural practices. In addition, informed by cultural-historical notions of learning and development, socio-spatial repertoires attends to social interactions, in the moment-to-moment work of social change, and the space producing features of practices within human activity. As defined by Cortez and Gutiérrez (2019), socio-spatial repertoires are the "individual and collective cultural tools and practices that people develop, revise, expand, and deploy to make sense of and produce space" and place (p. 127). In this work, Cortez & Gutiérrez (2019) noted the diverse linguistic, cultural, spatial, and political toolkits that youth draw on as they confront everyday contradictions in public space. Socio-spatial repertoires, in this regard, are always undergoing dynamic transformations as ongoing practices within human activity present new demands, affordances, and constraints. For this dissertation study, socio-spatial repertoires is a mediational tool that provides teachers with an analytical lens to see how everyday contradictions provide youth with opportunities to develop expansive space-producing practices that help them overcome these dilemmas. Here, the concept focuses the work of teachers on how youth work together with others in producing these spaces. In this respect, socio-spatial repertoires are always a collective production and historically rooted in the youths' and their communities' practices. Such practices are important to examine and leverage given the constraints that youth face in their everyday lives within cities undergoing transformation.

Further, as a learning scientist interested in the role of culture in the learning and sociocultural development of non-dominant populations, my dissertation study is designed to support teachers in attending to youths' everyday practices and the learning therein, to capture the everyday resistance (Pacheco, 2012) in which youth and their families and communities currently engage. IEmbedded in Pacheco's larger conceptualization is a central tenet regarding everyday learning and development: "youth are engaged in deep learning and are appropriating powerful cultural resources that are highly responsive to their material circumstances" (Pacheco, 2012, p. 121). Here, building on a long-tradition of scholarship inspired by cultural-historical activity (Cole, 1996; Gutiérrez & Rogoff, 2003; Moll, Amanti, Neff, & Gonzalez, 1992), learning is theorized as occurring across ecologies, that is the multiple sites that humans traverse throughout their everyday activity. In particular, Pacheco (2012) notes that youths' cultural practices, especially those of non-dominant people, involve resistance practices learned in and through everyday political mobilizations, echoing the notion of infrapolitics, as advanced by Cruz (2014), Kelley (1994) and Scott (1985). These conceptualizations privilege the agentic practices and distributed expertise involved in the evolution of youth resistance, especially across their everyday lives.

Early and more recent explorations of youth resistance (Fine, Freudenberg, Payne, Perkins, Smith, & Wazner, 2003; Fordham, 1996; Willis, 1977) illuminated the cultural processes that might explain the role of schools in reproducing economic and racial inequalities. These studies aimed to foreground agency in challenging the theory of correspondence (Bowles & Gintis, 1977) that argued schools are ideological apparatuses of the state that privilege and reproduce the dominant class interests of society. In this respect, the study of youth resistance emerges by challenging and nuancing overly deterministic (Marxist) arguments regarding the role the role of schooling in society, by centralizing the culture and individual and collective agency. In this literature, schools are still cast as ideological battlegrounds, but they are also places of resistance that enable and constrain youths' life choices. These studies argue that youth resistance is a cultural production whereby youth draw on their communities' histories as they resist the choices offered by schooling.

Willis' (1977) study on the working class "lads" in a small town in the UK, undergoing economic shifts, examined how the cultural practices of parents and youth explained why the youth frequently challenged and resisted the values of schooling and the authority of their teachers. While schools still hold the position of reproducing the dominant class interests, the youth actively rejected such values in their everyday practices in and outside of school. The youth frequently engaged in activities that sought to take control of the physical and social space of the school and classroom. Willis argues that these practices are similar to the dynamics that their parents experienced with management on the shopfloor in the factories where they work. As the youth struggled to gain autonomy over their lives, a similar practice that their parents engaged in their jobs, choosing to work in the factory was empowering. In this respect, youth resistance is seen as an explanation for the reproduction of working class identity, one that illuminates the agency exercised by the youth. The production of youths' working class identities is not solely a matter of school acting on the youth; the develop and engage oppositional practices that are culturally and historically rooted.

While Willis' study examines the resistance to class domination, Fordham (1996) illustrates how the Blacks' low achievement in schools could be explained by their resistance to a broader structure that has "set many of these youth up for failure" (p. 69). Fordham argues that Blacks' organize an "oppositional culture" to the whiteness advanced in within the sites of school. In schools, Black youth are presented with two choices, one of which, "acting white," negates their opportunities for maintaining kinship with their community. In order to maintain their kinship ties and their identity within schools, youth resisted achieving in schools largely to "avenge the the dehumanization of their Black ancestors by appropriating and inverting the myth of intellectual inferiority" (p. 329). This work highlights, similar to Willis, how youths' resistance is not merely a matter of unruly youth, but is deeply contextualized in historical and cultural processes that shape their everyday lives and the institutions they must navigate. In addition, it illuminates the deep social analysis that are instantiated within the everyday practices of youth as they experience school. These two studies offer analytical and theoretical tools for examining the agency that youth exercise in their everyday practice. In particular, their resistance practices are cultural productions that make visible the ingenuity (Gutiérrez et al., 2016) and dignity-conferring practices (Espinoza & Vossoughi, 2014) that non-dominant youth engage, in spite of the larger structures that mediate how they participate in in their day-to-day lives.

Gutiérrez, Rymes, and Larson (1995) also examine the agentic practices of youth in classrooms, by highlighting how participation in learning activity takes on different forms. Here

they point to the discursive space of the classroom as a site of resistance to the dominant teacher script, or the default teacher-centered social organization of learning. Like the previous studies discussed in this section, the authors examine resistance, or counterscripts, as co-constructed phenomenon. But, more importantly, they offer a window into how teacher scripts (discursive practices that center teacher expectations) enable and constrain learning opportunities within everyday discourse. I draw on this work in the design of analytical and conceptual lens for examining everyday classroom discourse in order to support teachers examination of discourse practices in their classroom. Gutiérrez, Rymes, and Larson (1995) point to the role of the everyday:

> An analysis of the everyday activity of classrooms, an analysis of the script of the classroom community, and a discourse analysis of the face-to-face interaction of the classroom participants will show how who gets to learn and what is learned is connected to the social relationships constructed in classrooms. These analyses will also demonstrate how power lies in these constructed social relationships, not solely in the individual or in a monolithic system of societal reproduction (p. 445-446).

Gutiérrez and colleagues offer concrete analytical and design considerations that are leveraged in this study; specifically, participant teachers are introduced to theoretical concepts and analytic tools that orient them towards designing learning that attends to everyday discursive practices, especially as they emerge in classroom talk.

In summary, this project aims to bring together theoretical and methodological contributions toward the design of expansive teacher learner ecologies: (1) the literature on teacher learning centralizes learning as a social process that involves a variety of tools, routines, relationships, and distributions of labor, and is deeply contextual (Cochran-Smith, Villegas, Abrams, Chávez-Moreno, Mills, & Stern, 2016; Horn & Little, 2010; McDonald et al., 2011); (2) examinations of mediated praxis (Gutiérez & Vossoughi, 2010), as design-based pedagogical tools, can serve to re-mediate (Gutiérrez, Hunter, & Arzubiaga, 2009) teacher learning ecologies; and (3) this study draws on the notion of everyday resistance (Pacheco, 2012) within space (Cortez & Gutiérrez, 2019) to develop analytical lenses to support the development of how teachers see and leverage youths' everyday cultural practices. In short, this dissertation project privileges shifts in how teachers write about and talk about their pedagogical practices and the mediational tools that support these changes, as teachers begin to design for transformative and consequential learning in the classroom.

Theoretical Framework

The following theoretical framework principally outlines the theories that will be used to examine how learning and transformation unfolded in my study. In this regard, I look to ecological (Cole, Hood, & McDermott, 1994) approaches to learning and actively leverage cultural-historical activity theory (Engeström, 1999) as a primary analytic for examining how learning and transformation occurred in my teacher education classroom. In this section I will begin with a description of Cultural-Historical Activity Theory (Engeström, 1999) as a primary heuristic for looking at activity in this study. I continue with outlining the framework of transformative agency (Engeström, 2011; Haapasaari, Engeström, & Kerosuo, 2014; Sannino,

2015) as it provides me with a further analytic lens for seeing transformation. I then explain the specific analytical purchase of participation frameworks (Goodwin, 2007) in examining collaboration. I conclude with a proposal for using social design based experiments (Gutiérrez, 2016; Gutiérrez & Jurow, 2016) as methodology for leveraging CHAT, transformative agency, and participation frameworks in my study.

Cultural-Historical Activity

My work takes as a starting point that all learning is a socially mediated activity (Vygotsky, 1980). Given this primary assumption, my dissertation project leverages Cultural Historical Activity Theory (Engeström, 1999) to understand how interaction in learning environments, specifically the teacher education classroom, can be examined within activity systems. Engeström (2001) presents features of an activity system as being: 1) the subjects (participants; 2) the rules of engagement; 3) the division of labor; 4) the communities involved; 5) the artifacts that mediate activity; and 6) the agreed-upon object/outcome of the system and its activities. It is important to note that these features mutually inform each other in constitutive ways, as illustrated in Figure 1.1. This co-constitutive nature highlights the dynamic nature of activity and mediation in a system, and the potential for transformation.

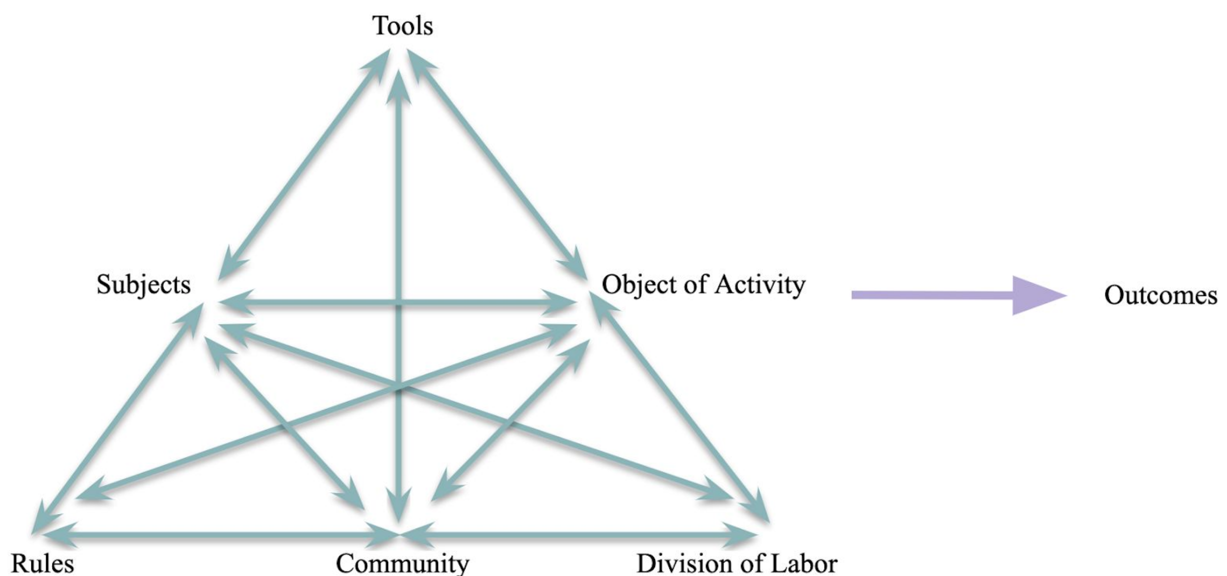

Figure 1.1. Cultural Historical Activity Triangle (adapted from Engeström, 2001).

Activity theory further centers multivoicedness and historicity as a necessary dimension in examining activity of learning and transformation. For instance, Engestrom (2001) underscored that activity systems foster, in principle, multivoicedness because “An activity system is always a community of multiple points of view, traditions and interests” (p. 136). This inherent multivoicedness marshalls individual and collective historicity as the shaping and transformation of activity can only be understood through the history of the people and their

practices (p. 136). Moreover, Engeström offers that transformation in these systems is catalyzed by contradictions that emerge as multiple histories and experiences come into tension with each other. Engeström (2001) sees these contradictions as "sources of change and development…[that] are historically accumulating structural tensions within and between activity systems" (p. 137). As will become clear in further articulating this theoretical framework, tensions, contradictions, and contestation are highly leveraged in the type of inquiry by teachers that is examined in this study.

Engeström and Sannino (2010) further offer a heuristic for looking at transformation and learning in activity systems by presenting seven steps of expansive learning mode: (a) questioning, (b) analysis, (c) modeling the new solution, (d) examining and testing the new model, (e) implementing the new model, (f) reflecting on the process, and (g) consolidating and generalizing the new practice (p. 8).

Transformative Agency

My study is animated by the framework of transformative agency (Engeström, 2011; Haapasaari, Engeström, & Kerosuo, 2014; Sannino, 2015), which has its roots in cultural historical activity theory. Transformative agency has an explicit focus on learning that expands from individual initiatives toward collective forms of activity. Given my interest in intentionally designing for equity, this framework helps me foreground the learning processes that emerge as teachers learn how to break away from encapsulated forms of schooling and imagine new futures, collectively with their colleagues and youth. Therefore, transformative agency foregrounds how people respond to contradictions emerging in their everyday activity (perhaps as teachers contend with the constraints imposed by structures of schooling). In addition, this theory orients how I study the evolution of teachers' collective agentive stances while reflecting on practice. This challenges dominant understandings of agency as necessarily rooted in the individual, notions that are frequently centralized, implicitly, in most examinations of how teachers learn and or develop agency. It is in the space of figuring out how to contend with uncertain futures, that teachers are involved in transformative agency, which Virkunnen defines as "breaking away from a given frame of action and taking the initiative to transform it."

Figure 1.2. Transformative Agency: The Evolution of Learning from Individual Initiative to Collective Action

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My study is animated by the framework of transformative agency (Engeström, 2011; Haapasaari, Engeström, & Kerosuo, 2016; Sannino, 2015), which has its roots in cultural historical activity theory. Transformative agency has an explicit focus on learning that expands from individual initiatives toward collective forms of activity (Engeström, 2007). Given my interest in intentionally designing for equity, this framework helps me foreground the learning processes that emerge as teachers learn how to break away from encapsulated forms of schooling (Engeström, 1991) and imagine new social futures (Gutiérrez, 2008), collectively with their colleagues and youth. Therefore, transformative agency foregrounds how people respond to contradictions emerging in their everyday activity (e.g., perhaps as teachers contend with the constraints imposed by structures of schooling). In addition, this theory orients how I study the evolution of teachers' collective agentive stances while reflecting on practice. This challenges dominant understandings of agency as necessarily rooted in the individual, notions that are frequently centralized, implicitly, in most examinations of how teachers learn and or develop agency. It is in the space of figuring out how to contend with uncertain futures, that teachers are involved in transformative agency, which Virkkunen (2006) defines as "breaking away from a given frame of action and taking the initiative to transform it" (p. 49).

For the purposes of this chapter[1], I draw on five expressions of transformative agency (Engeström, 2011; Haapasaari, Engeström, & Kerosuo, 2016) that emerged in teachers' written reflections. Earlier conceptualizations of this theory have examined the evolution of transformative agency in people's speech acts (Haapasaari, Engetsröm, & Kerosuo, 2016). In this

[1] As mentioned above, I am interested in how agency expands from individual initiatives to collective actions. In this chapter, I examine the evolution of this process of learning as teachers and students engage in joint-activity.

regard, I see teachers' written reflections as conversations with self (Fasulo, 2012), as well as with me, their colleagues, and other imagined readers they thought would engage with their text. The five expressions of transformative agency are:

- Critiquing or questioning the status quo in the identification of problems in a given activity.
- Explicate new possibilities for changing a given activity, based on previous experiences.
- Envisioning new models or patterns of activity that may inspire new ways of of engaging in practice. Such expressions may be partial models or fully fledged theories.
- Committing to taking concrete actions within a given frame of activity.
- Taking action to effect consequential change to activities.

One affordance of the transformative agency framework is that it foregrounds the development of iterative cycles of inquiry, which are important for design-based research studies given the role of contradictions in everyday human learning.

Vygotsky's (1936/1986) principle of double stimulation is central to the conceptualization of transformative agency and design-based work, as it illuminates the both the contradictions and the subsequent resolutions and transformation emerging in human activity (Sannino & Engeström, 2017). The subsequent resolutions to everyday dilemmas, or second stimuli, are conceptualized, using the transformative agency framework, as the process of envisioning new models or patterns of activity; in effect, these are the local theories of practice that teachers are generating. As Sannino & Engeström (2017) note, "by studying the ways in which subjects appropriate second stimuli in their work on a problem...it [is] possible to reveal the ways in which those subjects made sense of the world in which they were acting" (p. 60). As such, as pre-service teachers transform their practice they are also transforming activity, which involves the principle of ascending from the abstract to concrete (Engeström, 1991). This process involve the creation of "germ cells," such as the generation of local theories of practice that animate future activity. In particular, the central germ cell that this design experiment was oriented toward, serving as an axiological innovation (Bang, Faber, Gurneau, Marin, & Soto, 2016), was the rupturing of the encapsulation of schooling or advancing the development of new relationships between teachers and students and the relationship between teachers and theory, thus supporting teachers in learning how to intervene in their own practice to transform classroom activity.

Of note, the expressions of transformative agency are not laid out to follow a linear process, but are examined as part of iterative and cyclical processes of learning. In this study, I examine how transformative agency emerged as teachers and youth collaboratively engaged in initiatives to transform and develop their joint-activity. That is, this chapter centralizes the individual forms of agency, while Chapter 4 identifies the movement to more collective forms of transformative agency. In particular, the transformative agency framework helps make visible the genesis of teachers' learning processes in the generation of local theories of practice, processes that are critical "in which learners strive to become agents of their own learning, which coincides with active reshaping of their collective activity system of work" (Haapasaari, Engeström, & Kerosuo, 2016, p. 236).

Participation

This study's purpose of examining transformative learning in the teacher education classroom necessarily centers participation. In this regard my analysis of teachers' joint reflection is inspired by Goodwin's (2017) notion of co-operative action as it makes visible the changes in reflective activity, not just in how individuals' actions are laminated and built on one another, but also how the very motive toward which the reflective activity is oriented evolves as a result of joint-action. Cooperation is not understood here as action that is mutually beneficial toward a pre-defined goal, rather, co-operation illuminates "a systematic mechanism for progressive accumulation with modification on all scales, from chains of local utterances, through tools, to the unfolding differentiation through time of human social groups" (Goodwin, 2017, p. 1). Co-operative action, then, is the process by which people co-construct action, "inhabit each other's action" through various tools and speech acts and, at least in the context of joint reflection, create novel forms of reflective activity that support the evolution of teachers' pedagogical imagination (Gutiérrez, 2008).

To analyze how teachers engage in joint reflection, this chapter employs Goodwin's (2007) construct of participation frameworks. Specifically, Goodwin's participation frameworks help illuminate the interactional contributions of participating teachers' engagement in face-to-face and online activity over the course of the third cycle of this study. In their interactions, teachers appropriated a variety of epistemic tools, such as course theories and their written reflections, to make visible valued pedagogical practices. As they jointly reflected, teachers' engagements involved a variety of stances that mediated how they made sense of valued pedagogical practices and were positioned relative to one another.

Social-design Based Experiments

My endeavor to examine activity, transformation, and participation aligns well with a social design based experiment approach. This work is specifically animated by design principles that that privilege resilience, hope, historicity, an orientation toward the future, and, most importantly, equity (Gutiérrez & Jurow, 2016).

Of note, Gutierrez & Vossoughi (2010) offer considerations for how learning can be designed to foster mediated praxis in ways that "cultural historical formations developed with and for nondominant communities [are] designed to promote transformative learning for adults and children" (p.100). Moreover, they envision a teacher education classroom that provides "persistent opportunities for reflection and examination of informal theories developed over the course of participants' experiences as students and teachers in apprenticeship" (Gutiérrez & Vossoughi, 2010, p. 101). Of importance to this study, is the use of the cognitive ethnography as a central tool, "[that] becomes a site for sense making, synthesis, reflection, and mediated praxis and helps to refute long-held dichotomies often taken up in teacher education" (p. 104).

I follow other scholars who have used social design experiments as avenues for working with teachers to challenge their common sense notions of what teaching and learning are. Mendoza (2014), specifically used SDBE to help novice teachers see how "common sense is so grounded in social practices and dominant ideologies that good intentions alone are not a guarantee that equity work will be done" (p. 159). Empirically, Mendoza argues that through the design of "mediated praxis" teachers can come to understand their underlying assumptions that

are informed by normative (and oftentimes deficit) notions of what good teaching and learning are.

Research Questions

Given my interest in how teachers learn to leverage youths' everyday cultural practices, I foreground the pedagogical conceptualizations that teachers generate in the context of individual and collaborative inquiry, as well as the forms of mediation that might support their learning. Therefore, I am interested in how we can better understand teacher learning processes that support the expansion of individual initiatives to collective activity. I approach my study with the following research questions:

1. What is the nature of the reflective practices in this design-learning environment that privileges the generation of new pedagogical conceptualizations of practice?
   a. How do the reflective practices in this designed learning environment help to organize the generation of new pedagogical conceptualizations of practice?
   b. What shifts in individual reflective practice were observed across the participating teachers and what mediated these shifts?
2. What is the nature of the reflective practices in this design-learning environment that privileges collaborative practice?
   a. How do the reflective practices in this designed learning environment help to organize collaborative practice?
   b. What shifts in reflective practice were observed across the participating teachers and what mediated these shifts?

Chapter 2: Research Design

In general, the purpose of this study was to understand what goes into the design of teacher learning that is consequential to both teachers and the youth with whom they work. Employing a design-based approach (Cobb, Confrey, diSessa, Lehrer, & Schauble, 2003; Engeström, 2011; Engeström & Sannino, 2010; Gutiérrez, 2008; Gutiérrez & Vossoughi, 2010) to inquiry, this study aimed to examine how pre-service teachers learn how to leverage youths' everyday cultural repertoires of practice (Gutiérrez & Rogoff, 2003) toward transformative ends. Specifically, I was interested in how pre-service teachers appropriate theories on cultural-historical conceptions of learning (Gutiérrez & Rogoff, 2003; Wertsch, 1985; Vygotsky, 1978), critical geography (de Certeau, 1984; Le Febvre, 1991; Massey, 2005; Soja, 1989, 2013), and everyday resistance (Kelley, 1994; Scott, 1985). The desired outcome was that teachers would learn how to design learning environments that draw upon youths' history and present-day experiences, specifically non-dominant youth.

In line with the theoretical orientation undergirding this study, people's learning must be understood in its social context of development, locally and historically (Gutierrez, 2016). Toward this end, this study explored how to expand teacher learning with youth, with a focus on how teachers design learning environments that historicize youths' everyday practices to foster the development of new ways of seeing, representing, and engaging in teaching practice. By design, this study was aimed at contributed to both practical and theoretical explorations about how teachers design for consequential learning for non-dominant youth. In the following, I outline a research design that employed and iterative approach to examining how teacher learning unfolded via the naturalistic setting (Brown, 1992) of the teacher education classroom. I begin with a description of the conjecture map (Sandoval, 2014) that helped organize the design of the associated course, specifically, theoretical and design conjectures. I continue with descriptions of the site, the course, and participants of the study. I conclude with an outlined data collection and analysis process.

Conjecture map

There are several design and theoretical conjectures (Sandoval, 2014) upon which this social design based experiment (Gutiérrez & Jurow, 2016; Gutiérrez & Vossoughi, 2010) is developed (see Figure 2.1 below). My high-level conjecture is that teachers can design learning activities that illuminate and amplify (Cole & Griffin, 1986) youths' valued everyday practices. In order to do so, I have designed for teachers to identify and reflect on the pedagogical elements resulting in such consequential learning in their own classrooms. In particular, my design conjectures depend on a teacher education classroom that fosters the following embodied elements: participant structures, discursive practices, task structures, and tools (Sandoval, 2014). Participant structures attend to the division of labor within learning tasks and the expectation of each participant in the aforementioned course. Discursive practices are the turns of talk that participants engage in over the course of the learning task. The task structure explicates the goals of the learning activity. And, the tools are instruments, both ideal and material, that learners were expected to engage with over the course of the interactions in our course. These features of the learning activity are what Sandoval (2014) terms embodied elements that are designed to

generate mediating processes, which produce outcomes. In discussing the relationship between embodied elements, mediating processes, and outcomes, Sandoval (2014) states that in

> learning environments, the use of particular tools for specific tasks enacted in specific ways is intended to produce certain kinds of activity and interaction that are hypothesized to produce intended outcomes. These hypothesized interactions mediate the production of those outcomes. We could refer to these as mediational means from within a Vygotskian (Vygotsky, 1980) perspective (p. 23).

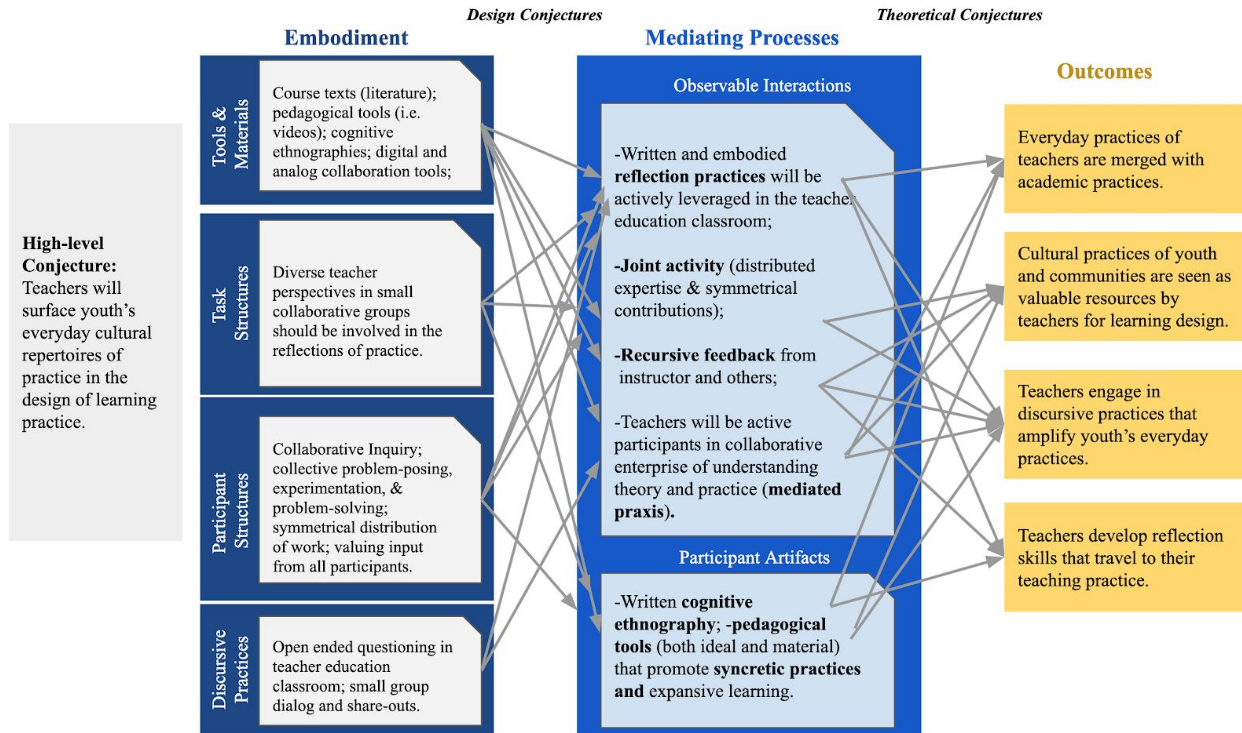

Figure 2.1. Conjecture Map.

My design conjectures for this intervention suggest that if teachers engage in a task structure where teachers document and share their everyday pedagogical practices, in collaborative inquiry, through discursive practices such as with me (the instructor) and other teachers asking generative questions, then the following mediating processes would emerge: teachers' "problem-solving attempts and solution-driven actions" (Pacheco, 2012, p. 129) would be made visible in oral and written artifacts generated by my participants. Next, my theoretical conjectures suggest these mediating processes would be expected to produce the following outcomes: teachers would learn how to combine their everyday teaching practice with academic concepts and practices; the cultural historical practices of youth and communities would be seen by teachers as valuable resources for learning design; teachers would engage in discursive practices that amplify youth's everyday practices; and teachers would develop reflection skills that travel to their teaching practice.

In the following, I explicate in detail how I attend to these conjectures in the research design of this study. I will begin with a description of the participants, continue with a description of the designed learning environment and conclude with the types of data that I collected in order to analyze my conjectures.

Study Site

The site of this project was a teacher education course at Willow University[2], a private institution in the San Francisco Bay Area. The course offered in the university's School of Education at this university. The School of Education has a general Masters/Credential program that predominantly enrolls dual degree students who are concurrently undergraduates. The course, called Academic Literacy, was required for all students obtaining a secondary education credential in the Master of Arts in Teaching program.

Course Structure

The teacher education classroom was designed to support teachers in making visible central dilemmas in their practice and using course texts, as well as their peers and my support, to develop new patterns of activity. To this end, students in my class engaged in cycles of inquiry throughout the fifteen weeks of the course. Near the beginning of the course, the participants of the study engaged in close readings and discussions of course texts the centered theories of sociocultural learning, critical geography, and critical literacy. At the sixth week of the class teachers began writing Cognitive Ethnographies (CE) based on their practice. These cognitive ethnographies were then leveraged in in-class collaborative inquiry where critical ethnography and discourse analytical tools were leveraged. The overall arch of inquiry was designed to culminate with opportunities for participants to collectively appropriate theories through small group workshops and presentations.

The cycle of inquiry presented in this research design is informed by a heuristic for potential transformation of activity. Engeström and Sannino (2010) presented seven steps, outlining an expansive learning mode: (a) questioning, (b) analysis, (c) modeling the new solution, (d) examining and testing the new model, (e) implementing the new model, (f) reflecting on the process, and (g) consolidating and generalizing the new practice (p. 8). The teacher education classroom presented herein was meant to be a robust activity system with iterations to these seven steps that would contribute to and "expansive cycle or spiral" (p. 7) of learning, and facilitate the ascension of the activity patterns from the abstract to the concrete. See Figure 2.2 for a visualization illustrating the cycles of inquiry designed within the Academic Literacy course.

[2] Pseudonym.

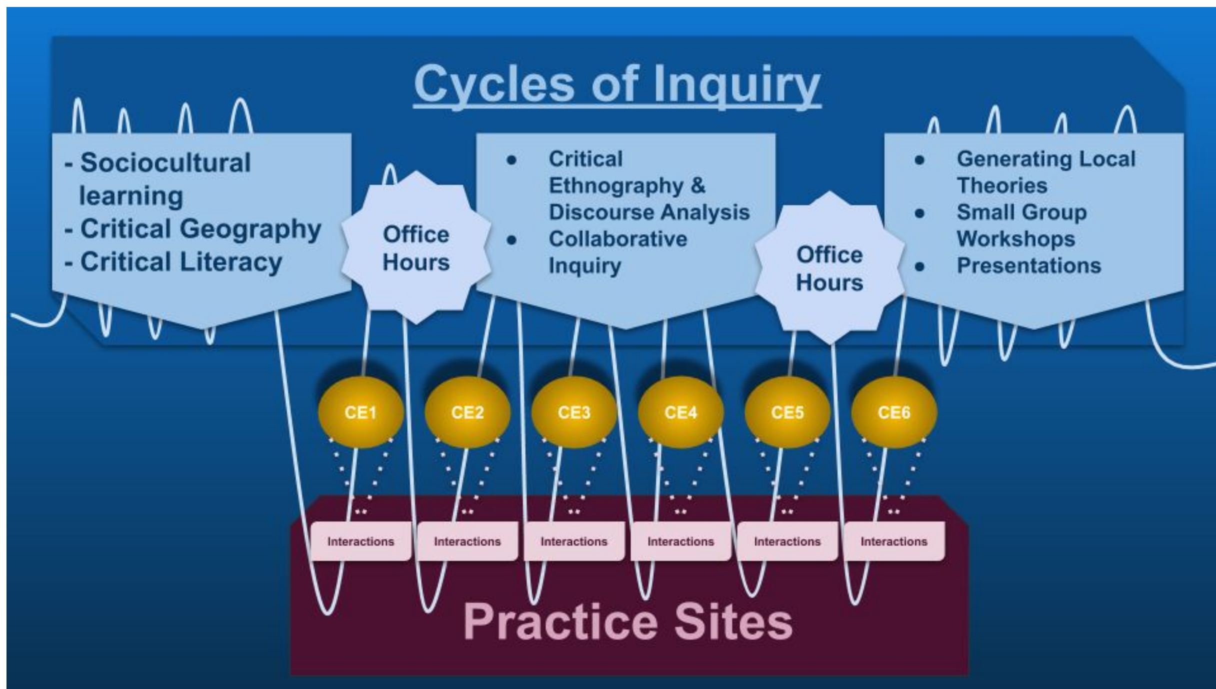

Figure 2.2. Visualization of Cycles of Inquiry in the Academic Literacies course.

Assignments and collaboration tools. As will be further explicated in the Data Collection section of this chapter, there were key assignments that were part of the intentional design of this course.

Cognitive Ethnographies. During the Spring 2018 semester, pre-service teachers conducted and documented focused studies of six one-hour interactions with youth (see Appendix A for course assignment). These cognitive ethnographies (Gutiérrez & Vossoughi, 2010) are intended to make visible the learning across the microgenetic, ontogenetic, and cultural historical planes (Rogoff, 2003). In particular, these assignments offer insights into how teachers make sense of and appropriate (Rogoff, 2003) sociocultural conceptions of learning, theories from critical geography, and conceptualizations of youth resistance—key tools deployed in the Academic Literacy course—as they design robust learning environments with youth. The cognitive ethnography is structured in four sections: (1) general site observation; (2) broad overview of interaction; (3) a focus in on a segment of their one-hour interaction; and (4) reflection and analysis.

Other writing assignments. Throughout the semester, teachers will conduct four main writing assignments (see Appendix B for course syllabus), besides the cognitive ethnographies: (1) small writing assignment on learning and culture, (2) everyday mapping inventory, (3) group research paper (see Appendix C for explanation), and (4) individual self-reflection. The first one is a response to a writing prompt that asks them to describe learning and its relationship to culture. In the second writing assignment, the teachers are expected to document and take an inventory of their everyday practices in the city over the course of one week. They are expected to document spaces where they experience comfort and discomfort. In particular, they are

expected to historicize how they have come to understand their responses to this discomfort in public space. For the research paper, the teachers will collaboratively work together in small groups to examine how learning unfolded in their respective classrooms.

The Digital Diologic Studio. One of the tools that was designed specifically for the latter part of the cycle of inquiry described above was a digital instrument for dialog and collaboration that I termed, the *Digital Dialogic Studio* (DDS). Student groups (mostly dyads) who were working together on a culminating research paper were introduced to this tool along with some guiding categories for organizing candidate course theories, codes, and excerpts from their CEs for reflection and analysis. This tool was housed in Google form form or Google doc depending on the working group's preference. I had commenting access to each group's DDS which allowed me to provide iterative feedback. Chapter 4 illuminates more of the mediational aspects of this tool.

Participants

The participants of my study included (10) pre-service teachers enrolled in a course, Academic Literacy, at Willow University[3]. The teachers in my study were diverse in their representation of reported race and gender; many of them being first generation students or from non-dominant communities. Moreover, their sites of teaching practice also varied along with their anticipated credential. See Table 2.1 for a detailed description for each participant[4].

Table 2.1. *Participant Matrix*

Participant	Gender (self-reported)	Race/Ethnicity (self-reported)	Site of Practice	Teaching Credential (anticipated)
Brian	Queer	White	Teaching assignment: Charter High School	Single Subject: English Language Arts (ELA)
Diana	Female	White	Substitute Teaching & Baby-sitting.	Multiple Subjects
Jeremiah	Male	Asian/Pacific Islander	Student Teacher: High School	Single Subject: ELA/Ethnic Studies
Joaquin	Male	Asian/Pacific Islander	Student Teacher: High School	Single Subject: ELA/Ethnic Studies
Keandre	Male	Black	Teaching Assignment: Middle School	Multiple Subjects

[3] All but one student, of the eleven enrolled in my class, volunteered to participate in this study.
[4] Information gathered from a survey administered at the beginning of the study.

Liam	Male	White	Student Teacher: Charter High School	Single Subject: Social Studies
Michael	Male	Black	Informal Interactions with Niece	Multiple Subjects
Reyna	Female	Mixed	Substitute Teaching: High School Math/Science	Single Subject: Math
Shahid	Male	South Asian	Student Teacher: High School	SS: Social Studies
Shane	Female	White	Instructor: After School Making/Tinkering Program	Multiple Subject

While data was collected and analyzed for all ten participants, two key participants will be discussed in detail within this dissertation. Those two participants are Shahid and Brian.

Shahid. At the time of the study, Shahid was a first-year pre-service teacher from the midwest. He had previously worked in an after-school woodshop class as an instructor. During the semester that he was in my class, Shahid was a student teacher at a large public high school, that was split up into four different academies. His placement as a student teacher was split across two different academies, with two different teachers. He identified as South Asian and he intended to obtain a single subject credential to teach government.

Brian. At the time of the study, Brian was a first-year pre-service teachers from the Pacific Northwest. He had a teaching assignment at a charter high school and intended to obtain a single subject credential in English Language Arts. He had previously worked at the school where he had his teaching assignment for five years, in various roles. He identified as queer and white.

Data

Data Sources

To understand how teachers appropriate theory and engage in mediated praxis, several sources of data were collected. Data consisted of the following: (1) cognitive ethnographies (Gutiérrez & Vossoughi, 2010); (2) classroom audio/video recordings of pre-service teachers and youth in interaction; (3) artifacts and documents of student work from the interactions between pre-service teachers and youth; (4) teacher writing assignments, including a group research paper, an individual end of course self-reflection, and other small writing assignments; (5) classroom video of the teacher education course; (6) interviews with the pre-service teachers; and (7) my own field notes. Table 2.2 summarizes the data source and count for each. In the

following, I briefly describe each data source, the reason for collecting it, and how it was collected.

Table 2.2. *Data Source Summary*

Count	Source
48	Teacher-produced Cognitive Ethnographies
76 hours	Teacher Education Classroom Video (360°) & Small Group Audio
49 hours	Office Hours (360° video and audio)
10 Hours	Virtual Reality Office Hours (including screen capture on Oculus Go)
48 hours	Student-teacher Interactions (360° video and audio)
450	Collaborative class slides, Teacher-written assignments, Teacher-produced Analytical Tools (shared on google drive), Youth Artifacts
15 hours	Semi-structured Interviews

Cognitive ethnographies. As discussed in the Course Structure section, the cognitive ethnography was a central tool of reflection for the teachers of my study. I read a total of 48 documents and provided comments and queries on each cognitive ethnography for each teacher throughout the semester. The teachers also read and commented on each others' cognitive ethnographies.

Video/Audio of interactions between teachers and youth. Teachers in the class audio/video recorded their six one-hour interactions with youth. In many cases, teachers used 360 degree cameras to document small group and large group work. They used these recordings to support the completion of the cognitive ethnography assignment and the writing assignments throughout the course.

Teacher education course writing assignments. This research paper drew upon the multiple data that teachers collected over the course of the semester to research a topic related to the relationship between learning, literacy, and culture. In the self-reflection, teachers described the aspects of the course that were most instrumental to their learning. Participants were expected to describe if their pedagogical practice was transformed, as well as when and how such a transformation occurred.

Teacher education course video/audio. Throughout the semester I recorded 360 degree videos of the large group discussion, as well as audio recordings of small group interactions in our classroom, as well as during informal office hours.

Virtual reality office hours. Throughout the semester I met with the participants of my study in order to have semi-structured conversations and discussions about their practice. During these sessions, we often used virtual reality technologies to view 360-degree video that was captured by the teachers at their teaching practice sites. I recorded these sessions.

Teacher interviews. I conducted two interviews throughout the semester with each teacher. The first occurred during the fourth week of the course. In this interview I asked teachers about their understandings of the following general concepts: space, learning, culture, and literacy. In addition, in this interview I asked them about how they plan to or already designed learning in their class and the role of youths' everyday practices in the classroom. The second interview occurred after all assignments had been turned in. The teachers and I reflected on the artifacts they created to examine and document learning in their classes, as well as their own learning. In this conversation, I expected to discuss with teachers how their understandings of learning, culture, and space had changed over time and to identify how they understood what was responsible for such changes. See Appendix D for interview protocol.

Data Collection: Reasoning and Alignment with Research Questions

My data collection process was closely aligned with answering the research questions outlined in Chapter 1. In addressing research questions that focused on the nature of reflective practices regarding pedagogical conceptions of practice (Questions 1, and 1a), I documented teachers' written and oral discourse by examining their oral responses during (1) an interview conducted during week 4 of the course and (2) discourse in the teacher education classroom. The teacher interview was conducted once during or after week 4 of the class in order to understand how teachers were making sense of the course readings and how they drew on previous understandings of learning, and the role of everyday practices as a source for learning. I asked them to speak about how they came to understand the role of everyday knowledge and practices in learning. In particular, I asked them to talk about how their teacher education classes and their own work in the classroom have informed their current understandings of everyday knowledge and practices in learning. In designing the teacher education course, I assumed that teachers were not familiar with the theories (i.e., sociocultural theories of learning, critical geography, and everyday resistance). However, these theories and concepts built upon and connected with teachers' own everyday practices, as teachers and adults, which, arguably, made them accessible to the participants in the study.

In order to help answer the question around shifts in reflection practices and pedagogy (Question 1c), I gathered teachers' written and oral discourse from four data sources: (1) teacher interview, (2) a writing assignment completed in our class, (3) teacher education classroom, and (4) researcher field notes. In these data sources, I paid attention to how the teachers jointly conceptualize and understand the relationship between learning and culture. The teacher interview was also conducted to understand how teachers' understandings of the readings on learning and culture, were informing their teaching practice. In this interview, I asked them to expand on their everyday practices and how they plan to make them visible in their own class. In addition, I examined their understandings of transformative learning and the larger purposes of education and the role that their conceptions of youths' everyday cultural repertoires played.

In answering the research questions relating to specifically to collaboration I focused on the interactions that took place in the teacher education classroom. In doing so, I collected

audio/video recordings of small and large group discussions over the course of the semester for each class. In group discussions conducted over the course of the semester, I looked at how the teachers jointly constructed understandings of the course readings, as well they come to understand their pedagogical practices in their own classrooms and if youths' everyday knowledge has a role. Contributions to the Digital Dialogical Studio (DDS) also served as a data for examining collaboration that occurred in the digital space. Simple data analytics (version history) of the DDS were also used to this end.

Data Reduction and Analysis

To answer my research questions, I triangulated the multiple data sources listed above, reduced my analysis to prepare it for analysis, and engaged in different kinds of analysis. To reduce the data, I transcribe the two interviews I conducted with the teachers and then uploaded the transcripts to Dedoose, a qualitative data analysis program that supports inductive and deductive coding processes (Bogdan & Biklen, 2007; Dyson & Genishi, 2005)).

For the video and audio recordings of the teacher education classroom I engaged in systematic micro-interaction video analysis (Erickson, 1986, 2007). I began by creating activity logs after each video and/or audio was collected. Part of the design of this study was iterative and recursive, therefore, I simultaneously engaged in data collection and analysis. I time-stamped all of the activity logs in a maximum of 5-minute intervals. As I create the activity logs, I noted the turns of talk and any observer comments I had regarding the videos or audios. As I reduced my data, I also wrote analytical memos to document moments that I found particularly interesting or compelling. After I completed the activity logs, I uploaded them to Dedoose to be coded.

All of the other artifacts, including the writing assignments, transcription of the teacher interviews, cognitive ethnographies, and youth artifacts were uploaded to Dedoose. As I was uploading data, I was involved in a constant honing of my coding process. I began with an inductive coding process, grounded in the data, while also paying attention to how theory may have informed the development of new codes. This process informed a third cycle of analysis aimed to identify patterns in clusters of data (Huberman, Miles, & Saldaña, 2014). These clusters and patterns are what animate the findings chapters presented in this dissertation.

Units of analysis. My units of analysis were primarily be teachers' individual and collective sensemaking that occurred during teacher interviews, teachers' writing assignments, including the cognitive ethnographies, teacher talk in the classroom. In addition, I also focused on the turns of talk in teachers' classroom practices with youth. Finally, another unit of analysis was the turns of talk in the teacher education classroom.

I focused on these units of analysis in order to examine the diverse teacher perspectives that emerged across the multiple data sources. In addition, these units of analysis pointed to the different learning practices that emerged as teachers designed their classrooms to leverage youths' everyday cultural repertoires.

Chapter 3: Co-constructing Pedagogical Conceptualizations

This chapter is concerned with the evolution of teachers' learning, as they move from individual efforts to collection action around improving their pedagogical practices, with both their peers and their students. Situated in cultural-historical activity theory, pre-service teacher learning is examined in the context of a teacher education classroom ecology that I designed to provide teachers with opportunities to develop new practices, using theories and other tools in the service of more equitable and robust learning environments of their own design (Gutiérrez, 2008; Gutiérrez & Jurow, 2016; Jurow, 2016). In particular, I was interested in how to design teacher learning environments in which teachers can learn how to co-construct a professional vision and a set of pedagogical practices that are anchored in principles of equity and transformative learning. Here the analytical focus is on how pre-service teachers begin to see themselves as members of a teacher community of practice, its tools and practices. In the context of collective activity with peers, teachers began to generate new pedagogical concepts—that is, examined models/assumptions or small "t" theories— that could help guide their practice. More succinctly small "t" theories could be considered as theoretically-informed conjectures that teachers proffer about pedagogy and learning, broadly speaking. I conjectured that (1) providing teachers opportunities to reflect on their own practices and generate pedagogical concepts about what they see and observe will support them in developing deeper understandings of learning and how to design for learning and (2) attending analytically to teachers' processes of generating new pedagogical concepts will make visible how teachers come to see how learning in school becomes bounded or encapsulated from the broader repertoires of non-dominant youths. As such, the following research questions orient this inquiry:

- What is the nature of the reflective practices in this design-learning environment that privileges the generation of new pedagogical conceptualizations of practice?
- How do the reflective practices in this designed learning environment help to organize the generation of new pedagogical conceptualizations of practice?
- What shifts in individual reflective practice were observed across the participating teachers and what mediated these shifts?

Examining these processes across both individual and groups of teachers, I argue, allows us to see how teachers bring together theory and examined practices to form new understandings of the relationship between youths' learning in and out of school and the context of their learning development. The work of this chapter, then, addresses the notion that teacher learning is supported through mediated praxis—a process that "provides new avenues for rethinking what teacher learning looks like, where there are persistent opportunities for reflection and examination of informal theories developed over the course of participants' experiences as students and teachers in apprenticeship" (Gutiérrez & Vossoughi, 2010, p. 101). By focusing on teachers' learning processes in the context of their practice, we can better understand how teachers can re-mediate (Griffin & Cole, 1984; Gutiérrez, Hunter, & Arzubiaga, 2009) previously held practices and dispositions about teaching and learning. Further, as will be illustrated in the data analysis for this chapter, teachers begin to link micro processes of the classroom to larger structural features of the learning environment, including how broader

ideologies about teaching and learning and cultural communities can mediate policies and practices and power structures and exacerbate inequality.

Situating Teacher Learning

To understand why these re-mediating processes are key to transformative teacher learning, it is important to first contextualize their need in the recent history of normative practices in teacher education programs. While studies have attended to how to support teachers' appropriation of a core set of practices (Loewenberg Ball & Forzani, 2009), the present work seeks to show that the field of teacher education could benefit from more focused attention to the processes of learning and development of pre-service teachers, with an eye toward the development of just and expansive notions of what youth and teachers can do and who they can become. To address this understudied aspect of teacher learning, I draw on the previously elaborated framework of transformative agency (Engeström, 2011; Haapasaari, Engeström, & Kerosuo, 2014; Sannino, 2015) to foreground the learning processes that emerge as teachers learn how to "break away" from the normative practices that have constrained both teacher and student learning, such as the traditional divides between the academic skill development and everyday forms of learning, or what Engeström (1991) calls encapsulated forms of schooling.

Transformative agency as a central analytic can help foreground how people respond to contradictions emerging in their everyday activity and, specifically, how teachers contend with the constraints imposed by structures of schooling. In particular, there are five expressions of transformative agency that emerge as people "break away" from everyday contradictions to change their existing systems of activity, as illustrated in Figure 3.1 (Engestrom, 2010). Further, this analytical frame orients how I studied the evolution of teachers' sense-making of their own pedagogical practices—processes that involved reflection and the development of small "t" theories of their own local practices, as well as the attendant approaches that guided this development. Drawing on Engestrom (2010), Table 3.1 provides key excerpts from a focal teacher's cognitive ethnographies, identified through iterative analysis of the salience and frequency of the teacher's expressions of transformative agency[5]. Here, I illustrate how the analytic frame of transformative agency helped make visible the learning processes of teachers as they generated new pedagogical concepts (which I see as theoretically-informed conjectures) and the approaches that they employed as they drew on the mediational tools of the designed teacher education learning environment. In particular, the data show that teachers generated small theoretically-informed conjectures that helped them negotiate or explain contradictions they confronted in their classroom interactions, and envisioned pedagogical approaches, as they employed course theories and other supports, such as critical discourse analysis. An example of a small "t" theory could be: students learn best when they are able to use their home language in the class. This specific small "t" theory has implications for potential pedagogical design across all four design elements. Further, the pedagogical approach that teachers instantiated, as they put this small "t" theory into practice, illuminates which of the four design elements they privilege and found most generative, as shown in Table 3.1.

[5] I coded each of the cognitive ethnographies three times over the course of six months. In cases where the coding did not overlap, I discussed them with a colleague to insure inter-coder agreement.

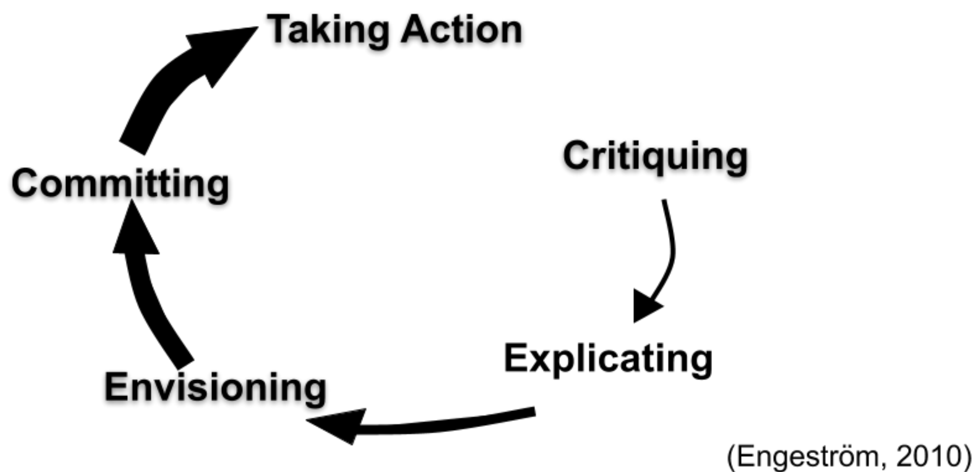

Figure 3.1. Five expressions of transformative agency.

Table 3.1. *Expressions of transformative agency in teachers' cognitive ethnographies.*

Expressions	Selected example text from Cognitive Ethnography
Critiquing teaching practice, ideology, schools, students, mentor teachers	"By asking students if they know why I showed this video in class, I'm communicating to them that there is a specific objective for the video. I wanted to use this video to get students reimagining the classroom and rethinking the use and value of their voice in this space. But because of how I posed the questions and attempted to engage students, I'm worried it may have had the opposite effect." (Shahid CE4, 03/20/2018, para. 18)
Explicating possibility, hope, and/or opportunity for change.	"Ramona is presenting the counterscript here...She is challenging my interpretive lens for the video. And, her doing this, I believe, allows the conversation to go where it does. It gets the class thinking about the purpose of parks and public spaces, arguably more than my questions and platitudes." (Shahid CE6, 04/11/2018, para. 13)
Envisioning new ways of engaging in practice	"I view this intervention as part of a longer dialogue between us. This dialogic nature is a fundamental aspect of the pedagogy I am developing as a teacher. In order for classrooms and schools to really be sites for social change, we must challenge, question, and change traditional educational relationships and the corresponding power dynamics. I do not believe most caring interventions happen

	in one moment, with one fiery speech or perfectly timed reflective question." (Shahid CE3, 03/13/2018, para. 17)
Committing to take action to change the activity	"I will find a way to speak with Juan more in-depth about his relationship to school and this class." (Shahid CE1, 02/20/2018, para. 30)
Taking action to change the activity	"I feel the [mentor teacher] fails to engage with students' counterscripts. I perceived this happening, and eventually could not remain silent, especially when I saw a potential opportunity to bring the scripts together and start engaging in something resembling dialogue between teacher and counterscripts." (Shahid CE5, 03/27/2018, para. 11)

As I conjectured above, the following analysis focuses on how these teachers generate new pedagogical concepts—that is, examined models/assumptions that orient their practice in the context of inquiry in their respective classrooms. Toward this end, I examine what particular kinds of tools and practices are most generative in helping the participating teachers discover, test, and generate new pedagogical conceptualizations of practice. As such, the analytical frame of transformative agency makes visible how such small "t" theories emerge in the context of everyday pedagogical contradictions, as mediational tools support the development of new pedagogical concepts for these teachers.

One rich site for documenting the processes of teacher learning and conceptual development were the teachers' empirically-grounded cognitive ethnographies (CE) (Cole & Engeström, 1993; Gutiérrez & Vossoughi, 2010; Hutchins, 2003) in which they documented and reflected on key concepts of cultural-historical activity theory, their own learning, as well as on youths' learning. The set of CEs for each teacher were systematically coded, identified, and analyzed for shifts in teachers' thinking about the following four design elements of learning environments in this social design-based experiment (Gutiérrez, 2008; 2016; Gutiérrez & Jurow, 2016): task structures, the participation structures, tool use, and discursive practices (Sandoval, 2014). These four design elements were intentionally examined throughout the first and second iterative cycles of the course. In particular, participating teachers were engaged in structured inquiry over the first 10 weeks the course of by examining classroom audio- and video-recordings of classroom interactions to identify the specific design elements in pedagogical practice. Toward the end of the first 10 weeks, three of the teachers volunteered to share audio- and video-recordings of their own classrooms for our joint inquiry. These activities were designed to support teachers in linking cultural-historical theories of learning to these foundations elements of classroom learning where they could serve as tools for addressing pedagogical dilemmas. The analyses reveal that these sessions proved to be consequential in supporting teachers to expand the focus and analysis in their own reflections on their classroom interactions. Broadly, I report on the following two general findings in this chapter:

- Teachers generated new pedagogical conceptualizations informed by the identification of pedagogical dilemmas that emerged in their classroom practice. Specifically, as illustrated in Table 3.4, I observed shifts in how teachers generated pedagogical

conceptualizations that were oriented toward bringing "disengaged" students into the central practice of activity and to the generation of concepts that aimed to disrupt structures that constrained learning and participation. In doing so, in their CEs teachers made explicit connections among discursive practices, power structures, and larger systems of ideology.

- Teachers' identification and response to dilemmas were mediated by a range of tools from our teacher education classroom, the situated demands of the interactional space of their respective classrooms, and other demands from their teacher education experience. Specifically, as summarized in Table 3.4, teachers exhibited a shift from deficit-oriented views on youth practices (e.g. youth not being "engaged") to a focus on their own examined practices, as well as those of their mentor teachers as being relevant to student learning. As I will illustrate shortly, I contend that the participants of my study, in effect, re-mediated previously held assumptions, dispositions, and practices regarding teaching and learning.

Teachers' Pedagogical Conceptualizations

Forty-seven (47) CEs were systematically coded to identify the design elements of learning—discursive practices, participation and task structures, and tools[6] (Sandoval, 2014)—that were present in teachers' reflection on their interactions. These codes were theoretically imported concepts from Sandoval's (2014) design-based conjecture mapping method to provide insight into how teachers intervened in and designed the social infrastructure of their respective classroom learning environments. In addition, the design elements of learning were central concepts in my teacher education class. In the course of attending analytically to these design elements, the following four distinct approaches emerged in the data and found that teachers made sense of, problem-solved, and tested new pedagogical conceptualizations and practices, mediated by what they gleaned from key texts examined in our class: (a) syncretic approaches to learning (Gutiérrez, 2014), (b) acculturation, (c) procedural display (Bloome, Puro, & Theodorou, 1989), and (d) relational approaches to learning.

Before describing these approaches in further detail, I make an analytical note here to describe the relationship between small "t" theories and approaches. As part of the analysis, I term small "t" theories as implicit or explicit applications of ideologies concerning how to organize and support learning in the classroom. For the analysis here, I note the generation of small "t" theories that specifically highlight the design elements of learning (i.e., discursive practices, participation and task structures, and tools). For example, as they appropriated course theories, teachers might enact a syncretic approach to this small "t" theory such that they would design a learning environment that would combine the home language of youth with academic genres (Gutiérrez, 2008). Specifically, the design of the classroom learning environment might be saturated with tools, like music, Youtube videos, or literature, that leverage meaning making and knowledge building that is polylingual (Gutiérrez, Bien, & Selland, 2011), multi-dialectical,

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[6]Discursive practices involve "ways of talking, in the simplest sense"; Participation structures "refers to how participants (e.g., students and teachers) are expected to participate in tasks, the roles and responsibilities participants take on"; Task structures "refers to the structure of the tasks learners are expected to do—their goals, criteria, standards, and so on" (Sandoval, 2014, p. 22); Tools are both material (e.g., books) and ideal (e..g., concepts) and are central elements of human activity (Cole, 1996).

and multi-modal. In this example, the teacher has employed a syncretic approach to leverage a student's home language in the classroom. In particular, the specific design elements of learning that were highlighted in this brief exploration included tools (e.g., literature, music, language) and discourse practices (e.g., polylingual meaning making). I now turn to Table 3.2 to provide definitions for the four approaches that teachers enacted as they put into practice a constellation of small "t" theories.

Table 3.2. *Pedagogical Instantiations to the Design of Classroom Learning Environments.*

Approach	Identification Criteria
Syncretic	learning is reorganized to hybridize everyday genres and academic practices to support youth in the development of expansive forms of learning that can be leveraged across multiple contexts (Gutiérrez, 2014)
Acculturation	teachers conceptualized learning as occurring when people in an interactional environment participated in patterns of behavior in alignment with the goals of the normative space
Procedural Display	general models that largely described interactions by using the theories from the class where teachers "move through and complete the lesson, without necessarily knowing or engaging academic content" (Bloome, Puro, & Theorodou, 1989, p. 272).
Relational	teachers center one-on-one relationship-building with individual youth, emphasizing ways that students can transition from peripheral to central involvement

Focusing on teachers' pedagogical instantiations of theory will help make visible how teachers come to see and design the social infrastructure of the classroom environment. In their reflective practice, these four approaches emerged differentially across the teachers' 47 CEs. In particular, while there were similarities in the types of approaches that the teachers enacted (e.g., syncretic, acculturation, procedural display, and relational), there was a spectrum of the small "t" theories that were generated as they centered on the design elements of learning (e.g., discursive practices, participation and task structures, and tools). As described in Table 3.3, the majority of the syncretic approaches (19 instances) were oriented toward the design of task structures; that is, teachers designed pedagogical conceptualizations, or small "t" theories and activities with flexible sequential steps toward open-ended goals (Erickson, 1982; Sandoval 2014). Overall, teachers employing a syncretic approach drew more often on all four design elements as aspects of their revised practice, with notable attention to task structures and to the discursive (68%) practices of the classroom, compared to the three remaining approaches (i.e., acculturation, procedural display, and relational). Such decisions are important as teachers who focused on the discursive practices of the classroom were more likely proffer explanations about who was and who was not speaking and why. These analyses supported a conjecture I held and examined: that introducing teachers to complex analytical lenses to understand the social infrastructure of the

classroom and the design elements of learning required robust theories of practice and expansive tools to support mediated praxis. Thus, teachers' approaches revealed important details about what they noticed, to what they attended, and why, moves important to understanding the decisions teachers made about pedagogy and student supports.

Table 3.3. *Teachers' Approaches across the Design Elements of Learning*

	Design Elements of Learning			
Approach (instances)	Discursive Practices	Participation Structures	Task Structures	Tools
Syncretic (19 CEs)	13 *(68%)*	11 *(58%)*	15 *(79%)*	13 *(68%)*
Procedural Display (17 CEs)	3 *(18%)*	14 *(82%)*	10 *(59%)*	2 *(12%)*
Relational (9 CEs)	3 *(33%)*	8 *(89%)*	1 *(11%)*	2 *(22%)*
Acculturation (7 CEs)	4 *(57%)*	4 *(57%)*	5 *(71%)*	2 *(29%)*

Across the other three approaches, the teachers were less likely to generate small "t" theories that attended to the broader design elements of learning. For example, the six teachers (17 instances) that generated a procedural display approach largely wrote *descriptions* of, rather than reflections on their pedagogical practices in their CEs, despite their engagement with theories in the class. When teachers enacted the procedural display approach, their small "t" theories tended to describe the participation (82%) and task structures (59%) of the learning environment. For example, Keandre, in his CE#1, demonstrated that his students were engaged in a collective third space by describing when they were engaged in activities where he believed they were exercising leadership. However, in these moments, these were examples of students simply asking questions about how to finish a worksheet. I suggest that when teachers enacted a procedural display approach, they paid less attention to the discursive practices (18%) and tools (12%) in the classroom, because teachers were also expected to study classroom environments in their other teacher education courses using tools like the cognitive ethnography (often called field notes). These ethnographic field notes often privileged the description of more noticeable features of learning such as how youth are working toward mastery of the learning goals, rather than the ways that discourse unfolds or how tools are used in the class. Compared to teachers who employed a syncretic approach, teachers using procedural display approaches did not draw on theory to reflect on their practice or design for future teacher-student interactions; rather, teachers provided more descriptive rather than analytical approaches to their reflection practice.

Four of the teachers' approaches could be considered to be relational in character (as documented in 9 of the CEs) and reported that they focused on supporting youth to feel more comfortable in the learning environment. In their CEs, these teachers frequently envisioned a classroom management technique as a response to what they perceived to be disruptive youth. Moreover, teachers employing relational approaches focused primarily on designing

participation structures (89%) and discursive practices (33%), often involving one-on-one conversations with youth, questioning them about their lack of participation in the classroom. While this approach was observed less frequently (as documented in 9 of the CEs), I conjecture that the four teachers enacting this approach were preoccupied with classroom management techniques, such as a warm demander[7] approach (Hammond, 2014), not an uncommon concern for beginning teachers, particularly as classroom management is often an important focus of teacher education; thus, it is not surprising that this concept was the focus of novice teachers' reflections.

As documented in the analysis of 7 of the CEs, four of the teachers revealed an approach that focused on practices that helped to acculturate students to the normative practices of the classroom. Within this approach, classroom learning was conceptualized as a socializing and assimilating process, where the locus of change resided within individual students, rather than on the social infrastructure of the classroom, a similar focus for those employing a relational approach. In other words, teachers who enacted this approach frequently generated small "t" theories about youths' participation and on-task engaged in which youth were characterized as disengaged from the central classroom activity. Here, teachers' approaches were oriented toward supporting youth to see the classroom (in its currently-designed state) as a space in which they could and should participate in the official space. These teachers primarily focused on examining and designing for making task structures (71%) more explicit for youth. In particular, these teachers examined how discursive practices (57%), such as asking youth questions or providing directives, could foster more central, as opposed to peripheral, participation structures (57%) to get youth on task. I conjecture that the three design elements task structures, participation structures, and discursive practices emerged in an acculturation approach because these specific teachers were primarily in classrooms as student-teachers where they were expected (as their primary responsibility) to support their mentor teachers to ensure the full participation of disengaged youth on the assigned tasks. In addition, I suggest that teachers' histories as students in the K-12 system (Lortie & Clement, 1975) mediated how they supported youths' central participation in learning. One key distinction between the acculturation approach and the syncretic approach is that teachers did not consider the role of youths' everyday cultural practices when envisioning how to support disengaged youth. Instead, the focus of the acculturation approach was centered on the development of practices that socialized students toward normative, extant practices versus new co-constructed practices. I now turn to an examination of how the generation of these approaches shifted over time. It is important to note that I present these approaches to depict the range of ways teachers instantiated their existing and newly acquired understandings. I do intend to suggest that there were particular affordances for some approaches that were closed out in others. For example, a preoccupation with participation in normative practices may limit the development of a mindset or practices that preclude or limit students' participation as co-constructors of knowledge and instructional conversations.

Shifts in Pedagogical Approaches and Theoretically-informed Conjectures

[7] Warm demander has a long and varied history (Delpit, 2013; Hammond, 2014; Kleinfeld, 1972), but was most recently defined as a disposition whereby teachers "expect a great deal of their students, convince them of their own brilliance, and help them to reach their potential in a disciplined and structured environment" (Delpit, 2013).

Table 3.4 summarizes the pedagogical approaches (i.e., syncretic, procedural display, relational, and acculturation) teachers evident across the 47 CE's, with attention to the corresponding elements of learning (i.e., discursive practices, participation and task structures, and tools) for which they had designed in their classroom interactions. Of the 47 cognitive ethnographies produced by the 10 teachers analyzed for this study, I observed a density of syncretic approaches employed by 5 of the teachers (i.e., Shane, Shahid, Brian, Reyna, and Liam). Here again I give emphasis to syncretic approaches, as the analyses reveal that they seem to have more potential for more significant transformation of teachers' practices, with the caveat that the teachers' approaches were still developing and approaches emergent.

Table 3.4. *Pedagogical approaches and the corresponding design elements of learning across all CEs.*

	CE1	CE2	CE3	CE4	CE5	CE6
Shane	$\text{Rel}_{\text{PS, DP}}$ †	$\text{Rel}_{\text{PS, DP}}$	$\text{PD}_{\text{PS, TS}}$	Syn_{TS}	$\text{Syn}_{\text{DP, TS}}$	$\text{Syn}_{\text{PS, DP, TS, T}}$
Shahid	$\text{Acc}_{\text{PS, DP}}$	$\text{Acc}_{\text{DP, TS}}$ †	$\text{Acc}_{\text{DP, TS}}$ †	$\text{Syn}_{\text{PS, DP, T}}$ †	$\text{Syn}_{\text{PS, DP, TS, T}}$ †	$\text{Syn}_{\text{PS, DP, TS, T}}$ †
Brian	–	–	$\text{Syn}_{\text{PS, DP, T}}$ †	$\text{Syn}_{\text{PS, DP, TS, T}}$ †	$\text{Syn}_{\text{DP, TS, T}}$ †	$\text{Syn}_{\text{PS, DP, TS, T}}$ †
Reyna	$\text{PD}_{\text{PS, DP, TS}}$ †	$\text{PD}_{\text{PS, TS}}$°	PD_{PS} $\text{Syn}_{\text{DP, TS}}$°	PD_{PS} $\text{Syn}_{\text{DP, TS}}$°	$\text{Syn}_{\text{PS, DP, TS}}$°	PD_{DP} Syn_{TS}
Liam	$\text{Rel}_{\text{PS, DP, TS}}$	$\text{PD}_{\text{PS, TS, T}}$	$\text{PD}_{\text{PS, TS, T}}$	$\text{Syn}_{\text{PS, TS, T}}$	$\text{Syn}_{\text{TS, T}}$	$\text{Syn}_{\text{TS, T}}$
Jeremiah	PD_{DP} $\text{Syn}_{\text{PS, T}}$	$\text{PD}_{\text{PS, TS}}$	$\text{PD}_{\text{PS, TS}}$	–	–	–
Keandre	$\text{PD}_{\text{PS, DP, TS}}$°	$\text{Acc}_{\text{PS, T}}$ PD_{TS}°	PD_{PS}	–	–	–
Michael	$\text{Acc}_{\text{PS, TS, T}}$	$\text{Acc}_{\text{PS, TS, T}}$	$\text{PD}_{\text{PS, TS}}$	$\text{Rel}_{\text{PS, T}}$	–	–
Joaquin	PD_{PS}	$\text{Acc}_{\text{PS, DP, TS}}$	$\text{Syn}_{\text{PS, DP, T}}$	–	–	–
Diana	Rel_{T}	Rel_{PS} †	Rel_{PS} †	Rel_{PS} †	Rel_{PS} †	PD_{PS} †

Acc = Acculturation, PD = Procedural Display, Rel = Relational, Syn = Syncretic, Subscript (DP = Discursive Practices, PS = Participation Structures, TS = Task Structures, T = Tools); † Audio-recorded, °Video-recorded

It is important to note, however, that the teachers' syncretic approach evolved over the course of the semester, often moving from more technical approaches (e.g., procedural display) to classroom issues to more complex approaches. For instance, a majority of teachers enacted approaches that were oriented toward procedural display in the first three CEs. During the first five weeks of the teacher education course we focused primarily on the design of participation and task structures and I suggest that these course texts activities influenced to what teachers attended in their initial CEs. In addition, I argue that the preponderance of procedural display at the beginning of their reflections on their classroom practices was again partly informed by how teachers made use of course texts that focus on classroom practice; my argument here is that teachers saw these course texts as exemplars for completing the CEs. In addition, after CE2, the

teacher education course was intentionally designed to center the joint-examination of the CEs during class, a practice which opened up opportunities for teachers to make explicit connections to course theories while also making classroom practice the object of analysis rather than sole observation. The design of the teacher education course attempted to peel away teachers' existing and often unexamined small "t" theories about managing classroom behavior and this is why they focused on more technical dimensions and drew on those aspects of the readings; these teachers were not yet open or ready to seeing the complexity of classrooms and learning.

However, teachers' experimentation with and appropriation of a diverse range of tools, including analysis of audio- and video-recording technologies, supported shifts in theory generation, thus deepening teachers' emergent understandings of robust and consequential learning. For example, five of the teachers' accounts exhibited a density of orientations to syncretic approaches as compared to their uptake of other approaches; four focused on discursive practices and were concerned with examining how learning unfolds in classroom talk. After CE3, the teacher education course was intentionally designed to support teachers' experimentation with using critical discourse analysis to examine classroom talk. These four teachers used audio- and video-recordings to analyze how learning unfolded in moment-to-moment interactions. For instance, Shahid, who will be the focus of a case in this chapter, initially recorded one-on-one interviews with youth to investigate possible reasons for youths' peripheral involvement in their classrooms. However, as we investigated approaches to studying classroom discourse in the teacher education class using audio-recording technologies, Shahid began to turn to the broader classroom environment rather than his one-on-one conversations with individual youth to understand how to leverage youths' everyday cultural practice in the academic environment. He was learning to attend to layers of complexity.

Teachers, by and large, moved through cycles of experimentation over the six weeks of reflecting on their practice. In the following section, I examine how the emergence of a syncretic approach to the design of learning environments was mediated by a teacher's appropriation of the key ideas and theories raised in course texts, as well as the use of critical discourse analysis as he examined audio--recordings of his own classroom interactions. My analyses were particularly concerned with the shifts that occurred as teachers took on syncretic approaches when confronted with dilemmas emerging in their interactions with youth and their cooperating teachers, as illustrated in their cognitive ethnographies. In this regard, the framework of transformative agency helped me see how the teachers discovered, tested, and generated small "t" theories and approaches as they identified and worked to resolve dilemmas in their interactions with youth. In the analysis, there were similarities within the types of pedagogical approaches that the teachers envisioned (e.g., syncretic, acculturation, procedural display, and relational) and a spectrum in how they appropriated the design elements of learning (e.g., discursive practices, participation and task structures, and tools). I now turn to one case to illustrate the learning process of one teacher who shifted toward a syncretic approach and the tools that mediated his learning.

A Case of One Teachers' Learning Process

Because of my interest in how to support teachers' engagement with more expansive forms of teacher learning, I documented the learning process of one participating teacher, Shahid, and highlight the evolution of the pedagogical approaches he reported across his 6

cognitive ethnographies. Shahid was an excellent case as he appropriated and employed a variety of tools from the teacher education class to make sense of dilemmas in his interactions with youth in his classroom; in addition, and perhaps more important, Shahid also shifted toward more expansive approaches as he designed his pedagogical interactions. In particular, in his first three CEs, he generated deficit-oriented acculturation approaches about what he perceived as youths' disengagement in the class. As he began to employ tools such as critical discourse analysis of classroom talk and cultural-historical activity theory to engage in reflective practice, Shahid began to generate new pedagogical practices that focused on how everyday and school-based kinds of knowledge could be leveraged to support youth in historicizing their everyday practices, concepts we had discussed in the course. To illustrate his learning process, I present the genesis of the approaches across two of his CEs (CE1, written during the sixth week of the course and CE5, written during week 11), as well as the tools and supports that mediated the development of his learning. I now turn to an overview of Shahid's first CE.

Cognitive Ethnography 1: Javier as "Checked Out"

In his first CE, Shahid generally focused his writing on providing critiques of the practices of one youth, Javier. He described how Javier was frequently "checked out" from the central practices of classroom activity or was "not talking to anyone" during a whole group activity (Shahid CE#1, 02/20/2018). Here, Shahid, in his attempt to critique the practices of the classroom, has an unexamined small "t" theory that positions Javier as disengaged, thus making Javier's behavior the focus of change. However, Shahid's critique is not ill-intentioned but emerges at the crossroads of the competing demands of university coursework, the school practicum site, and his own personal commitments. Shahid is expected, by the mentor teacher, Mr. Stone, to be an observer and watch classroom activity from afar; he is expected to only participate by helping students engage in practices sanctioned by the mentor teacher. On the other hand, as a student in my course (Academic Literacy), he is expected to complete the CE assignment, described in the course syllabus as an opportunity to document and reflect on "interactions with youth, design new tools AND new participation structures that help youth identify AND build on AND amplify their everyday practices." In this regard, the assignment in our class tasked Shahid to engage in practices that went beyond the role of the passive observer and into that of a participant observer (Erickson, 1986).

In addition, as a student concurrently enrolled in another course, "Teaching Adolescents," he is also expected to complete an ethnography of one youth, in which he is to "shadow a student in order to get a sense about what their whole day at school looks like...and [to] conduct an interview about their relationship with school" (Shahid CE #1, 02/20/18, para. 5). This focus is different than the expectations in our course where he is to study and reflect on how learning is unfolding in his interactions with youth. In this first CE, Shahid is attempting to reconcile these competing demands. First, rather than study the broader learning environment and his role in it, Shahid "had hoped a student named Javier would be interested, because the previous week [Shahid] had observed how checked out [Javier] was in class and how he did an excellent job of disappearing and not being noticed by [the mentor teacher]" (Shahid CE#1, 02/20/2018, para. 5). Thus, he wanted to study Javier because of the young person's peripheral involvement in classroom activity; at the outset, like many of the other teachers in our teacher education class, Shahid located the dilemma within an individual student's lack of productivity in the classroom.

Here, Shahid makes the observation that Javier learns best when he is part of the central activity of the classroom.

After describing Javier's practices in the first three sections of the cognitive ethnography, Shahid instead began to reflect on his interaction with Javier, opening up opportunities to see Javier as a productive participant in the class. Shahid's initial description of Javier as "checked out" framed Javier's participation as non-productive. However, upon reflection, Shahid challenged his own assertion, and noted:

> "I first noticed a pattern of him checking out in this class. But as I observed him more, my hunch is that he's not checked out, I think he's just a combination of shy and bored. He generally takes notes and turns in homework, and he even seems to be following along with discussions and activities. He just doesn't really insert himself." (Shahid CE#1, 02/20/2018, para. 27).

Shahid frames some of Javier's practices (e.g., taking notes, turning in homework, following along with discussions) as productive in terms of the demands of the classroom. However, from Shahid's perspective, Javier "doesn't really insert himself " in whole class or small group activities. This distinction, in what counts as productive participation in the classroom, marks a shift in Shahid's small "t" theory regarding Javier's learning, expanding beyond an individual student as non-productive. In particular, Shahid is raising the possibility that there are explanations external to Javier, given that he is "bored."

In this respect, by focusing on new dimensions of classroom life and interaction, Shahid now sees new possibilities for seeing Javier as a productive member of the classroom, which has important implications for where Shahid aims his critique, subsequently. Here, his approach to supporting Javier in the classroom is to understand Javier as a participant in the larger social organization of the classroom environment, seeing Javier in practice. His critique of Javier begins to shift from seeing Javier as a disengaged student to reflecting on a range of explanations for Javier's engagement. By appropriating a central text from our teacher education class, Shahid argued that Javier's participation can be framed as productive irrespective of what is considered normative participation in classroom activities. As Shahid describes,

> "Cortez & Gutierrez write about socio-spatial repertoires, and I would argue Javier is utilizing his repertoire to carve out some space in this classroom (22). I can only guess at what is going on with him, but I do see the behavior that I have observed as a way for him to assert himself in some way in this space that for whatever reason he is not comfortable in, even if this assertion paradoxically involves withdrawing and making himself semi-invisible to others, especially [the mentor teacher]" (Shahid CE#1, 02/20/2018, para. 28).

Cortez & Gutiérrez (2019) argue that youth are engaged in space-making practices of resistance throughout their everyday lives, and Shahid is leveraging this concept to illuminate Javier's participation as "carv[ing] out some space in this class." This shift involves re-defining notions of productivity beyond the normative participation structures of the classroom; in particular, Javier's productivity is now being framed as "assert[ing] himself in some way." Here, Shahid is examining Javier's participation as a response to not being "comfortable," thus enabling Shahid

to make Javier's concerns central to what counts as productive participation in the classroom. The focus of Shahid's critique begins to shift to the ecology of the classroom, away from solely seeing Javier's practices as an individual student not meeting demands placed upon him. This newly formed observation opens up opportunities for Shahid to envision his future interaction with Javier, and future students. Specifically, he begins to generate an acculturating approach that privileges the demands of the classroom. Importantly, the generation of this approach was mediated by the formation of a critique of Javier, classroom practice, and theories on youth learning. His reading of Cortez & Gutiérrez (2019) provides an opening for re-mediating his view of Javier as disengaged. However, Shahid focuses on student learning that aims to support his involvement in the central activity of the classroom, without examining how to change from within the social organization of learning.

As a student teacher, Shahid struggles with his role in the classroom and this largely informs how he envisions, or his pedagogical approach to, future interactions with students. In particular, Shahid examines how his own practices might support Javier as a classroom participant, focusing specifically on discursive practices.

> "So what I think about and notice with all of my interactions with students, but especially my interactions with Javier, are all the questions I didn't ask or ways I didn't push a little more intentionally toward learning outcomes. Part of this is because I'm new to this class and these students, and I'm not strongly invested in the subject of economics. Or I should say as it is generally being taught in this class. But that should be all the more reason for me to interject a little more intentionally, and perhaps push conversations and student interactions in what I believe are more meaningful and challenging directions" (Shahid CE#1, 02/20/2018, para. 26).

Shahid envisions that his role in the classroom is to ask questions that "push a little more intentionally toward learning outcomes," as this way of participating and talking with students, he believes, would bring them into the practice of the classroom, a central focus in the acculturation approach. However, he feels conflicted because he is new to the classroom and he is "not strongly invested in the subject of economics." This critique of the social organization of the classroom, that is economics as it is "generally being taught," illuminates a tension that Shahid is trying to navigate in his interactions with youth in this class. Here, Shahid has shifted his critique from an individual student who does not participate to one that centralizes a particular history of a student's involvement in the learning environment. But, Shahid is conflicted because he does not have a role, in his view, in designing the learning environment beyond the expectations that are placed on him as an observer in his mentor teacher's classroom.

Given that Shahid is not responsible for designing lessons and that he has been relegated to an observer (a peripheral participant himself), this enables and constrains the possibilities for the approaches that he envisions in supporting youth, more broadly, and Javier, more specifically. Thus, Shahid is prepared to "interject a little more intentionally" in one-on-one interactions with youth, but he distances himself from the demands of the economics classroom. Rather than ask questions that aim to bring students into the practice as defined by the mentor teacher, Shahid envisions an approach, a set of discursive practices, that will "push conversations and student interactions in what [Shahid] believe[s] are more meaningful and challenging directions."

Given his role as observer and, I argue, because of his assignment in his other teacher education course, Teaching Adolescents, Shahid does not limit his approach to the confines of the classroom space. Shahid's critiques of his mentor teacher's practices affects how he envisions his future work with Javier and allows him to explore how he can design new types of participation structures that would help him resolve the dilemmas that are emerging within the classroom.

> "Regardless, I want to keep observing how Javier's space rubs up against the larger space being co-created by the majority of students and Mr. Stone. I think this is a good example of the "underlife" or third space that exists in all classrooms (Martinez & Morales, 338). As I have hinted at, Mr. Stone doesn't call on or interact with Javier very often. On my first day observing, Javier left class for the last 10 minutes, and then came back to get his backpack after the bell rang. Neither Mr. Stone or myself even noticed he had been gone. Mr. Stone made an observation along the lines of, "he's just one of those invisible students who doesn't really want to be here." I asked him what he meant, and he told me that Javier won the lottery to get into IHS, and he's an example of a student that the lottery doesn't help, because it doesn't seem like he wants to be here. So we have Mr. Stone's interpretation of Javier and his history, and then we have the beginnings of my observations. I hope to find a way to speak with Javier more in-depth about his relationship to school and this class" (Shahid CE#1, 02/20/2018, para. 30).

Shahid wants to observe Javier more in the classroom and to speak with him "more in-depth about his relationship to school and this class." These are expectations that have been placed on him by the assignment from Teaching Adolescents. In addition, Shahid's description of the classroom's multiple interactional spaces, "Javier's space" and "the larger space being co-created by the majority of students and Mr. Stone," is identified and inspired by using a central concept from our course, the underlife[8] of the classroom (Gutiérrez, Rymes, & Larson, 1995). Of importance, Shahid begins to see these spaces of participation as co-constructed phenomena by all the participants in the classroom. However, what is clear from his description is that the combination of the underlife and the dominant space is perhaps untenable given that Mr. Stone sees Javier as "one of those invisible students who doesn't really want to be here." In this respect, Shahid makes sense of the central dilemma of Javier not participating as a critique of how the mentor teacher designs learning in the classroom. Shahid's appropriation of the course text mediates the development of a pedagogical approach that re-mediates his deficit-oriented view of Javier as disengaged. For Shahid, he hopes that he can learn more from Javier about how to disrupt this dynamic in a one-on-one interaction.

Shahid's "observations" of Javier have illuminated the opposite—that Javier is, indeed, participating in the classroom on his own terms in ways that "paradoxically involve withdrawing and making himself semi-invisible to others." Subsequently, Shahid envisions an approach where he will "speak with Javier more in-depth about his relationship to school and this class." Shahid, here, is commiting to engaging with Javier outside of the dominant participation structure of the economics classroom. Specifically, he is identifying a particular activity that will

[8] Gutiérrez, Rymes, and Larson (1995) define underlife, drawing on Goffman (1961) "as the range of activities people develop to distance themselves from the surrounding institution" (p. 451).

perhaps help him confirm or disconfirm what he has seen in the classroom, in terms of Javier's participation. This is a pedagogical approach that is oriented toward acculturation.

Here Shahid shifted in his explication of a small "t" theory, by envisioning an approach of acculturation. In particular, he initially saw Javier as disengaged, and his appropriation of key course texts helped him see how Javier's participation was mediated by the social organization of the classroom; in this respect, Javier was seen as a productive participant in the classroom, albeit on his own terms. However, Shahid still wants to support Javier in getting more involved in the central activity of the classroom. The shift in his small "t" theory suggests that students learn best when they are able to discuss their history of participation in the classroom. For Shahid, if Javier is able to discuss how this classroom has been unsupportive in his full participation in the classroom, then perhaps, Shahid can help him become a more central participant. However, Shahid is caught in a double bind here, given that the social organization of the classroom is outside the sphere of his influence. This makes sense, because Shahid, as a student teacher, is relegated to peripheral observer in the classroom and he feels like he is unable to take part in designing the larger classroom activity. The next section briefly describes how Shahid shifts in his approach with youth, from interviewing them to designing a classroom activity as he takes on additional responsibilities in the classroom.

Cognitive Ethnography #2-4: "If we could just engage with it the right way"

Across his next three cognitive ethnographies, Shahid engages with youth outside of the dominant space of the classroom and largely spends his time interviewing them. This is a participation structure that involves him asking youth questions either during passing periods or at lunch. In addition, he has drawn key ideas from texts and concepts from our class, Academic Literacy, that help him see students as expansive meaning-makers in the classroom. Part of his exploration over the next three cognitive ethnographies had been to encourage youth to use their voice given their history of involvement in what Shahid and the students perceive as inequitable practices in the classroom.

However, in his fourth cognitive ethnography, Shahid takes on a more central role in designing classroom activity and realizes that he, too, is engaged in practices that reinforce normative participation structures in the classroom. Given that he has spent the last three weeks interviewing students about their history of involvement in what he and the students perceived as unjust practices, Shahid designed a lesson that

> "would inspire some students to share in public what they had shared with me one on one in previous interactions, or just think about how they use their voice in a new way. I wanted to spark a discussion, for students to engage with what I found to be an interesting text and then apply it to their classroom, school, and lives. I saw this as an opportunity to sneak in some cool content and meaning before students had to get back to the drudgery of [classroom practice]" (Shahid CE#4, 03/20/2018, para. 14).

However, he reflected that the lesson he designed—which he hoped would involve students engaged in a whole class discussion after watching a video—was largely driven by his identification of a problem, albeit one that was informed by his interviews. He reflected:

> "I thought [a video] would benefit everyone in this class, if we could just engage with it in the right way. And this is the dilemma when it comes to creating authentic third space. It requires a balance of teacher script and counter script that I believe leans much more towards the counter script side of the equation. And this mini-lesson, I'm realizing, had way too much teacher script" (Shahid CE#4, 03/20/2018, para. 16).

Here, he is developing an approach that involves a "balance of teacher script and counter script" rather than "engag[ing] with [a tool] in the right way." Again, as discussed in previous CEs, Shahid is leveraging another key text from our course to help him reflect on his practice. In this case, he is engaging with the concept of thirdspace[9] (Gutiérrez, Rymes, & Larson, 1995) in order to design for expansive task structures, discursive practices, tools, and participation structures. His reflection in subsequent cognitive ethnographies involve him grappling with the emergence of this phenomena, as he tries to design classroom activities that involve co-constructing ideas with youth. This is a departure from his initial approach of identifying "disengaged" students in the classroom, interviewing them outside of class, and trying to empower them to stand up against their teachers. These were theories of acculturation, wherein he was interested in youth rising up against a problem that he thought was present. As we will see in the next section, he begins to localize his approaches within a larger ecology that includes youths' everyday practices beyond their involvement in school.

Cognitive Ethnography 5: "Why can't you call it a threat?"

As he expressed in his previous four cognitive ethnographies, Shahid frequently critiqued the practices of youth and the mentor teachers in the classroom. But, he began to transition from his observer role and started to critique his own classroom practice, inspiring the development of small "t" theories and pedagogical approaches that involved building on youths' everyday cultural practices. He frequently leveraged concepts from key texts from our teacher education class, deepening previously examined concepts and appropriating them in the service of his classroom practices and dilemmas emerging therein. Most important, he began to focus centrallyon how learning unfolded in classroom talk. In this section, I focus on the approaches that he developed as a result of intervening in a lesson that another mentor teacher, Ms. Turner, had designed. In this lesson, he made it clear that he wanted to be more involved in the daily classroom practices beyond facilitator and observer. In his CE#4, he had committed to designing for practices that combined the teacher and student counterscripts[10] emerging in the class, and in his fifth cognitive ethnography he begins to put this approach into practice. In this example, there are a multitude of tools being leveraged in order to bring more into focus the social infrastructure of the learning environment.

To set the stage, Shahid selected an audio clip of 5 minutes to analyze, but for the purposes of this chapter I selected two relevant segments in this five minute clip that build on

[9]Third space, as presented to the participants of this study, is defined as instances "where teacher and student scripts—the formal and informal, the official and unofficial spaces of the learning environment—intersect, creating the potential for authentic interaction and a shift in the social organization of learning and what counts as knowledge" (Gutiérrez, 2008, p. 152). This definition necessarily centers the "counterscripts" (Gutiérrez, Rymes, & Larson, 1995) of young learners as they push against the official scripts of teachers and institutions.

[10] See footnote 5.

one another. The audio clip was transcribed by Shahid and is included below, as written in Shahid's cognitive ethnography. According to Shahid, this clip begins midway through the class and Shahid's mentor teacher is standing at the whiteboard asking students to define subpoena.

Excerpt 3.1. *The Emergence of the Counterscript.*

1	Ms. Turner	It is basically a requirement for you to produce something. Whether that's for you to produce your testimony or produce documents or whatever is being requested by this court order.
2	Jaali	Why can't you just call it a threat?
3	Ms. Turner	OK, so that's a subpoena. What, Jaali?
4	Jaali	Why can't you just call it a threat?
5	Ms. Turner	A threat for information?
6	Jaali	Mmm hmm.
7	Ms. Turner	You could call it a threat if you want, yeah.
8	Jaali	But why not call it a threat? (Shahid CE#5, 03/27/2018, para. 16)

Shahid explained that this clip represents just one of several moments throughout the lesson that exemplified Ms. Turner's resistance to a student, Jaali's, repeated challenges to "the teacher's rules for participation" (p. 447), what Gutiérrez, Rymes, and Larson (1995) call counterscripts. He remarked:

> "Jaali has engaged with the mentor teacher's script and offered a challenge. His question is a good one. Why is it wrong to say threat? He perceives her using softer words for what he perceives as a threat, and he wants to know why. She is slightly dismissive of this question. She says, "You could call it a threat if you want," which I think subtly suggests that there is something wrong with this understanding. I think Jaali interprets it this way too, because he asks a third time, "But why not call it a threat?" (Shahid CE#5, 03/27/2018, para. 17).

For Shahid, this is an important moment in the discussion because Jaali, who is frequently reprimanded for his behavior in the classroom, has offered a challenge to the teacher script. Shahid writes in his CE, "his question is a good one. Why is it wrong to say threat? He perceives her using softer words for what he perceives as a threat." Here, Shahid sees the possibilities of legitimizing Jaali's questions in opening up discussion beyond the official script. Shahid, consequential learning happens when students' questions are seen as generative. In addition, he is noting how the teacher maintains the official script, even after being asked the same question three times. He says, "She is slightly dismissive of his question." We see how Shahid is adeptly observing how student inquiry, in this case, questioning the definition of legal discourse, can in effect be suppressed.

Following this exchange, Shahid expressed that in the moment he "could not remain silent, especially when [he] saw a potential opportunity to bring the scripts together and start engaging in something resembling dialogue between teacher and counterscripts" (Shahid CE#5,

03/27/2018, para. 11). Here, Shahid is trying to find a balance between teacher script and counterscript toward the thirdspace.

Excerpt 3.2. *Shahid Co-Constructs with Youth.*

9	Shahid	Have you ever heard...Have you ever heard of legalese?...Have you ever heard of legalese?
10		(Laughter, side chatter)
11	Shahid	Legalese? It's a separate language. That's why lawyers cost so much. They go to school to learn a whole new language, right? And it's called legalese.(begins writing on board).
12	Mariana	Whoa!
13	Ben	Legalese?
14	Lisa	Instead of legalese it's legalese?
15	Shahid	'Legal' : 'ese'
16	Mariana	Oh wow.
17	Ben	Ohhhh I get it.
18		(Laughter)
19	Lisa	Legalese!
20	Shahid	And, so. So you're right, a subpoena's a threat.
21		(Laughter)
22	Shahid	It's a threat. But they call it this so that you have to pay a lawyer… and so it doesn't sound so… threatening.
23	Ms. Turner	Right.
24	Kyrie	But, can't you technically represent yourself?
25	Shahid	You could. And then they say subpoena and you don't know what it means and then you go to jail.
26	Kyrie	But if you do know what it means?
27	Sharif	But if you know what it means. Right, yeah.
28	Lisa	Could you like I'm filing a subpoena to get my money?

(Shahid CE#5, 03/27/2018, para. 19)

In his cognitive ethnography, Shahid explains that he wanted "to more explicitly surface what the students are interested in by asking a surprising and seemingly unrelated question" (Shahid CE#5, 03/27/2018, para. 20) moving the conversation, his participation, and the participation of the class into a new terrain. He further expands on why he intervened:

> "I have perceived Jaali's resistance or challenging of [the mentor teacher] as engagement, and so I attempt to intervene so his engagement is not reprimanded or diminished. It's interesting that Jaali's engagement seems to be coming from a place of resistance. He is sort of poking at [the mentor teacher], testing her patience by challenging her [...] word usage. But in doing so, he raises a pretty interesting topic of discussion that actually brings in other students to the conversation. Jaali did that. I just responded to it." (Shahid CE#5, 03/27/2018, para. 21)

Of importance, Shahid has transitioned to the role of participant-observer in which the function of his approach, borrowing from Fred Erickson (2004), is tactical. Shahid notes in his reflection, "I attempt to intervene so Jaali's engagement is not reprimanded or diminished." Shahid is working simultaneously to interrupt the dominant script (Gutiérrez, Baquedano-Lopez, & Tejeda, 1999), as well as to support youths' agency in meaningful, playful, and critical engagement, as they unmask the power implicit in legal discourse. In effect, he challenges the "softer words" that the mentor teacher has proposed in her definition. Shahid's, Jaali's, and the students' interventions expand individual actions toward the development of new forms of collective activity. I argue that this a form of transformative agency, as the students and Shahid are collectively pushing on the role of institutions as legitimating bodies for how we speak, act, and make new demands.

Shahid continues to reflect on this interaction, generating new approaches concerning the role of tools and how they mediate the co-construction of participation in the classroom. In particular, he noted the role that affect, as a tool, plays in the creation of the third space (Gutiérrez, 2008). Before Jaali's previously examined exchange with Ms. Turner, Shahid described how Jaali posed counterscripts as he joked about the misspelling of the word, subpoena. As Ms. Turner wrote "subpeona" on the board, Jaali joked about the spelling of the word, prompting other students to participate. Shahid muses about the reasons behind their engagement with word and the teacher's response:

> "What I find revealing in this interaction is Jaali's evolving engagement with the teacher script. He starts off interacting with Ms. Turner's script, but she doesn't see it as such. He points out a spelling error, but she just shuts it down. Honestly, it doesn't much matter if he's consciously or unconsciously pointing out a spelling error, or not at all. He may just be pointing out that it's 'subpeona' is kind of funny word, regardless of where the 'o' and 'e' are (It has a 'b' and a 'p' right next to each other, and it kind of sounds like 'penis'!).

While these are counterscripts, Shahid sees their potential in fostering a collegial and playful atmosphere in the class that can in effect build community, transforming the dialogue from the teacher script to the thirdspace. He is seeing youths' practices here as opportunities for the whole class to jointly make meaning around a misspelled word that is ripe with potential.

> "Wong & Peña challenge teachers to not see laughter as loss of control, "to recognize the humanization that occurs in joy by means of collective laughter" (2017, p.133). It's not that she totally shuts Jaali down, either. But she noticeably keeps her distance, and situates herself as separate from not only the counterscript, but the laughter and joy - however silly - of her students. This is counterproductive to the creation of community which I believe is the essential foundation for the creation of third space, and which I see as the essential dilemma of this particular classroom space." (Shahid CE#5, 03/27/2018, para. 25).

For Shahid, joy and laughter shift the affective tenor of the learning environment in ways that bring the teacher and counterscript together in "the creation of community." Shahid observes that perhaps Ms. Turner does not see the utility of the youths' practices in achieving her learning

goal: defining the word subpoena, viewing students' contributions as potential challenges to her teacher script and as hindrances to the main classroom activity. During this interaction, Shahid also began to envision how, in contrast, he might design for participation structures and discursive practices that create opportunities to co-construct meaning with youth. He identifies the potential of seeing youths' questions as connected to larger concerns in their everyday lives. He describes why he decided to ask, "Have you ever heard of legalese?"

> "It's interesting because in the moment, this felt more urgent than it comes across in the transcript or audio. I saw students sort of perk up and start listening, there was a certain buzz, and I saw Ms. Turner sort of missing the point of Jaali's question. Or at least the implication that I interpreted from his question. I interpret his repeated questioning of why we don't just call it a threat as directed at Ms. Turner, but also at the legal system. In Jaali's question, I'm hearing him also ask, "Why use these goofy words? What purpose do they serve?" And I don't think this reading is totally baseless. I saw genuine student interest emerging, I saw a portal into something resembling third space, and it was exciting. I wanted to see what would happen if I attempted to maintain that energy. So I interjected by posing another question to the class inspired by Jaali's: "Have you ever heard of legalese?"" (Shahid CE#5, 03/27/2018, para. 30)

After listening to the audio and generating the transcript, artifacts that were central for mediated praxis, Shahid examines the multiple ways Jaali's questions can be interpreted. For Shahid, these are not solely challenges to the teacher script, but also to the larger "legal system." Importantly, Shahid noticed that the "students sort of perk up and start listening [and] there was a certain buzz" as Jaali raised these questions and he felt a sense of urgency to build on the energy that was being mobilized in the class. As Shahid "attempted to maintain that energy," he is envisioning how horizontal forms of learning could emerge in the class, as well as how they could be leveraged in classroom discourse to historicize everyday words. Shahid's intervention enabled him to develop a new theoretically-informed conjecture in which he identifies learning as bringing together forms of participation and discursive practices in classroom discussion to question the legal system. At the end of this reflection, he began to imagine how he might design for future activities that built on this moment if he were the teacher of record in this class. Again, Shahid feels constrained by his role in the classroom, yet it provides a context for him to imagine how he might design his classroom of the future.

For example, in his CE6, Shahid had managed to transition to a more central role in designing activities in the class. However, he struggled with surfacing the collective energy around a central topic of exploration that he saw in the legalese example in CE5. In his sixth CE, he discusses what he designed in this class not as failures, but as moments for future inquiry. In chapter 4, I examine how he takes this up in his collaboration with a peer in our teacher education class. Before turning to that analysis, I briefly discuss the implications of Shahid's learning process, while also highlighting the learning of other participating teachers in this study, including points of overlap and distinction.

Discussion

This chapter illuminated distinct patterns for how teachers appropriated the tools from the teacher education course in their reflections on practice. Teacher learning, in this ecology, was mediated by the introduction of new theories of learning, tools that supported mediated praxis (e.g., cognitive ethnography), as well as critical discourse analysis of audio- and video-recordings of their interactions with youth. In particular, the tools from the teacher education classroom supported teachers in developing more expansive understandings about how to combine the everyday with the academic in the design of consequential learning.

Shahid's learning process was made visible through the use of the cognitive ethnography, as it was "a site for sense making, synthesis, reflection, and mediated praxis…[helping] to refute long-held dichotomies taken up in teacher education" (Gutiérrez & Vossoughi, 2010, p. 104). As I have highlighted, Shahid appropriated specific theories and tools from our class to make sense of dilemmas that emerged in his practice with youth, thus enabling and constraining opportunities for his own small "t" theory generation and pedagogical approaches. In my previous discussion of Shahid's first CE, I highlight how one particular course text (Cortez & Gutiérrez, 2019) opened up an opportunity for him to shift from focusing on an individual student, Javier, to one that helped Shahid consider the history of Javier's involvement in classroom activity. In this respect, important aspects of the broader learning ecology became central units of analysis that enabled and constrained Shahid's conceptualizations of learning and subsequent design efforts, supporting the development of his pedagogical imagination and the possibilities for transforming systems of activity. Of importance here, the concepts in these texts not only helped Shahid critique and identify dilemmas of practice, but they helped him envision and organize for future opportunities with youth. In this latter respect, Shahid is foregrounding his hopes for his future classroom and rooting his analysis and generative critique in the histories of classroom activity, more broadly.

Further, Shahid learned how to co-construct theoretically-informed conjectures about teaching and learning and pedagogical approaches as he responded to the context of the classroom interaction, as well as the demands of the teacher education courses. Here, I foreground how Shahid learned how to critique and break away from dominant pedagogical practices that emphasize perceived deficits in youth, critical for the development of transformative agency. I argue that the tools did not solely mediate how Shahid responded to and generated pedagogical approaches, it was Shahid's appropriation of these tools that supported his inquiry, that is, his own agency and sensibilities were key. As with the other teachers, Shahid's learning was situated across a broader teacher learning ecology such that the constraints faced in his classroom interactions mediated how the tools were taken up, specifically in the context of his teaching site.

Throughout this chapter, I have examined howShahid contended with rupturing the encapsulation of schooling. In my discussion of his fifth CE, I highlight how he paid special attention to a student's question regarding the use of "threat" instead of "subpoena." This particular interaction opened up an opportunity for Shahid to see a theory in practice, especially as he leveraged a counterscript and made explicit connections to youths' everyday cultural practices, including everyday language. But more importantly, my analysis shows that Shahid was making a shift toward understanding the pedagogical and learning potential of privileging the everyday toward socio-political ends, by surfacing relations of power and justice with his students.

A transformative analytical frame helped to make visible the evolution of Shahid's shifts in his pedagogical approaches—with the transformative agency framework—in particular, his response to disturbances and contradictions that emerged in the classroom. As Shahid reflected on his classroom practice, he enacted expressions of transformative agency as he questioned and retooled practices and concepts from our teacher education classroom. Early in his reflections, Shahid critiqued youths' and his mentor teachers' practices, maintaining understandings about the social organization of learning that were oriented toward ensuring disengaged youths' full participation in the classroom activity. When relegated to an observer role as a student teacher, Shahid felt ill-equipped to support the design of the learning environment or to contribute to it. Therefore, he initially focused on approaches that supported his role in supporting his cooperating teacher's expectations to identify and manage disengaged youths' participation. However, through an analysis of classroom discourse and the appropriation of new concepts from course readings, Shahid was able to generate new theoretically-informed and pedagogical approaches that helped him take a more active role in the design of classroom learning; his role here was not solely in the planning of the lesson, but in the actual moment-to-moment interactions of classroom discourse. As he analyzed his interactions from this perspective, he was able to envision, to commit , and to take action on a pedagogical approach that aimed at leveraging youths' everyday understanding of the legal system, as one example.. Here, his reflection served as impetus for the creation of a small "t" theory about the possibility of seeing youths' contributions as resources within the context of whole group discussion. Through this process of reflection and experimentation, I claim, Shahid learned to co-construct meaning with youth, re-imagine his role as a student teacher, and to appropriate various mediational tools to generate new conceptual understandings of the social organization of learning in the classroom.

While this chapter focused mostly on Shahid's reflections as he generated new understandings and pedagogical approaches, it is important to note that four other participants (out of the 10 in this study) also generated syncretic approaches to the design of learning environments. Of note, as briefly discussed earlier in this chapter, Shane, along with other teachers generated similar pedagogical approaches toward task structures, discursive practices, and tools across her latter three CEs. While the specific pedagogical interactions and reflections were contextually different, these four teachers were able to design learning environments that leveraged the everyday resources that youth bring into the classroom. Like Shahid, these teachers initially critiqued the practices of youth, their mentor teachers, and school officials in their early reflections, making it more difficult for them to develop a focus about how learning should be organized in the classroom. Over the course of their reflections, their explanations and pedagogical approaches shifted and as they worked jointly in reflective practices and appropriated the mediational tools of the teacher education classroom. I propose that the tools of our course, the cultural-historical theories on learning as well as our collective examination of classroom discourse, helped to mediate the shifts in the participating teachers' approaches to designing for learning in the classroom. But, more importantly, this process of reflection created opportunities for teachers to learn how to design learning environments that were anchored in principles of equity and justice, as these became central themes of teacher discussions and work.

As described earlier, this analysis helped to make visible how teachers learned to examine previously held small "t" theories and develop pedagogical approaches to guide their future interactions with youth. This chapter has potential for illuminating how to design teacher learning ecologies such that teachers learn how to respond to the local context of the learning

environment and how to use a range of mediational tools that support their professional growth, as well as their students' learning.. Furthermore, I argue that designing for teacher learning requires intentionality, with respect to the tools, theories, and the role of pedagogical practice that help to shape the context of development for teachers.. In this regard, university-based teacher education learning environments need to make explicit connections across a broader teacher learning ecology in order to make visible the the competing demands that pre-service teachers face. As made clear above with Shahid's learning, the role of his teaching placement, mentor teacher, and youth shaped his learning and pedagogical approaches in powerful ways–that were often in competition with his course learning. In making visible teachers' learning processes, as well as the tools that mediated such learning, this chapter underscores that teacher learning ecologies must be designed with intentionality so that teachers can be designers of their own futures and professional practice and this requires more alignment and symmetry across the various practices and settings of teacher education.

Chapter 4: Centering Collaborative Reflection

This chapter builds upon Chapter 3's exploration of an individual teacher's practice of generating new pedagogical concepts as part of his individual reflection and continues to map the trajectory of Shahid's learning in our teacher education classroom. Here, I center the collaboration between Shahid and his peer Brian to illustrate how this joint practice offers further opportunities for teachers to deepen their understanding of how learning occurs in their own practice. In particular, I argue that the opportunity for students to reflect on what they were learning in relation to what they already knew about teaching allowed a unique opportunity to proffer understandings of theory in context, to examine and revise their understandings, and to jointly consider how to adequately represent valued pedagogical practices. Specifically, I draw on Stone and Gutiérrez (2007) in my design for collaboration as teachers engaged in collective problem presentation and problem-solving, allowing them to rise to the concrete in their practice (Engeström, 1991). In this regard, this chapter will illuminate that teachers often need each other's insights and analyses in order to see opportunities for transforming practice; they need many-eyes[11] and mediation to co-construct new ways of seeing. I focused my analysis on the collective practices of teachers to answer the following research questions: What is the nature of the reflective practices in this design-learning environment that privileges collaborative practice? How do the reflective practices in this designed learning environment help to organize collaborative practice? What shifts in reflective practice were observed across the participating teachers and what mediated these shifts?

In the following, I examine data collected in the third iteration cycle of the course where student teachers, who were now tasked with collaboratively writing a culminating reflective paper in which they jointly examined and reflected on their mutual practices by using their collective CEs as empirical evidence and course theories as analytical tools. At this point in the design of the course, teachers had been attending class for twelve weeks, had completed practicum work, and had, collectively as a class, generated a corpus of 47 Cognitive Ethnographies (CE). During this third iteration cycle, student teachers were tasked with assembling the CEs that they had written in order to inductively generate a set of codes that would then be used to analyze their reflections for their collective reflection paper. During this exercise of generating codes, teachers looked for instances of practice that they felt reflected theories from the course. In what follows, I had proffered the following based on my analysis of one dyad, Shahid's and Brian's joint reflection, in this third iteration cycle: (1) When teachers were immersed in joint inquiry, mediated by a range of tools, feedback, and theories, they would have opportunities to deepen their understanding of how to support learning and its design; (2) When teachers experimented with course theories, they would robustly negotiate how to adequately represent and resolve contestations over their valued pedagogical practices; and (3) When teachers privilege the social organization of learning in their joint reflection, they would imagine how they could leverage the everyday cultural practices of youth within the context of the classroom. A focus on the social organization of learning, here the four design elements of learning (e.g., discursive practices, participation, task structures, tools), would support, I conjectured, teachers' understanding of the constitution and complex structures of learning

[11] I am inspired by Vossoughi's notion of many-hands in describing joint-activity in making and tinkering spaces.

environments, including spaces in which students' everyday knowledge could be better leveraged.

In this chapter, then, I begin with a brief discussion of the key theories informing the design, the third iteration cycle of the course, and students' learning. In doing so, I explicate my justification for focusing on the joint reflection practices of teachers and further propose using Goodwin's (2007) participation frameworks as an analytic for understanding how teachers learn to see valued classroom practices, as mediated by theory, collaborative tools, and teachers' intentional participation. This chapter will conclude with a discussion and implications of designing for and deeply examining collaborative reflection practices in the teacher education classroom.

Designing for Collaborative Reflection

To support teachers in sustained joint inquiry in identifying and examining valued pedagogical practices, I designed a third iteration cycle to my teacher education course that drew on ethnographic tools to foster collaborative participation. This cycle primarily involved the creation of a jointly-authored data-driven research report that was meant to leverage their collective reflections of practice (documented in their CEs) and the theories of this course. In this respect, I designed the teacher education classroom to foster a collective reflection of practice.

Centering Reflection

In this activity of joint inquiry, teachers were expected to return to their CEs and analyze their previously written understandings. As the teachers became more familiar with each other's practice, the teachers would then be able to engage in a collective mediated reflection that, I conjectured, would be distinct from individual reflection practices and potentially richer. As I will elucidate in this chapter, part of novice teachers' learning involves the development of a professional vision (Goodwin, 1994), such as being socialized into noticing valued classroom practices (van Es & Sherin, 2002). To support the generation of novice teachers' pedagogical and instructional models, it is important that they were presented with opportunities to individually and jointly generate tools of reflection using a variety of representational media and newly appropriated theory. In this regard, learning how to notice and see a valued pedagogical practice was a co-constructed phenomenon that involved a complex negotiation how such pedagogical practices are made visible with specific tools. Hall & Horn (2012) examined the co-construction of representational adequacy in the context of in-service teacher mathematics study groups and this chapter aims to build on this work in the context of a pre-service teacher education classroom, by specifically highlighting how teachers learn to use a variety of representational media to highlight, contest, and generate new understandings of valued pedagogical practices.

The design of this cycle is animated by scholarship that has centered reflection in mediated praxis. Gutiérrez and Vossoughi (2010) explain: "Such reflection is necessary for teachers to develop a coherent and an orienting framework for teaching and learning that has both heuristic and explanatory power" (p.101). In their work, the CEs–as tools of mediated praxis–were instrumental as sites where novice teachers not only documented their practice but, with guidance from the teacher educator and researcher, also examined the ideologies and theories underlying practice, engaged with held assumptions, and began to reimagine practice. As with Gutiérrez and Vossoughi (2010), the third cycle of my course and study sought to

leverage the CE as a valuable resource for reflective practice. What distinguishes my study from many studies in teacher education is the use of the CE as tool that is centered in joint activity between teachers[12]. In this latter respect, I examine the co-operative action (Goodwin, 2017) of participating teachers as they use digital tools to leverage their CEs to create adequate representations of valued classroom practices. Their joint reflection, a form of co-operative action, illustrates Goodwin's (2017) notion of laminated action that involves the combination of various "materials with quite different properties (e.g., language and expressive prosody [and written text]) [...] into an arrangement where each elaborates the other to create a form of action not found in any of its components in isolation" (p. 110). In this respect, this chapter analyzes how teachers combine a variety of texts, representations, and theories to create new reflective practices that supported how they see and imagine consequential forms of learning.

Tools of reflection

As described in Chapter 3, the participating teachers reflected on their practice using the Cognitive Ethnographies (CE) in the second cycle, primarily focusing on their own individual practices. In this cycle of learning, most teachers were no longer writing cognitive ethnographies and they were expected to use the remaining five weeks to jointly examine the assumptions undergirding the pedagogical models that they developed in their reflections on practice. Toward this end, I introduced a collaborative digital tool (via google drive) for digital dialog and collaboration that I termed, the *Digital Dialogic Studio* (DDS), which served as a site for joint inquiry where teachers proposed candidate theories, codes, and excerpts from their CEs for reflection and analysis. In addition to the DDS, and in order to support teachers in the participation of practices of joint reflection and the appropriation of course theories, the following mediational tools were employed:

- Cognitive ethnographies
- Shared online google documents
- Course theories
- Design elements of the social infrastructure of the classroom (e.g., discursive practices, participation and task structures, and tools)
- Audio- and video-recordings
- My feedback

As teachers collaborated with one another during this third cycle of the teacher education classroom, I designed activities to support teachers to see each other's everyday pedagogical practices as important resources for the development of new conceptual understandings. To get there, teachers drew on their documented practice and jointly reflected on their instructional practices to better understand how they collectively engaged in practices that sought to leverage youths' everyday cultural practices in the classroom.

After they completed their CEs, and as part of this third iteration cycle, participating teachers were asked to jointly-identify instances in their CEs where they believed that they had leveraged youths' everyday cultural practices, where they wanted a deeper understanding of

[12] In the courses studied by Gutiérrez and Vossoughi (2010), the teachers wrote collaborative research papers in which they pooled their CEs, as well as additional ones provided by peers.

these attendant practices, and where they felt that their practices needed more development[13]. To make sense of what they were observing in their practices, they were then asked to generate codes that provided labels for concepts that linked their practices with theories from the class. The process of identifying their own key practices and linking these practices with relevant theories was a consequential design practice that, as I will show, proved generative for deepening all of the novice teachers' understanding, albeit to varying degrees, of how to intervene in the development of their own practices. Further, in contrast to more commonplace teacher education practices, this process was organized with the expectation of joint activity around a shared practice, in which teachers could benefit from one others' expertise (as opposed to the sole expertise of a teacher educator).

The tools that were made available to teachers were taken up differently across the dyads of collaboration. Four of the five dyads used the DDS to collectively code their CEs; the remaining dyad used another shared document online to organize their joint reflection and were still writing their CEs up to the fourteenth week of our course. Four of the dyads used the DDS outside of the teacher education class and all of the dyads used the DDS or their shared document during class workshop time. All of the shared documents that were created showed various coding schemes, research questions, and CE references, as expected. In particular, three dyads focused their codes on the construct of third space[14], a primary conceptual tool that was discussed throughout the course. Each of the other two groups focused more broadly on one of the following concepts: collaboration and play. Finally, all of the groups focused their co-operative action around literacy development and the role of youths' everyday cultural practices in that process.

My analysis of teachers' joint reflection is inspired by Goodwin's (2017) notion of co-operative action as it makes visible the changes in reflective activity, not just in how individuals' actions are laminated and built on one another, but also how the very motive toward which the reflective activity is oriented evolves as a result of joint-action. Cooperation is not understood here as action that is mutually beneficial toward a pre-defined goal, rather, co-operation illuminates "a systematic mechanism for progressive accumulation with modification on all scales, from chains of local utterances, through tools, to the unfolding differentiation through time of human social groups" (Goodwin, 2017, p. 1). Co-operative action, then, is the process by which people co-construct action, "inhabit each other's action" through various tools and speech acts and, at least in the context of joint reflection, create novel forms of reflective activity that support the evolution of teachers' pedagogical imagination (Gutiérrez, 2008).

To analyze how teachers engage in joint reflection, this chapter employs Goodwin's (2007) construct of participation frameworks. Specifically, Goodwin's participation frameworks help illuminate the interactional contributions of participating teachers' engagement in

[13] While not tasked with doing so, several dyads generated questions that guided their joint inquiry. I made available tools from previous classes, including previous written assignments where teachers had generated questions to guide their joint reflection.

[14] *Third space*, as presented to the participants of this study, is defined as instances "where teacher and student scripts—the formal and informal, the official and unofficial spaces of the learning environment—intersect, creating the potential for authentic interaction and a shift in the social organization of learning and what counts as knowledge" (Gutiérrez, 2008, p. 152). This definition necessarily centers the "counterscripts" (Gutiérrez, Rymes, & Larson, 1995) of young learners as they push against the official scripts of teachers and institutions.

face-to-face and online activity over the course of the third cycle of this study. In their interactions, teachers appropriated a variety of epistemic tools, such as course theories and their written reflections, to make visible valued pedagogical practices. As they jointly reflected, teachers' engagements involved a variety of stances that mediated how they made sense of valued pedagogical practices and were positioned relative to one another. I draw on the following stances, as cited in Philip, Olivares-Pasillas, & Rocha (2016).

1. *"Instrumental stances* involve placing or drawing attention to entities necessary for joint meaning making.
2. *Epistemic stances* comprise "the knowledge claims that [participants] assert, contest, and defend in and through turns-at-talk and sequences of interaction" (Heritage, 2013, p. 370).
3. *Affective stances* comprise the "emotions by the individual and toward others that are generated […] by the organization of participation in interaction" (Goodwin, 2007, p. 70–71).
4. *Cooperative stances* toward other participants and the environment do work to demonstrate willingness to sustain and help construct activities in progress.
5. *Moral stances* involve "acting in such a way as to reveal to others that the actor can be trusted to assume the alignments and do the cognitive work required for the appropriate accomplishment of the collaborative tasks they are pursuing in concert with each other" (Goodwin, 2007, p. 70–71)."

(Philip, Olivares-Pasillas, & Rocha, 2016, p. 364)

I found it productive to draw on Philip et al's elaboration of stances as they emerged in co-operative action.

In the following, I highlight the digital and face-to-face interactions, with the use of the DDS tool, between one dyad of student teachers: Shahid and Brian. I selected this group because of the robust and dynamic collaborations I observed during the data reduction phase of my study, illuminating the potential of what could take place among teachers. Through an analysis of Shahid and Brian's joint participation, I hoped to gain a deep understanding of collaborative reflection that would help me develop design principles that could be applied to the teacher education learning environments. This practice was particularly salient in my analysis of Shahid and Brian and therefore they became the focus of my analysis. In addition, Shahid and Brian's reflections were frequently used throughout the course and became objects of joint reflection in our class, as will be described below.

Building Distributed Expertise

My findings broadly document shifts in how teachers represented their valued pedagogical practices over the course of their joint inquiry. In particular, this chapter shows that teachers began to focus on the social organization of learning in the classroom. In this regard, it is important to note that my findings also show that the 10 participating teachers appropriated theory to help inform the design of learning environments that leveraged youths' everyday cultural practices. The findings presented here specifically attend to the ways that teachers, with a focus on Shahid and Brian, engaged in joint reflections on their practice. Generally speaking,

the social organization of learning of my class fostered a distribution of activity around reflection. In particular, individual contributions in collaborations were not symmetrical, qualitatively speaking. They brought different expertise to their joint activity, based on their own reflections of practice that they engaged in during the second cycle of the teacher education course. This distribution of labor and expertise will emerge as significant for the types of collective reflection that will be examined later in this chapter.

Experimentation with Course Theories

In what follows, I present an analysis of Shahid's and Ben's experimentation with course theories. In particular, this section is an examination of how Shahid and Brian are collaboratively making sense of theory in their attempts to define it and elaborate on it as they represented valued pedagogical practices. I define this practice of experimenting with theory as a dialogue (in this case digitized) between teachers that results in the appropriation of existing theory and the generation of new conceptual understandings, while simultaneously opening up new possibilities for reflective activity.

In the collaborative space of the Digital Dialogic Studio (DDS), Shahid's early participation consisted of proposing candidate codes in analyzing his and Ben's collective interactions that were documented in their CEs. My analysis of the history of revisions of the DDS (housed in a shared google sheet) revealed that he drew widely from theories from our course and other courses, often with a summary of his understanding of the theory and a quote from the text. In Excerpt 4.1 we see that he initially draws from a course reading in our class, Antero Garcia's (2017) *Good Reception: Teens, Teachers, and Mobile Media in a Los Angeles High School*, to propose the concept of magic circles[15].

Excerpt 4.1. *Shahid Presents the Concept of Magic Circles (4/21/2018 11:15pm)*

1 Antero Garcia quotes John Huizinga to define his conception of magic circles as
2 spaces specifically linked to play, in which participants are allowed to safely
3 transgress societal norms and experiment wildly with identity (p. 98). But going
4 back to the source, we find Huizinga laying out a more expansive formulation of
5 magic circles: "The arena, the card-table, the magic circle, the temple, the stage,
6 the screen, the tennis court, the court of justice, etc., are all in form and function
7 play-grounds, i.e., forbidden spots, isolated, hedged round, hallowed, within
8 which special rules obtain. All are temporary worlds within the ordinary world,
9 dedicated to the performance of an act apart" (1955, p. 10). Huizinga saw society
10 and play as inextricable. All of these overlapping magic circles together create
11 society. So the question then becomes not if we can create magic circles in our
12 classrooms, but what kind of magic circles are our classrooms already? What
13 kinds of spells and incantations are we casting in our classrooms? What
14 performances are being enacted? What kinds of magic circles are we

[15] Garcia (2017) draws upon Huizinga's (1955) notion of magic circles in his description of game play. In particular, Garcia makes a distinction between gaming environments and schooling, such that players have an opportunity to step outside of reality allowing "wild experimentation and behavior because gameplay is a safe space to be someone that society says you are not" (p. 98).

15 (re)creating? Perhaps more importantly, what kinds of magic circles are we
16 subverting? Are teacher and student allowed to step out of their traditional
17 roles? Are our classrooms places where students, through trying on different
18 roles and masks, can discover and define parts of their identity in order to
19 navigate society more effectively?

By drawing on Garcia, in combination with Huizinga, Shahid takes an instrumental stance by highlighting texts that he deems important for animating his and Brian's joint-reflection (lines 1-11). In addition, he assumes an epistemic stance by implying that Huizinga's interpretation of magic circles is "a more expansive formulation" than Garcia's, given that it describes everyday life outside of game play (lines 3-9). Of note, Shahid's appropriation of Huizinga's and Garcia's notions centralizes the ubiquity of magic circles as "overlapping" forms of human activity which "together create society" (lines 10-11). Here, this epistemic stance creates an opportunity for Shahid and Brian to leverage magic circles as an analytical lens for their joint reflection. In particular, Shahid is offering a bid for their joint reflection to identify moments in their CEs where explicit connections are made between the classroom and everyday human activity.

Through the instrumental stance of highlighting a series of questions (lines 11-19), Shahid underscores an inquiry-oriented approach to using magic circles as a code, rather than offering a precise and static definition that would narrow the scope of its application in their CEs. Of the seven questions that Shahid proposes, five of them are open-ended which creates opportunities for this code to be elaborated on in the future. This is important for Brian's and Shahid's joint work because it provides an opening for Brian to engage with and expand Shahid's conceptualization of magic circles.

In addition, Shahid assumes an epistemic stance by offering a potential motive for Shahid's and Brian's collective inquiry: identify "what kind of magic circles are our classrooms already" (line 12). Drawing on Heritage (2013), epistemic stances are "the knowledge claims that [participants] assert, contest, and defend in and through turns-at-talk and sequences of interaction" (p. 370). Here, Shahid is proposing that classroom activity is a constellation of "performances" that can be "(re)created" and "subvert[ed]" (lines 14-16). I suggest that Shahid is leveraging this conceptualization of magic circles to both describe existing practice, but also imagine opportunities for designing classrooms that, through subversion, suspend dichotomous student/teacher roles.

I argue that Shahid's appropriation of the notion of magic circles emerges, in part because of his placements, as a student teacher, in classrooms that, from his perspective, need to be subverted (as described in Chapter 3). Theory, here, is prompting him to search for what magic circles look like in classroom practices in order to subvert the demands of institutions, but also how such subversion may be connected to transforming society. In proposing this conceptualization of magic circles and the accompanying questions, Shahid offers an earnest and solid opening for his group in exploring how the concept connects to practice, especially given his commitments to challenging oppression in society and schooling. This epistemic stance is consequential for how Brian and Shahid will leverage this term in their joint reflection.

In the following excerpt, Shahid continues the digital conversation and collaboration by using his working partner Brian's CE as a resource. Specifically, eighteen minutes after

developing magic circles as a working concept, Shahid takes an instrumental stance by proposing Brian's reflection of his schools Gay-Straight Alliance (GSA) as a candidate representation for magic circles. In other words, by offering, "Brian's GSA?," Shahid is positioning Brian's CE in the collective reflective space of the DDS as a potential representation of magic circles in practice. As shown in Figure 4.1, Shahid writes on the DDS: "Brian's GSA?" (4/22/2018, Digital Dialogic Studio).

Code	Theoretical Underpinnings	Examples from CE's
Magic Circles?	Antero Garcia quotes John Huizinga to define his conception of magic circles as spaces specifically linked to play, in which participants are allowed to safely transgress societal norms and experiment wildly with identity (p. 98). But going back to the source, we find Huizinga laying out a more expansive formulation of magic circles: "The arena, the card-table, the magic circle, the temple, the stage, the screen, the tennis court, the court of justice, etc., are all in form and function play-grounds, i.e., forbidden spots, isolated, hedged round, hallowed, within which special rules obtain. All are temporary worlds within the ordinary world, dedicated to the performance of an act apart" (1955, p. 10). Huizinga saw society and play as inextricable. All of these overlapping magic circles together create society. So the question then becomes not if we can create magic circles in our classrooms, but what kind of magic circle are our classrooms already? What kinds of spells and incantations are we casting in our classrooms? What performances are being enacted? What kinds of magic circles are we (re)creating? Perhaps more importantly, what kinds of magic circles are we subverting? Are teacher and student allowed to step out of their traditional roles? Are our classrooms places where students, through trying on different roles and masks, can discover and define parts of their identity in order to navigate society more effectively?	Brian's GSA?

Figure 4.1. Screen-grab of Shahid proposing a selection of Brian's CE on the Digital Dialogical Studio.

Of note, Shahid punctuates his proposal with a question mark, signaling that he is tentative that Brian's CE will represent magic circles as a concept in practice. Shahid's familiarity with Brian's practices and CE reflections, including this GSA example, emerged from previous conversations involving Shahid and Brian discussing their classroom practices as part of the second iterative cycle of our course. Of importance here, Shahid takes an epistemic stance by proposing classroom practices and reflections as sites for experimenting with and appropriating pedagogical concepts. Two days later, Brian takes heed of this opening by elaborating on Shahid's proposition in Excerpt 4.2 (also shown in Figure 4.2).

Code	Theoretical Underpinnings	Examples from CE's
Magic Circles?	Antero Garcia quotes John Huizinga to define his conception of magic circles as spaces specifically linked to play, in which participants are allowed to safely transgress societal norms and experiment wildly with identity (p. 98). But going back to the source, we find Huizinga laying out a more expansive formulation of magic circles: "The arena, the card-table, the magic circle, the temple, the stage, the screen, the tennis court, the court of justice, etc., are all in form and function play-grounds, i.e., forbidden spots, isolated, hedged round, hallowed, within which special rules obtain. All are temporary worlds within the ordinary world, dedicated to the performance of an act apart" (1955, p. 10). Huizinga saw society and play as inextricable. All of these overlapping magic circles together create society. So the question then becomes not if we can create magic circles in our classrooms, but what kind of magic circle are our classrooms already? What kinds of spells and incantations are we casting in our classrooms? What performances are being enacted? What kinds of magic circles are we (re)creating? Perhaps more importantly, what kinds of magic circles are we subverting? Are teacher and student allowed to step out of their traditional roles? Are our classrooms places where students, through trying on different roles and masks, can discover and define parts of their identity in order to navigate society more effectively?	Brian's GSA!!! As a place that creates a magic circle within the regular school culture. Students are "allowed" or encouraged to create space together as queer people. Teacher/student role is (for the most part) suspended.

Figure 4.2. Screen-grab of Brian's Elaboration of the Candidate Representation

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Excerpt 4.2. *Brian Elaborates On Candidate Representation (4/24/2018, 6:30pm)*

1 Brian's GSA!!! As a place that creates a magic circle within the regular school
2 culture. Students are "allowed" or encouraged to create space together as queer
3 people. Teacher/student role is (for the most part) suspended.

In Excerpt 4.2, Brian takes a cooperative stance and edits Shahid's question-mark punctuation in the original contribution and adds three exclamation points (Excerpt 4.2, line 1), thus validating Shahid's proposed candidate code. In doing so, Brian assumes an epistemic stance by describing the GSA as a magic circle where "students are 'allowed' or encouraged to create space together as queer people." (Excerpt 4.2, lines 2-3). In effect, Brian is suggesting that magic circles should be understood as spaces that can exist "within regular school culture" and can be important spaces for non-dominant youth, especially queer youth. Magic circles, here, is being conceptualized by Brian as the creation of a particular type of coming together for people based on affinity, especially as it relates to everyday cultural practices. This is consequential for how magic circles is later conceptualized because Brian's description centralizes the relationship between magic circles and the everyday practices of youth.

In addition, Brian describes the GSA as a place where "Teacher/student role[s are] (for the most part) suspended" (Excerpt 4.2, lines 2-3). Here, Brian's description of the GSA interaction addresses one of Shahid's questions: "Are teacher and student allowed to step out of their traditional roles?" (Excerpt 4.1, line 16-17). As a magic circle, Brian's GSA is a school-sanctioned space, but he is complicating the question that Shahid proffered in the magic circle conceptualization by centralizing the active role that a teacher has in the creation of a

magic circle. His epistemic stance signals that a magic circle can be designed for, especially through the roles that teachers and students assume in their interactions. Brian underscores this complication by putting *allowed* into air quotes, marking it as a word, I argue, to be questioned or at least nuanced. In this respect, Brian positions the teacher as an active designer rather than a subject to be designed upon by the school or society, at large.

However, what I want to highlight in this example is that Brian and Shahid engage in co-operative activity where they code and laminate upon each others' contributions as they align their representations of valued pedagogical practices, through the appropriation of theory and by drawing out pertinent details from their own pedagogical interactions with youth. Brian has placed a value on the teacher having an active role as a designer of spaces and has also made visible how participation structures (e.g., suspending teacher, student roles), a central design element of our course, can support the creation of consequential learning environments for youth. Brian's epistemic stance has important implications for how future concepts can be conceptualized in their joint reflection. Here, Brian and Shahid are experimenting with theory by specifically connecting it to specific design elements that we have examined in our course and this reflective practice animates their future joint reflection as they continue to build new conceptualizations and new ways of revising, re-imagining, and designing for their classrooms of the future.

Throughout this short digitized co-operative activity, the CE is seen as a representation of practice In this case, the representation is brought into the interactive space as a candidate for representing a code: Shahid's proposition of "GSA?" as an example of a magic circle. Here, I identify a collaborative negotiation over an adequate representation of a code, in this case, magic circles. Shahid's initial contributions to the DDS are seen as highlighting and coding (Goodwin, 1994), where he is using both theory and Brian's CE as resources. When Brian enters the dialogue on the DDS, he elaborates on Shahid's proposed concept of magic circles while leveraging his practice and expanding the notion to include the design elements of learning (Excerpt 4.2, lines 2-3), specifically participation structures. This representation of classroom practice is one that is oriented toward the development of a magic circle that attends to the social organization of learning (e.g., participation structures) and more explicitly the role of educators. In this regard, I view Brian's epistemic stance as a response to Shahid's proposal of a candidate code, one that necessarily required a connection to classroom practice. Indeed, Brian's CE is seen as a resource, but this representation of classroom practice also required a joint-elaboration for seeing classroom practice, simultaneously propping up what is seen as a valued practice.

Here, I want to call special attention to how the motive of reflection shifts as new representations of practice emerged in their joint inquiry. In particular, Shahid's propositions and Brian's subsequent response were not just attempts at finding CE examples that "fit" theory, but rather their actions were part of a process of searching for new conceptual understandings of magic circles. As they experimented with course theories, Shahid and Brian appropriated theory to find adequate representations of these theories in their practice. To this end, the CEs were seen as valuable resources for collective reflection.

There was a subtle shift in how Shahid and Brian began to search for and articulate representations of practice that more concretely addressed principles of designing expansive learning environments. Specifically, Shahid and Brian shifted in their reflection practices from finding representations of a static theory to reflection practices that were oriented toward adapting and generating new concepts. As they collectively pushed on theory, they made their

valued pedagogical practices visible, while also finding adequate representations of these values. Their instrumental, cooperative, and epistemic stances were consequential for how they appropriated theory and connected it to their practice. As they jointly developed their own understanding of the notion of magic circles, they began to design for new forms of participation that disrupted traditional hierarchies in the classroom—that is, learning that encouraged youth and teachers to build together (Gutiérrez, 2008); however, as will be discussed later, their understanding of these concepts was still evolving in their joint work.

It is important to note that the collaboration and collective reflection observed was not always a straightforward negotiation, as was illustrated in this example. In the following section, I illustrate an example of how Shahid and Brian began to create conceptualizations of pedagogical practice that surfaced the everyday cultural practices of youth. Specifically, the next section highlights a moment of contestation that emerged as Shahid and Brian proposed further candidate codes to orient their representations from their CEs.

Surfacing the Everyday

In the following, I present a salient example of Brian's and Shahid's contestation over the use of theory as they struggled to find adequate representations of their practice. This was a frequent occurrence across all of the dyads in my teacher education classroom. I chose to focus my analysis on Shahid's and Brian's interaction because this moment was consequential for how they made sense of designing for classroom learning aimed at leveraging youths' everyday cultural practices. In addition, as will be discussed in the following section, their joint work in this interaction mediated how the class, as a larger group, made sense of the design of robust learning for youth.

In the 13th class meeting, the dyads were tasked with continuing their work in generating codes for analyzing their collective CEs, as well as drawing on the work they had done asynchronously using the DDS tool. Prior to the class in question, and as seen in Figure 4.3, Shahid had proposed "Relationship Building / Caring / Warm Demander[16]" as a candidate code on the DDS on April 22nd, an instrumental stance that pointed to examples in their CEs where they were engaging in a dispositional practice of firmly encouraging students to meet the instructional demands. Unlike his proposal for magic circles, Shahid did not provide a definition for the code of relationship building/caring/warm demander nor did he explicitly cite theory; he wrote down the name of the code, as shown in the first column, labeled code, in Figure 4.3.

[16] Warm demander has a long and varied history (Delpit, 2013; Hammond, 2014; Kleinfeld, 1972), but was most recently defined as a disposition whereby teachers "expect a great deal of their students, convince them of their own brilliance, and help them to reach their potential in a disciplined and structured environment" (Delpit, 2013).

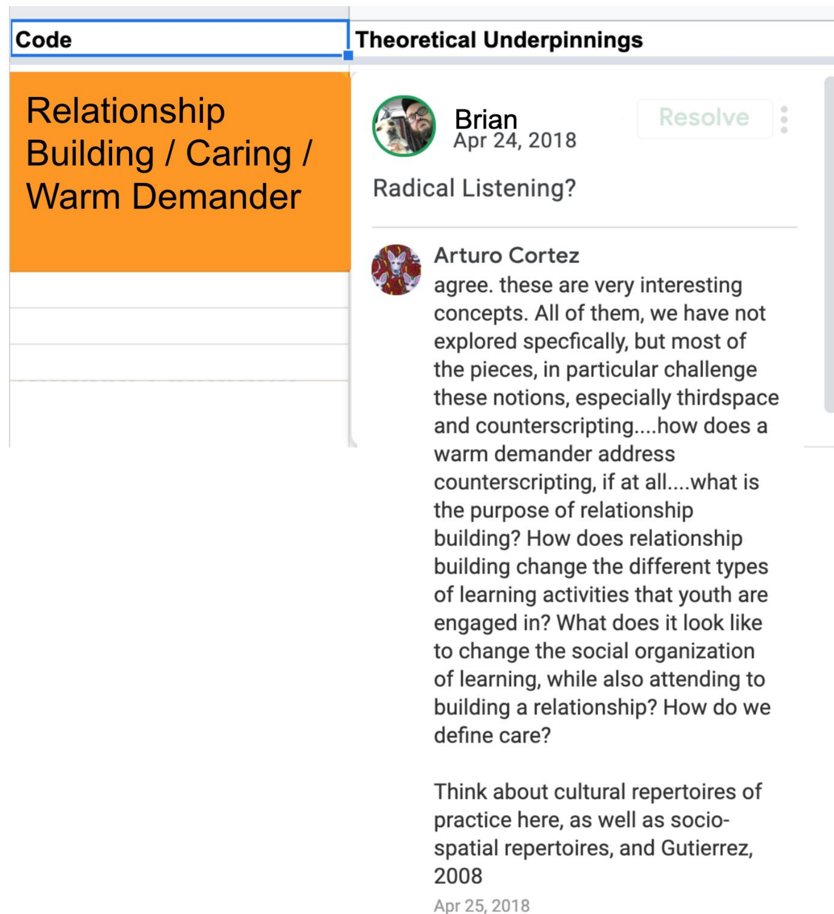

Figure 4.3. Screen-grab of exchange among Shahid, Brian and myself on the Digital Dialogical Studio.

Two days later, on the 24th of April, Brian commented on Shahid's proposal and assumed a cooperative stance by proposing "radical listening?"[17] (Figure 4.3) as an alternative to relationship building, caring, and warm demander. Later that evening, I provided a comment supporting Brian's suggestion and drew attention to specific concepts that we had explored in our class. In doing so, I took a cooperative stance in building on Brian's suggestion, as well as taking an epistemic stance by centering the role of the social organization of learning by asking, "What does it look like to change the social organization of learning, while also building a relationship?" (Figure 4.3). Specifically, I was asking Brian and Shahid to consider the "purpose of relationship building" (Figure 4.3) in their classrooms. In this respect, I provided a challenge

[17] During the 5th class, we read Cindy Cruz's (2012) article, "Making curriculum from scratch: Testimonio in an urban classroom," in which she draws on Langout's (2011) notion of radical listening, described as "listening for root ideas that are connected to a structural analysis. This means listening for what is being said and what is left unsaid. It means co-creating a space where what has been rendered invisible can be seen, spoken, and heard. To practice radial listening is to take seriously what is being said and to be in dialogue with the speaker in ways that facilitate a structural, radical analysis" (Langout, 2011, as cited in Cruz, 2012, p. 470).

for using “relationship building / caring / warm demander” as a code and asked Shahid and Brian to reconcile the use of the code with ideas pertaining to Gutiérrez’s (2008) notion of third space and counterscripts, which were key concepts from our course. This comment informed their conversation when they arrived to class later that day.

When they arrived to the 13th class meeting, Shahid and Brian began to review their joint work on the DDS and my comments. In the following, I present an analysis of a video-recorded interaction that occurred between Shahid and Brian at the beginning of class in their small group. Here, I highlight an example of how Shahid and Brian contested and resolved the use of relationship building, caring, and warm demander as a code, mediating how they jointly represented valued pedagogical practices, and privileged leveraging youths’ everyday cultural practices as part of their pedagogical commitments. Again, this interaction happened shortly after the asynchronous dialogue on the DDS.

Excerpt 4.3. *Grappling with competing pedagogical models (4/25/2018, 5:04pm)*

1	Shahid	Do you think we should change this code to radical listening? [Brian looks over at Shahid’s computer screen]
2	Brian	Yeah, so we won’t get in trouble?
3	Shahid	Did you read that comment as that? [laughter]
4	Brian	Yeah, I was like...
5	Shahid	Really?
6	Brian	Yeah, I’m like, of course he’s talking about warm demander. We’re being recorded right now. [points to recorder]
7	Shahid	Oh, no! He’s onto us.
8	Brian	But it makes, you know, it’s kinda like. [laying head on keyboard] My KIPP teacher supervisor was talking about warm demander. I should have red flagged it. I was like, well, Zaretta Hammond talks about it, too. And I like...

In Excerpt 4.3, I see Shahid and Brian extend a contestation that occurred on the DDS regarding the use of “relationship building / caring / warm demander” as a code. In the opening of this interaction, Brian and Shahid are looking at the DDS on their respective computer screens while sitting next to each other. Shahid takes a cooperative stance by addressing Brian’s comment, asking if the warm demander code should be changed to radical listening (line 1). Brian responds in the affirmative, but suggests that this is necessary so they “won’t get in trouble” (line 2). Of note, Brian is citing my comments (Figure 4.3) as justification for changing the code; Brian is assuming an epistemic stance by positioning my questions and comments as legitimate sources for evaluating how Brian and Shahid should engage in their reflective practices. However, Shahid’s question, “Did you read that comment as that?” (line 3), followed by laughter, indicates an affective stance that serves to challenge Brian’s assertion that I would reprimand them for their use of this specific code.

This negotiation is important for their contestation, because it illuminates how Brian diminishes his own authority in the dyad while also lifting up his initial concern regarding the use of warm demander as a code. In particular, by leveraging my authority—even though he had

initially challenged the use of warm demander on the DDS—Brian opens up an opportunity to discuss the merits of using warm demander as a code while also downplaying the question he posed on the DDS. Shahid's affective stance underscores the light-hearted and playful manner in which this contestation emerges. As Brian makes another bid to appeal to my authority by pointing out that I am recording their conversation (line 6), Shahid's affective stance (e.g., "Oh, no! He's onto us.", line 7) serves to playfully undermine the proposition that my opinion matters heavily in this encounter.

This analysis illuminates how Brian's and Shahid's joint work on the DDS and how our collective comments mediated their initial contestation over using codes, in this case, warm demander and radical listening, for their analysis. Brian's appeal to my authority and Shahid's subsequent playfulness create alignment in their collaboration. While Brian initially suggested an alternative code to the use of warm demander, he also makes it clear that he understands why Shahid may have chosen this code. In particular, Brian says that he had heard the concept of warm demander being talked about by his KIPP teacher supervisor (line 8) and he also voices his support for the author of the warm demander concept: "Zaretta Hammond talks about it, too. And, I like…" (line 8).

Here, Brian is assuming a moral stance by positioning himself "in such a way as to reveal to [Shahid] that [Brian] can be trusted to assume the alignments and do the cognitive work required for the appropriate accomplishment of the collaborative tasks they are pursuing in concert with each other" (Goodwin, 2007, p. 70–71). In particular, I argue that Brian's interjections illustrate his understanding that warm demander is a ubiquitous term that he might support, as evidenced that he "likes" Zaretta Hammond (line 8). However, Brian does equivocate or, at the very least, present to Shahid that he has not made a final judgement on whether or not he appreciates the concept. He says that he should have "red flagged" warm demander, alluding to the KIPP teacher supervisor who mentioned it. In previous class discussions, Brian had mentioned his disdain for KIPP schools and his supervisor in particular, signaling his cautiousness around the use of the term. Ultimately, Brian's moral stance indicates that he understands how it makes sense that Shahid would want to use this term and that Brian doesn't judge his use of the term, thus creating an opening for their collaboration.

I argue that Brian's and Shahid's history of working together, including their joint work on the DDS, my comments, and their experimentation with theory mediated their continued collaboration as they initially contested using the concepts of warm demander and radical listening. Across all of the dyads, there were frequent contestations over the appropriation of theory, especially theories from other courses. Teachers frequently assumed moral stances and used my comments as they negotiated the use of theory; however, early contestations often involved varied use of representations and the surfacing of dilemmas in their pedagogical practice. The representations and articulated dilemmas that emerged in these contestations proved consequential for how the teachers centralized youths' everyday cultural practices as they appropriated course theories. Following Brian's interjection in line 8, Shahid changes the warm demander code on the DDS to radical listening; as seen in Excerpt 4.4, Shahid begins to share a dilemma.

Excerpt 4.4. *Shahid defends "warm demander"*

9	Shahid	That's what's interesting. I don't know. Like, I'm in a class where it's

like, I don't know, like we need to get litera=like we need, or maybe not, maybe we don't. Maybe we radically rethink the purpose of school. But, like, it's these newcomer students, they're about to graduate high school [Brian lifts head up] and it's like a struggle for some of them to like write a couple paragraphs, write a paragraph in English. And, what does that mean? I don't know. But...

10 Brian Until we change [the world], what are we gonna need to do?

11 Shahid [I think the point] <laughs> But, we can say that there are options for success in our current society. And, even their ability... Well, I don't know.

After Shahid changes the code from warm demander to radical listening on the DDS, he interjects (line 9) in the conversation by taking an instrumental stance and calling attention to a central pedagogical dilemma in his class. In particular, he is deliberating about how to make sense of the purpose of school, especially given the critiques of using a warm demander disposition. In his remarks (e.g., "we need to get litera=like we need", line 9), I contend that Shahid is assuming an epistemic stance by arguing that there are necessary aims to schooling. But, he is also unsure of making such a declaration, because turning away from such important and necessary dimensions of schooling may mean that "we radically rethink the purpose of school" (line 9). My argument here is that Shahid has linked his proposal of a warm demander disposition to fulfilling specific aims of schooling. Shahid's instrumental and epistemic stances illuminate a tension with transitioning from using warm demander to radical listening as a viable code in their joint reflection.

To support his claim that such a transition would require a radical shift in his approach to schooling, Shahid takes an instrumental stance by citing an example from his class concerning newcomer students and their struggles in being able to write in English (line 9). Simultaneously, he assumes an epistemic stance that frames a classroom dilemma in terms of youth's deficits (i.e., newcomer students not knowing how to write in English). In the wake of Brian's and Shahid's movement away from using the concept of warm demander, Shahid raises a specific type of classroom dilemma that presumably could be resolved by using the disposition of warm demander. I argue that Shahid highlights this example because he is trying to design a learning environment that advances knowing how to "write a paragraph in English" (line 1) as a valued practice for students. For Shahid, without the warm demander disposition, he is suggesting that he does not know how to pedagogically support students in mastering the valued academic practice of writing in English. However, Shahid's instrumental and epistemic stances open up an opportunity for Brian to build on this dilemma.

In line 10, Brian interrupts Shahid and takes a cooperative stance, "Until we change the world, what are we gonna need to do?" (line 10). Here, Brian is challenging and undermining Shahid's framing of the impossibility of resolving this specific pedagogical dilemma. In addition, he is assuming an affective stance; the sing-song prosody of his interjection indicates that he disagrees with Shahid's claim, but his playfulness indicates that he seeks to build with Shahid. Furthermore, Brian is suggesting that a solution to the pedagogical dilemma might not require a radical rethinking of schooling, as Shahid's framing seems to imply.

Following Brian's question, in line 11, Shahid takes a cooperative stance and laughs at Brian's question, while also continuing to build on his previous framing in line 9. Through his epistemic stance, Shahid claims that "there are options for success in our current society" (line 11). I contend that Shahid is suggesting that these options for success are only available to newcomers who are able to "write a paragraph in English" (line 9). In this initial part of their interaction, Shahid and Brian have co-constructed a problem of practice and Shahid, in particular, has advanced a representation of a dilemma that is rooted in a deficit view of young people.

As Shahid vacillates in the framing of the problem, he highlights that he is still uncertain about how to overcome this problem of practice. He initially advanced a pedagogical problem that focused on youths' deficits and a solution that was aimed at ensuring students acquired the requisite skills that he deemed necessary and important for their future. Moreover, Shahid framed the problem in terms of how youth are not meeting his demands, albeit with the best of intentions. Based on his initial proposition of warm demander, we see how he appropriated theory to solve a specific pedagogical problem that framed youth in the deficit. This is telling because the specific concept of *warm demander* upon which he was drawing privileges the work that teachers need to do in order for students to accomplish what teachers want them to do. In other words, this conceptualization considers how teachers can be firmer in their demands, but also warmer in their approach in order to support youth in meeting demands placed on them. At least in how it is being appropriated here, Shahid has not advanced a conceptualization of warm demander that builds with youth.

This is a primary distinction between how the concepts of warm demander and radical listening are being appropriated here; that is, warm demander is being conceptualized as a teachers' disposition that can be deployed to help students, as in the example presented here, write in English. As will be described shortly, Brian's appropriation of radical listening shifts their analytical focus to what teachers and students can co-construct together in the classroom, as opposed to students meeting a predetermined skill. This is important because Shahid's proposition is an example of a practice that was advanced across all of the teachers. Frequently, teachers in the class framed problems of practice in general terms, often contradicting their reflections and analyses in their individually-written CEs. However, the framings of such problems of practice gave the teachers an opportunity to test the limits of a theory and to integrate design elements of learning, as Brian and Shahid illustrated in the joint activity. For his part, Brian is trying to challenge warm demander and advance radical listening to re-orient their collective approach to the design of learning environments. In Excerpt 4.5, Brian and Shahid begin to identify another problem of practice, this time from the perspective of Brian. And, together, I argue, they are able to build a more expansive design practice, one that highlights the importance of co-constructing learning with youth.

Excerpt 4.5. *Brian cites his CE to justify his claim for radical listening*

12	Brian	[lifts head up] I mean this might be it. It happened in, I don't know if it happened in one of my CEs or not. But, when I was doing Fortnite week, so I think it was in my CE. I gave them this article to read about Fortnite and [unintelligible] they fucking read it. If I give them another thing to read, that's like a page, they're like ahhhhh.

13	Shahid	Right.
14	Brian	But, they've fucking read it and annotated it.
15	Shahid	So, it's like
16	Brian	So, it's like [hand in the space]
17	Shahid	You could make the argument that it's like, yeah they can't write uh a paragraph in this boring ass economics class.

As a reminder, Brian and Shahid are continuing a conversation regarding using warm demander or radical listening as potential codes to guide their analysis. Here, Brian is taking an instrumental stance by pointing to an interaction that took place in CE3 and CE4. Brian is simultaneously taking an epistemic stance by centering his pedagogical practice as an example of radical listening. In Brian's CE3 and CE4, as he described in Excerpt 4.5, Brian wrote about class discussions and activities that he designed to leverage his student's interest in Fortnite, "I gave them this article to read about Fortnite and [unintelligble] they fucking read it" (line 12). I highlight here a theoretical construct that Brian is drawing on to represent his practice to argue that he is engaged in radical listening or "listening for what is being said and what is left unsaid" (Langout, 2011, as cited in Cruz, 2012, p. 470). In this case, Brian had heard that his students were interested in talking more about Fortnite, but he felt that Fortnite needed to be questioned and nuanced further given that the game was violent and involved first-person shooting, as Brian mentioned in his CE. Rather than shutting down the conversation, he leaned into his what students were saying and supported his students over several weeks, as described in CE3 and CE4, in a critical examination into how the game has gained popularity.

In Excerpt 4.5, Brian is taking an instrumental stance by pointing to his valued practices (i.e., listening to students and providing them with texts that support their joint work) as evidence for using radical listening as a challenge to warm demander. His analysis emerged in his CE#3 and CE#4 and in previous conversations that he and Shahid had regarding this particular Fortnite example. Here, Brian previously foregrounded a critical analysis in his CEs that aligned with how he understood radical listening; that is, a practice that is deeply committed to structural analyses of everyday life. Here, in his joint work with Shahid, radical listening is being used to challenge the concept of warm demander and is, unfortunately, being reduced to surfacing cultural interests. However, Brian's example does inspire Shahid to re-present his original problem with newcomer students ability to write a paragraph in English. Instead of a teacher's firm, but loving disposition (i.e., warm demander) as the solution to the newcomer problem, Shahid takes a cooperative stance as he begins to see that learning requires intentional practices for surfacing youths' cultural interests that are not "boring" (line 17). Here, Shahid and Brian co-construct the concept of radical listening as surfacing youths' everyday cultural practices as necessary for pedagogical practice

Whereas Shahid offered a representation of practice that identified youths' deficits as needing to be fixed, Brian offered a solution to Shahid's problem of practice, as well as a code, radical listening, to guide their joint analysis. Radical listening, as conceptualized here, centralizes the possibility of leveraging the practices that youth bring to the classroom as a starting point for designing learning environments. In particular, their joint activity here points to not just what a teacher can demand of students, but specifically what kinds of practices might

emerge in the classroom when teachers learn how to co-construct meaning and expansive forms of learning with their students.

It is important to note that shortly after this discussion (roughly 20 minutes later), Shahid amended his original contribution of “magic circles” as a candidate code. The revised entry is illustrated in italics in Excerpt 4.6 and in bold in Figure 4.4., capturing his iterative process; example of revising their own understanding of how this process allowed them to refine and voluntarily go back and change their understandings.

Code	Theoretical Underpinnings
Magic Circles?	Antero Garcia quotes John Huizinga to define his conception of magic circles as spaces specifically linked to play, in which participants are allowed to safely transgress societal norms and experiment wildly with identity (p. 98). But going back to the source, we find Huizinga laying out a more expansive formulation of magic circles: "The arena, the card-table, the magic circle, the temple, the stage, the screen, the tennis court, the court of justice, etc., are all in form and function play-grounds, i.e., forbidden spots, isolated, hedged round, hallowed, within which special rules obtain. All are temporary worlds within the ordinary world, dedicated to the performance of an act apart" (1955, p. 10). Huizinga saw society and play as inextricable. All of these overlapping magic circles together create society. So the question then becomes not if we can create magic circles in our classrooms, but what kind of magic circle are our classrooms already? What kinds of spells and incantations are we casting in our classrooms? What performances are being enacted? What kinds of magic circles are we (re)creating? Perhaps more importantly, what kinds of magic circles are we subverting? Are teacher and student allowed to step out of their traditional roles? Are our classrooms places where students, through trying on different roles and masks, can discover and define parts of their identity in order to navigate society more effectively? **How do we answer Cortez and Gutierrez's call for "teacher educators to expand how we conceptualize the everyday resources youth develop to include expansive socio-spatial repertoires in which youth assert their roles, their practices, and their “right to the city” — more broadly understood as their right to the spaces they inhabit literally and figuratively” (in press, p. 22)** **OR** **“Teachers must co-design pedagogical spaces with youth and communities that give right to the classroom—the local space in the city—where the linguistic demands involve hybridity and the right to learn” (p. 17)**

Figure 4.4. Screen-grab of the Amended (represented in bold) DDs entry for Shahid.

Excerpt 4.6. *Amended (represented in italics) DDS entry by Shahid.*

1 Antero Garcia quotes John Huizinga to define his conception of magic circles as
2 spaces specifically linked to play, in which participants are allowed to safely
3 transgress societal norms and experiment wildly with identity (p. 98). But going
4 back to the source, we find Huizinga laying out a more expansive formulation of
5 magic circles: "The arena, the card-table, the magic circle, the temple, the stage,

6 the screen, the tennis court, the court of justice, etc., are all in form and function
7 play-grounds, i.e., forbidden spots, isolated, hedged round, hallowed, within
8 which special rules obtain. All are temporary worlds within the ordinary world,
9 dedicated to the performance of an act apart" (1955, p. 10). Huizinga saw society
10 and play as inextricable. All of these overlapping magic circles together create
11 society. So the question then becomes not if we can create magic circles in our
12 classrooms, but what kind of magic circle are our classrooms already? What
13 kinds of spells and incantations are we casting in our classrooms? What
14 performances are being enacted? What kinds of magic circles are we
15 (re)creating? Perhaps more importantly, what kinds of magic circles are we
16 subverting? Are teacher and student allowed to step out of their traditional roles?
17 Are our classrooms places where students, through trying on different roles and
18 masks, can discover and define parts of their identity in order to navigate society
19 more effectively? *How do we answer Cortez and Gutierrez's call "We call on*
20 *teacher educators to expand how we conceptualize everyday resources youth*
21 *develop to include expansive socio-spatial repertoires in which youth assert their*
22 *roles, their practices, and their "right to the city"— more broadly understood as*
23 *their right to the spaces they inhabit literally and figuratively" (in press, p. 22) OR*
24 *"Teachers must co-design pedagogical spaces with youth and communities that*
25 *give right to the classroom—the local space in the city—where the linguistic*
26 *demands involve hybridity and the right to learn" (p. 17)*

Of note, Shahid is taking a cooperative stance in his addition of concepts and excerpts from Cortez and Gutiérrez (2019), an assigned course text, in an effort to elaborate on his proposed theory of "magic circles." Lines 17 through 26 specifically refer to theoretical and pedagogical considerations, that are presented in the text, and further advance the centering of youths' everyday cultural and spatial-production practices. This signals a commitment by Shahid to continuously amend his reflections and conceptualizations in ways that adequately represent the valued teaching and learning practices that he is jointly generating with Brian. In short, Shahid and Brian are still searching for a combination of theory and representations of practice that align with their developing understanding of how to best organize for learning that leverages the everyday cultural repertoires of practice of youth.

Toward the Possible

The third iteration cycle of the teacher education course was also designed to support teachers to share their emergent analyses with their peers in our class. These proved to be generative in supporting the whole class test out and experiment with each dyad's conceptualizations. In their presentations, each dyad would share data from their CEs and engage the class in a discussion about how these data sources represented conceptualizations and theories from our class. In the following, I examine selections from Shahid's and Brian's presentation during the 15th week of class to highlight their shifts in reflection and how they attempted to support their peers in seeing how to leverage youths' everyday cultural practices in their classrooms. In Excerpt 4.7, Shahid begins their joint presentation to the class by identifying

the theoretical roots to their appropriation of the concept, magic circles, prior to sharing an audio clip from his CE5.

Excerpt 4.7. *Shahid Introduces the Data Source*

1	Shahid	This is like the reference to Gutierrez and I forget who she's quoting; a conversation they had is kind of a play on zone of proximal development but also zo- from. It's an african word for shaman. Wise. Exactly. To highlight this. Magic Circles that surface are when you have a conversation. Right? When it's not so teacher student. But, when you're playing around with roles. But, then we didn't feel like we did very much in more expansive, like deeper magic circles with sort of developing transformative literacies. We were mostly just on the surfacing. We just wanted to bring in sort of our examples. This is from one of the classes I was in. It started with this student. They were learning about subpoenas. This student, they were going over the definition, the teacher was. And, the student just kept asking why not call it a threat. And the teacher was just sort of resistant to it. And so, we see counterscripts as incantations that, if you listen to them, can be used to create portals into third space, entrances into third space. So, I'm gonna play this and I just wanted, you could see that this is the audio and this is at the point I=let's listen to it first.
2		[Shahid plays audio and transcript appears on screen]

Shahid takes an instrumental stance by pointing to an abstraction of a pedagogical practice and its connection to his and Brians' conceptualization of magic circles. Specifically, Shahid takes an epistemic stance by claiming that Gutierrez's (2008) appropriation of Cole's (2005) notion of zo-ped as "a play on zone of proximal development" is a "reference" for magic circles (line 1). This highlights a shift in how Shahid and Brian are linking theory and practice as part of they are framing their reflective analysis. In addition, their current conceptualization of magic circles signals Brian's and Shahid's evolution in their thinking on and appropriation of the term. As indicated earlier, their experimentation with theory and the centering of the everyday cultural practices in their joint activity supported the development of magic circles, as presented here.

Moreover, Shahid takes an epistemic stance by claiming that magic circles "surface...when you have a conversation" (line 1). Here, he is identifying a specific design element for learning environments, discourse practices, that is successful in "surfacing" youths' everyday cultural practices (line 1). As he suggests, Shahid feels that most of the examples they found in their analysis focused on surfacing[18] youth's everyday cultural practices. As Shahid's

[18] As part of our co-design during this third iteration cycle, Shahid shared a diagram with the class of the different types of student inquiry (see Appendix E). The diagram drew on a swimming pool metaphor to offer four types: (1) structured inquiry, (2) controlled inquiry, (3) guided inquiry, and (4) free inquiry. Our class discovered that third space (Gutiérrez, 2008) was not visible as a form of participation here and came up with the following schematic to

framing indicates, he and Brian have brought together theory, practice, a design element to learning, and, as we shall see, the surfacing of youths' everyday cultural practices.

Shahid's instrumental and epistemic stances frame how he expects the class to see (read: hear) the example that Shahid is sharing in the form of an audio file (line 2). As suggested earlier, Shahid identifies this clip as an example of surfacing youths' cultural practices, but he also says that his cooperating teacher, in this clip, is "resistant" to a student's questions (line 1). He is also specifically marking students' practices in this example as counterscripts and building on their joint conception of magic circles, "as incantations" (line 1). Here, Shahid and Brian are inviting the class to look beyond the teacher's practices and imagine how these discourse practices can, "if you listen to them, be used to create portals into third space, entrances into third space" (line 1). As part of the set up here, Shahid continues to describe the scene, but stops mid-sentence and asks the class to listen and follow along with the transcript on the screen at the front of the class as he begins the clip (the transcript is in Appendix F).

Excerpt 4.8. *Class Participants Identify the Teacher's Practices.*

3		[Teacher education class is laughing]
4	Shahid	Alright, so what just happened there? Y'all are laughing here. What is going on?
5	Joaquin	It's a requirement, cuz it's a requirement.
6	Shahid	Okay. What's she doing? What's going on?
7	Shane	She's trying to shut it down, but she's proving them right.
8	Shahid	She's trying to shut it down, but she's proving them right. So, how does she respond to the counterscript?
9	Keandre	She teacher scripted that.
10	Shahid	She teacher scripted it.
11	Keandre	This is right cuz this is right. This is right.
12		[Shahid plays audio and transcript appears on screen]

In the lead up to line 35 (see Appendix D), Brian is pointing to lines in the transcript and Shahid moves toward the computer to stop the clip. At this point, several teachers assume an affective stance by laughing and snickering at the cooperating teacher's following response to the student's question:

> Well a threat implies a lot and a requirement… this is required but the requirement is this is required or else we can do something else to you which is why I say that it would be fair for you to require it for you to think of it as a threat. (Shahid CE#5, 03/27/2018, para. 16)

describe a non-linear process of third space: leveraging youths' everyday cultural practices necessarily involves (1) surfacing, (2) building, and (3) amplifying. We, as a class, used these three terms as a new tool for identifying pedagogical practices and examples from the CEs to confirm or disconfirm co-operative theorizing.

Shahid notices this laughter and takes a cooperative stance by asking, “Alright, so what just happened there? Y’all are laughing here” (Excerpt 4.8, line 3). Joaquin assumes an epistemic stance by re-voicing, in his own words, the teacher’s response by saying, “It’s a requirement, cuz it’s a requirement” (Excerpt 4.8, line 5). I contend that Joaquin is claiming that the teacher is repeating herself and is stuck in a loop of the teacher script. In the set up to the clip (Excerpt 4.7, line 1), Shahid pointed to the teacher’s “resistance” and identified this as a crucial moment for the class to attend to. In addition, Brian took an instrumental stance by highlighting key text from the transcript that was visible on the screen. Here, Shahid and Brian are working together to help their peers identify the teacher’s practice.

However, Shahid takes a cooperative stance by probing with an additional question, “Okay. What’s she doing? What’s going on?” (Excerpt 4.8, line 6). In addition, Shahid assumes an epistemic stance by indicating that there is more in this dialogue than the teacher repeating herself. In response, Shane takes a cooperative and epistemic stance by identifying how the teacher is specifically “proving [the students] right” (Excerpt 4.8, line 7). Shane builds on Joaquin’s contribution by claiming that Ms. Turner is contradicting her argument and not aligning herself with the students. Here, Shane highlights how the teacher’s response is directly tied to the student’s questions in the clip, as opposed to just focusing on what the teacher is saying.

Again, Shahid takes a cooperative stance by rephrasing Shane’s response, but now assumes an instrumental stance by pointing to “the counterscript” (Excerpt 4.8, line 8). Here, Shahid is shifting the focus of our class to look at both the teacher’s and students’ practices in this scene. In addition, he is intentionally bringing theory, Gutiérrez’s (2008) notion of third space and counterscripts (Gutiérrez, Rymes, & Larson, 1995), back into the cooperative work of analyzing this clip. Keandre takes an epistemic stance, building on Joaquin’s and Shane’s contributions with, “She teacher scripted[19] that.” (Excerpt, 4.8, line 9). Here, I argue, Keandre is not just adding a theoretical label to identify this teacher’s action, but he is suggesting that the teacher’s response undermines the youth.

Following this, Shahid assumes a cooperative stance and elevates Keandre’s contribution by repeating what Keandre said, “She teacher scripted it” (Excerpt 4.8, line 10). Of note here, Keandre responds immediately with a similar contribution to Joaquin’s: “This is right cuz this is right. This is right” (Excerpt 4.8, line 11). Keandre is taking an epistemic response by claiming that the teacher positions herself as the holder of truth (e.g., “This is right”), thus marking the students as wrong in their approach. Following this statement, Shahid begins the audio for the next part of the interaction (see Appendix F for transcript).

Here, I highlight the joint work that the class, through subsequent turns and stances, engaged in as they developed a more expanded definition for the practice of the teacher and students. Using Goodwin’s (2007) participation frameworks, the analyses identified how the class worked together to shift the object of reflection from singling out and admonishing a teacher’s practice to connecting it to a theoretical construct from our class. In particular, they were able to move beyond a typical practice that was present in their reflections, which was to focus solely on critiquing the practice of their cooperating teachers. In doing so, this practice served to de-center their contributions or even the experiences of students in their classrooms. But, by bringing in Gutierrez’s notion of third space and counterscript, I argue, that the class was

[19] Keandre is using a crucial term from the conceptualization of third space (Gutiérrez, Rymes, & Larson, 1995). See footnote 3 for further explication.

able to identify students' resistance practices as consequential for learning, thus opening up the object of their reflection to include the possibility of leveraging youths' everyday resources. In Excerpt 4.9, Shahid continues with the next selection from audio clip and opens with a question.

Excerpt 4.9. *Imagining the Possibilities of Counterscripts as Incantations*

13	Shahid	So, that was sort of my very brief interaction which I wasn't. I just observe in this class, but, thoughts? Real quick. Reactions to that?
14	Joaquin	I'm curious. How did Ms. Turner react once you labeled it as a threat?
15	Shahid	She nodded. Then, the next thing that happened was she got back on her script. Like, a few lines later, she says, alright, we're off track. Let's get back. But, so, we kind of are arguing that this is an example of like how you use that counterscript. You hear that and then you...as many of us have been saying. You sort of...you channel it. But...It's just a preliminary step of that.
16	Brian	And, like, I think for us, when I was reading over Shahid's CE. This to me, [inaudible], this was an incantation. But if you know what it means. But if you know what it means. There's like so much possibility. It's like opening a door for building. Kyrie is totally into this. If I know what it means, I could subpoena the government.
17	Shahid	This is like building, this is literally literacies, right? And, literacies that they seem to care--They suddenly are caring about how this relates, connects to them. Um, and, um...But, how can we make it more transformative is sort of our question for thinking about--How do we build on this, right? This is just our tippy toe into third space.

In the second clip, Shahid's role is pronounced (see Chapter 3 for a more descriptive analysis of the "legalese" moment) and he is intervening in this practice to build on youths' contributions (see Appendix B for transcript). After the clip ends, Shahid solicits ideas and responses to the clip, but assumes an epistemic stance by suggesting that it is important to attend to the fact that he "just observe[s] in this class" (Excerpt 4.9, line 13). Shahid wants "quick" reactions and, I contend, that this is illustrative of the difficulty that members of our class undergo when they share their practice. After admonishing a teacher for her practice, it only makes sense that Shahid might potentially be the next target especially since his practice is up for scrutiny.

Shahid's framing is cooperatively addressed as Joaquin directs his questions back to the Ms. Turner's practice (Excerpt 4.8, line 14). Then, Shahid takes an epistemic stance to Joaquin's question, by re-directing the discussion to the main argument that undergirds his and Brian's analysis: "this is an example of like how you use that counterscript. You hear that and then you...as many of us have been saying. You sort of...you channel it" (Excerpt 4.9, line 15). Here, Shahid is focusing the class's attention to the students' practices and the possibilities of designing for discursive practices that "surface" youth's everyday practices. For Shahid and

Brian, counterscripts open up new opportunities for a classroom discussion, as opposed to seeing youth's contributions as hinderances or perhaps, as Keandre argued about Ms. Turner earlier, as indications of wrongdoing. Shahid's and Brian's analysis brings together an appropriation of theory (i.e., third space), their pedagogical practice (i.e., the example of legalese), a specific design element of learning (e.g., discourse practices), and the everyday practices of youth (e.g., everyday examinations of legal discourse).

Even more, they continue to examine how starting from the proposition of using a counterscript as an "incantation" can be built upon, given that this example was just a "preliminary step" to surfacing youth's everyday cultural practices (Excerpt 4.9, line 15). Brian takes a cooperative and epistemic stance by building on the notion of counterscript as incantation, by highlighting the consequential nature of a youth's contribution to the classroom discourse (Excerpt 4.9, line 16). Brian's reading of the discourse patterns points to the transformative potential of seeing this student's interjection (i.e., "if you know what it means" line 16) as an opening for structural analysis given that Kyrie could potentially "subpoena the government" (Excerpt 4.9, line 16). Here, Brian is nuancing the possibility of leveraging youth's everyday cultural practices, by imagining how to build on this interaction. Here, discourse practices are seen as openings for continual expansion, especially as youth's contributions are seen as resources.

This interaction concludes when Shahid suggests that this audio clip was an example of surfacing, as the youth "suddenly are caring about how this relates, connects to them" (Excerpt 4.9, line 17). But their analysis does not end here, they are interested in thinking through how to move beyond this moment and to consider how to build on these literacies in their classrooms. He ends by asking the class "How do we build on this, right? This is just our tippy toe into third space" (Excerpt 4.9, line 17). I argue that Shahid and Brian have demonstrated to the class how to identify consequential discursive practices that can result in transformative analyses with youth. In particular, Shahid and Brian tried to help the class re-imagine this interaction by shifting away from a singular focus on critiquing a cooperating teacher's practice.

However, my aim here is not to suggest that their critique of Ms. Turner is not consequential for the teachers' learning. They were able to build upon one another's stances by bringing together theory, their practice, and the everyday cultural practices of youth. In particular, the shift in the object of reflection involved here supported the teachers in looking beyond critique of pedagogical practice toward imagining the possibility. Shahid and Brian left the class with a powerful question and finding regarding leveraging youth's everyday cultural practices: if we have barely tiptoed into third space, how can we build on these moments in our practice? Importantly, the shift involves examining the possibility of designing for expansive learning within the context of a cooperating teacher's classroom. By bringing together their practice along (mediated by new theoretical understandings) with their appropriation of theory, Shahid's and Brian's joint reflection involved negotiating what they saw with their peers, which created an opening for re-mediating how to reflect on and approach their practices with youth.

Discussion and Implications

In this third iteration cycle of my course, I designed for collaborative inquiry with the use of tools that mediated experimentation around the use of theory and CEs and individual reflections of practice as valuable learning resources. I note in this chapter, that once these CEs

were seen as valuable resources and employed as tools that mirrored their practices, teachers began to engage in thoughtful negotiations of what constitutes adequate representations of practice. Importantly, adequate representations of practice were co-constructed and involved shifts in the object of reflection. As the object of reflection was expanded toward re-imagining practice, the teachers here began to represent specific design elements (i.e., discursive practice) as important for leveraging youths' everyday cultural practices. I proffered that these two design elements emerged in their reflection because of the representational media made available, as well as the analytical tools (i.e., critical discourse analysis). In particular, half of the dyads had audio- and video-recorded their classroom interactions. They transcribed these files and focused mainly on the expansive opportunities that emerged in discourse.

Three salient practices emerged in my analysis of collaborations between two specific teachers, Shahid and Brian: (1) experimentation with theory; (2) centering the everyday; and (3) centering imaginative praxis. Throughout these three reflective practices, teachers generated representations of their pedagogical practices while simultaneously negotiating and nuancing valued features of classroom activity. In other words, the teachers learned how to co-construct adequate representations of practice wherein their hopes, moral commitments, and pedagogical imaginations were inscribed[20]. Furthermore, throughout the collective reflection practices described here, the participating teachers developed a shared and deepened understanding for how to create consequential learning environments.

The findings presented in this chapter have implications for how teacher education courses are designed to leverage reflection as part of mediated praxis. Here, I have underscored the necessity of collaborative and collective reflection practices as teachers worked toward reconciling theory with practice in order to "rise to the concrete." One of the most salient affordances of this collaborative work is the distribution of labor in reflection practice. As I noted earlier, Shahid and Brian's joint collaboration was distributed in that Shahid predominantly cited theories (from within and outside our course) and Brian contributed examples from both of their collective practices and reflections (CEs). This illuminates that teachers often need co-operative action around valued pedagogical pratices and each other's insights and analyses in order to see opportunities for transforming practice; they need many-eyes[21] to co-construct new ways of seeing, but the representational media that we use to support this process is consequential. For Shahid, Brian was instrumental in helping him see the possibilities of theory as grounded in practice; and for Brian, Shahid was instrumental helping him see practice as grounded in theory. In this regard, I observed both appropriate theory in order to describe, nuance, and extend their partner's practice. In doing so they contextualize, live, and become conversant in theory.

While not the focus of this chapter, it is important to note that the fruits of the labor of these cycles of collaborative inquiry, which included experimentation with theory, centering the everyday, and imaginative praxis were synthesized in their presentation and final collaborative reflection paper. The final co-authored paper further served as the context for further reflection of their practice, one that exemplified how they appropriated learning theory, made use of their reflections, and imagined new possibilities for practice.

As noted previously in this chapter, all of the teachers and dyads engaged in reflective practices differently, as expected, but the three practices (i.e., experimenting with theory,

[20] In this respect, they are tertiary artifacts (Wartofsky, 1979).

[21] I am inspired by Vossoughi's notion of many-hands in describing joint-activity in making and tinkering spaces.

centering the everyday, and imaginative praxis) described here were present in all of the dyads to varying degrees. This design iteration of my course does illuminate the possibilities for the design of teacher education classrooms that make intentional use of digital technologies and privilege cycles of collaborative inquiry. Central to this third iteration cycle, as with the previous two, is the development of reflective practices that I hope teachers will carry with them throughout their practice. In this instance, teachers learned how to jointly see practice, make their own valued practices visible, and to negotiate contested ways of designing pedagogical practices. Mediated praxis, in this regard, is about making visible the theories that undergird one's held assumptions and then opening up possibilities for change in everyday practice. In this respect, teachers learned how to engage in processes of reflection that foregrounded who they hoped to become and what kinds of practices they imagined would support that dream. This chapter underscores that such processes of learning are slow, messy, laminated, and necessarily involve the development of new values, as well as new ways of seeing.

Chapter 5: CONCLUSION

Discussion of Findings

This study makes visible preservice teachers' learning processes, in the context of individual and cooperative reflection, as they aimed to leverage youths' everyday cultural practices toward consequential learning (Gutiérrez, 2008; Gutiérrez & Jurow, 2016; Jurow & Shea, 2015). In particular, I illuminated the evolution of teachers' collective generation of robust pedagogical conceptualizations and designed classroom practices, as they drew on theories of learning, tools that supported mediated praxis (e.g., cognitive ethnography), as well as critical discourse analysis of audio- and video-recordings of their interactions with youth. Here, teachers began to broaden their understanding of how to design for combining youths' everyday practices with academic genres by attending to the design elements of learning environments (i.e., discursive practice, participation structures, task structures, and tools).

Such conceptual and pedagogical shifts involved breaking away from traditional notions of the social organization of learning in the classroom, which emerged as teachers questioned and examined (a) the expectations that were placed upon them, as well as (b) their own assumptions about the purposes of classroom learning. Building on previous conceptualizations of teacher learning (Horn & Little, 2010; Putnam & Borko, 2000; Grossman, Smagorinsky, & Valencia, 1999), I centralized the contextual and social processes involved in mediated praxis (Gutiérrez & Vossoughi, 2010; Stone & Gutiérrez, 2007). Given that the majority of studies in the field of teacher education tend to examine teachers' learning as an alteration of teachers' beliefs or learning as an individual phenomenon (Cochran-Smith, et al., 2016), this dissertation study contributes to the field, theoretically and methodologically, by making collective activity the central unit of analysis (Engeström, 1987). This is important because the assumption that undergirds these studies (Cochran-Smith, et al., 2016) is that teachers must change their beliefs and understandings of teaching for diverse learners, largely leaving unexamined how their pedagogical practices can effect change in their classrooms. Here, learning to teach was largely conceptualized as a change in how an individual teachers views youth and the communities that they work with. While important, a change in preservice teachers' beliefs about youth do not alone support teachers in developing a repertoire of practices that can support non-dominant youth in consequential forms of learning.

In addition, because the majority of studies in the field focus on individual change processes of preservice teachers, this study provides design implications for organizing cooperative activity between preservice teachers. In particular, participating preservice teachers were able to reconcile theory with practice as they "rose to the concrete," (Gutiérrez & Vossoughi, 2010) providing them with opportunities to generate new pedagogical conceptualizations, as they reflected on their shared practices with youth and made sense of cultural-historical notions of learning. Here, teachers were not expected to engage with surface-level applications of course theories, but, as was intended in the design of the course, the teachers were expected to appropriate course theories and make them their own. In this respect, this study provides insight in designing for teacher learning environments that privilege the development of teachers' agency as they themselves design for expansive pedagogies in their own classrooms.

As a design-based research study (Gutiérrez, 2014), anchored in what is possible in teacher learning ecologies, we, the participating teachers and myself, were able to engage in iterative cycles of inquiry with each other, giving us opportunities to re-imagine and implement new pedagogical practices and conceptualizations together in both our teacher education classroom and in their interactions with youth. This study of teacher learning in a university-based teacher education classroom shows that teachers made sense of, experimented with, and designed new pedagogical practices and conceptualizations that had affordances for how they engaged with youth.

For example, the teachers in this study shifted in their pedagogical approaches, subsequently generating new small "t" theories about the social organization of learning in their classrooms. In Chapter 3, Shahid initially conceived of his role in the classroom as a peripheral participant, as he was expected, as a student teacher, to help youth stay on task. However, as he appropriated course theories, specifically those on third space (Gutiérrez, 2008) and socio-spatial repertoires (Cortez & Gutiérrez, 2019), Shahid began to attend to specific features of the broader classroom environment; in effect, he began to turn away from solely focusing on individual students' who he believed were disengaged. In addition, by using critical discourse analysis as an analytical lens, he was able to see classroom discourse patterns as opportunities for leveraging the everyday cultural practices of youth and connecting them to a larger structural analysis of power. Here, the analytical purchase of transformative agency makes visible how Shahid shifted from an individual initiative of changing individual students to collectively building with them. As he shifted in his critiques, from disengaged students to the broader social organization of the classroom, he was able to generate pedagogical conceptions and approaches that built on the collective interests of the youth. This was a similar process of learning for the five teachers who developed syncretic approaches in their reflections.

In Chapter 4, I focus on the co-operative action (Goodwin, 2017) of two teachers as they experiment with course theories in their reflections on their pedagogical practices. Through this experimentation, Brian and Shahid began to center their meaning making on the everyday practices of youth, as well as imagine new possibilities for their practices. Through their collective actions, we see changes in how they participate with one another and their peers as they struggled to move beyond more general prescriptions for teaching toward more specific approaches that were oriented toward leveraging the everyday through the design of the elements of learning. In particular, Shahid and Brian focused their efforts on the possibilities that can emerge in the design of more flexible and open-ended discursive classroom practices. In this respect, Brian and Shahid shifted in their critiques of students, schools and their cooperating teachers toward examining the possibilities in their role in the classroom and their pedagogical approach.

Through the participation framework, we see the various stances that teachers deploy in their co-operative action as they make sense of new pedagogical conceptualizations that seek to build with youth. In particular, Shahid and Brian worked to expand their understandings of their practices and course theories, by working with their peers. Here, learning was conceptualized as collective activity, which provided a window into the various commitments that were still evolving in the collective space of the teacher education classroom. But, more importantly, this chapter offers implications for the design of pre-service teachers' conversations about practice and theory. As the field begins to shift toward examining teachers' learning and development in the context of collaborative reflection, we need to know more about the affordances and

constraints in how teachers jointly make meaning of pedagogical practices and theories on learning.

In summary, I want to emphasize that while I have examined the trajectories of two teachers, the framework of transformative agency helped me illuminate how individual initiatives can inspire collective activity. These examples are indicative of the types of learning processes we can hope for in teacher education. Not all of the teachers had similar learning trajectories, but Shahid and Brian, in particular, were able to support each other in the expansion of their pedagogical practices, in ways like the other participating teachers. These were practices that were seen across all of the teachers; as they engaged in cooperative inquiry, they had to experiment with, center the everyday, and strive for re-imagining their practice. While not all of the teachers showed that they learned how to build on youths' everyday cultural practices, I argue that there were contextual features of their placements (i.e., being positioned as assistant teachers) that perhaps restricted their ability to contribute to the design of their respective learning environments.

In the cases of Brian and Shahid, presented across Chapter 3 and 4, we saw them both supporting youth in the development of critical digital literacies, as well as supporting youth in becoming engaged citizens. They did this while also, simultaneously, collaborating with teachers in generating new pedagogical conceptualization. Thus, I envision their trajectories as a helix, where they often "went their separate ways" while engaging in their teaching practice, and frequently came back together to collaborate, share, and build. This was a genome of teacher learning. By genome, I mean the genetic material that motivates or guides the work of teachers in this learning ecology. Importantly, as a metaphor, a genome reflects the historical responses to ecological disturbances (Walker & Salt, 2012). And, teachers in this study continuously re-imagined their practice, thus expanding their collective genome, they leveraged various theoretical, technological, and analytical tools to support their collaborative inquiry and collective expressions of transformative agency.

By centralizing the continual development of teachers' theories about practice, I am pointing to how the study of teacher learning must involve keen attention to the evolution of teachers' individual initiatives into collective action, with their students and their colleagues. Designing ecologically means that we look for how individual and collective learning evolves and is responsive to disturbances. In this respect, our design approach to teacher education should provide all learners, young people, teachers, and communities alike, with multiple opportunities for imagining new social futures, an important implication for equity. Examined in this way, this study has clear pedagogical, methodological, and theoretical significance.

Implications for Practice

As I argued earlier, a central challenge persists: how can we intentionally design teacher education such that youths' everyday practices are an inherent part of how teachers learn? In this dissertation study, I illuminated how teachers can learn to develop practices to design expansive forms of learning, of which youths' everyday practices are a fundamental part, building on prior work that has been done (Gutiérrez & Vossoughi, 2010). In my commitment to further our theories on teacher learning, I have been thinking about the role of tools and how they can support teachers in seeing learning in new ways across temporal and spatial scales. Specifically, I

have considered the pedagogical potential of tools and how they can be repurposed and transformed by teachers in their collaborative inquiry and theory-building practices.

In this respect, this study has shown (Gutierrez, 2016; Gutierrez & Jurow, 2016; Gutierrez & Vossoughi, 2010) the importance of designing robust ecologies for teacher learning, saturated with a range of tools and forms of assistance; the same design principles we have for robust student learning. Here, I call attention to leveraging non-dominant people's everyday practices (Gutiérrez, Cortes, Cortez, DiGiacomo, Higgs, Johnson, Lizárraga, Mendoza, Tien, & Vakil, 2017) and to the use of youths' full everyday cultural toolkits to expand opportunities for meaning making and consequential learning—practices that disrupt the encapsulation of schooling (Engeström, 1991). This approach stands in contrast to those that use "everyday knowledge" to move youth from everyday understandings to school-based understandings, independent of what we know about how people learn expansively, as well as the cognitive and social affordances of leveraging the everyday. Such reductive practices fail to incorporate the cultural knowledge and practices that are richly available in youths' repertoires into substantive meaning-making practices in school-based learning (Gutiérrez, 2014). Finally, I argue that teacher learning opportunities must be re-mediated to create learning systems in which teachers develop deep understandings of youths' cultural, linguistic, and socio-spatial repertoires. This would involve engaging teacher learners in practices that highlight the idea that youth learn in their movement across the practices of everyday life, thus, expanding teachers' occasions to learn how everyday cultural practices are constituted and made consequential in school and in the city space in which youth live, play, study, and work (Gutiérrez & Jurow, 2016).

Toward this end, we look to new ways of designing teacher education courses where teachers can expand their pedagogical toolkit through reflection and the application of socio-cultural explorations of learning, alongside opportunities to re-imagine the larger institutional demands of schooling, including how policies and practices can constrain opportunities to engage in consequential and respectful forms of learning where youth can become designers of their own futures (Gutiérrez, 2008). In this respect, teacher educators must attend to a set of design principles that privilege the social process of learning and the development of teachers' agentic practices and stances. Here, I am attending to the types of activities and assignments that teachers are generally expected to engage in their coursework, which have embedded within them theories of learning, which can reinforce or challenge familiar dichotomies between theory and practice.

Implications for Research

As a design-based research study, I worked to examine new forms of distributed expertise with preservice teachers to respond to and identify practical dilemmas in the context of their reflection on their pedagogical practices. A central tenet of this study is that the participating teachers and I would work together, especially since they had more expertise and understanding concerning their classroom. But, more importantly, positioning myself as a research partner required that teachers would learn to develop a new relationship with theory and their reflection practice. However, working side by side with teachers was not always an easy endeavour and required intentional design in terms of the norms and routines, as teachers were generally not used to participating in the teacher education classroom in this regard. In particular, teachers, at times, expected to be provided with the "correct" solution to problems they encountered in their

classrooms, either by the course theories or by me, as the course instructor. In this respect, I paid attention to how I designed activities around the use of course theories and my role. For example, my comments on the cognitive ethnographies were generally designed to open dialogue, rather than make outright assertions. Of the five teachers that did not engage in syncretic approaches in this study, I found out that they wanted validation or confirmation that they were engaging in their practices the right way. However, as it became a normative practice in our classroom to share reflections, the teachers began to understand the iterative process of design that expected that they experiment with their practice. Given that this was the second semester of their first year as preservice teachers, it seems that teacher education should be designed to counter these types of practices that in effect represent the beginning of siloing in one's practices. Toward this end, teacher education has an enormous responsibility in supporting shifts of this quality, but design-based sensibilities might help generate new relationships among teachers and pre-service teacher.

Another challenge emerged over the course of the study regarding pre-service teachers' preparation in other university-based classes, as well as in their student teaching placements. There was considerable the lack of alignment among the courses, assignments, and theories across the teacher education department and this is how most university-based teacher education programs are designed. While my required course was loosely tied to other courses, instructors were not expected to build on or leverage assignments or course theories from any of the other courses. There were moments, as seen in Chapter 3, where teachers had to make sense of two seemingly similar assignments, that were designed to support teachers in seeing the process of learning at very different levels. And, there were also moments when assignments and course theories between courses seemed to be at odds with one another. When these types of dilemmas emerged and an easy answer was not in sight, teachers that wanted more freedom in their approach to the teacher education program typically appropriated course theories or the assignments in ways that made sense to them. But, this challenge could easily be designed for in a teacher education program. McDonald and colleagues (2011) designed a study that integrated teachers' assignments, course theories, student teaching placement across five different courses. This holds exceptional promise and I feel that this study, as well as mine, confirm that more research is needed to understand the affordances and constraints involved in designing for coherence across preservice teachers' preparation. Following the work of 5th-Dimension (Cole and Distributed Literacy Consortium, 2006), Gutiérrez's (2008) Migrant Student Leadership Institute, and Zeichner and colleagues (2016) work in designing new partnerships with communities, it is possible to create programs that make connections across coursework and field experience.

Another area that my study highlights for future research is the need to design learning environments for coaches, mentor teachers, and field-based supervisors. As previous research confirmed (Anderson & Stillman, 2010), student teaching tends to be organized to support teachers in classroom management techniques or supporting teachers to focus narrowly on preparing students for achievement tests. Similar to designing for alignment among coursework, we need more research that helps us understand the broader learning ecology of preservice teachers' preparation. Teacher educators should be responsible for design learning environments that support the development of coaches and mentor teachers. However, there exists an assumption that these more seasoned teachers have already developed expertise in their craft and their role is to bring them into the normative folds of the profession. In this respect, the design of

field-based experiences and student teaching tends to be designed using older paradigms regarding how teachers learn.

In addition to these methodological considerations, this study opened up opportunities for future research. As illustrated in this study, I have explored the pedagogical potential of one form of representational media, the cognitive ethnography, an artifact that supported teachers in both documenting and reflecting on teaching practice. In this study, teachers also used 360-degree video-recording and the use of virtual reality to revisit their own classroom again or those of their peers. There were only three teachers who participated in this part of the study and one instance where we looked at video in this regard in the classroom. Building on work that uses video-based reflections (van Es & Sherin, 2010), collectively examining classroom practice through an immersive medium, could afford teachers opportunities to use their senses in new ways, leading to new forms of embodiment during cooperative reflection. As seen in this study, audio-recordings enabled teachers to listen and repeatedly playback classroom conversations. This opened up opportunities in how they designed for their role in facilitating and interacting with youth in whole class discussions. Using video-based reflection has the potential for

Finally, and perhaps most importantly, the use of social media has opened up tremendous opportunities for preservice teachers to see the everyday practices of youth. In this study, a key pedagogical tool was the analysis of videos that showed everyday interactions involving youth outside of traditional classroom settings. In particular, these videos supported teachers in seeing the ingenuity (Gutiérrez et al., 2017) that emerges in various forms of everyday practices. I think this calls for the need to research how various forms of representing learning enable or constrain the development of preservice teachers' professional vision (Goodwin, 1994). Rightly so, teachers are typically trained to look at videos of classroom instruction in order to support their understanding of typical dilemmas or perhaps even to see best practices. What I am arguing for here is a more keen understanding on how to support teachers' development in looking beyond the classroom, especially as we discover more about how teachers learn to leverage youths' everyday cultural practices.

Ultimately, this dissertation shows the promise of supporting preservice teachers' learning in a university-based teacher education program. Specifically, by designing for cooperative inquiry and saturating the learning environment with a robust set of theoretical, conceptual, and pedagogical tools, teachers can develop agentic stances that support new sensemaking and design sensibilities that are anchored in principles of equity. In this vein, the work of the teachers in this study show us their ongoing negotiations with maintaining a sense of hope and possibility as they imagine new social futures with the youth in their classrooms.

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Appendix A: Cognitive Ethnography Assignment Guidelines

Overview

Can the city be read? Any rendering (textual: written, verbal, graphic) of the city is always a joint achievement. We are always working together in space to "see" and to create new practices. In the classroom, as an example, you and your students will foreground and background certain things that each of you privilege as you make sense of how to read the city. For example, youth may be concerned with the presence of police on the streets, but some other people may say that the presence of police makes the streets safer. How can these different perspectives be reconciled? In this respect, you will work with youth to create a shared narrative about the city, by surfacing the practices that they engage in within the city, specifically in public spaces, as well as private spaces. A central concept of this class is that in our everyday experiences we engage with a variety of *literacies* that carry affordances and constraints and impact how and what we learn. In this respect, we are always learning in specific spaces and we carry with us what we learned from the past into the present. In your work with youth, you and the students will investigate (historicize) the sources of these constraints and affordances. This will give you and the youth opportunities to investigate the resistance practices of youth and their communities as they navigate and traverse the city. Given that you all are teaching different subject matter, you can, if you choose to do so, make explicit links to how youths' everyday renderings are related to *literacies* in your subject matter. This assignment is about how you help youth develop *new literacies* for reading and writing the city. In your six (6) interactions with youth, you will design new tools AND new participation structures that help youth identify AND build on AND amplify their everyday practices, but with specific attention to helping them re-imagine the city. Specifically, you are documenting how you and the youth are creating a shared narrative to re-imagine how they will make the city tomorrow and what is enabling and constraining their everyday experiences.

Some guiding questions/inquiries

What is a narrative of the city?

- What are the broader narratives about the city? Where do you see, hear, feel these narratives through a variety of texts (e.g., youtube, newspapers, the streets, oral histories, etc)? What is the general public saying about the city? What are their complaints? In what ways are these different/same than what youth and what you say/think?
- What are the practices that youth and their communities engage in throughout their everyday lives? What are the constraints (as they understand them)? What does resistance look like to them?
- How do youth read and write the city?

    - Use your disciplinary knowledge and your own literacies as you read the city from your perspective and pay attention to how youth read the city, too. Your tools and plans during your interactions should focus on surfacing their expertise in their everyday lives.
    - Examples: interviews, photos, sounds, videos, social media, maps, writing, any other texts

What is resistance in the city?

- What are the various narratives/perspectives about how to trouble constraints in the city? How are constraints made visible? Who wins and loses when people/social movements advance narratives/practices of resistance?
- What is being resisted? How is this resistance articulated?
- What are connections that can be made for how youth understand constraints and broader movements? How can youth critique these resistance movements, lovingly?

How do we re-imagine the city?

- How can the city be changed in our everyday practices?
- Where and when can it be changed?

What kinds of practices are youth and you engaged in to challenge the constraints that are faced in the everyday? What are the everyday practices that can change and are already changing the city? Toward what end are these practices deployed?

Cognitive Ethnography Format

Name:	Your first and last name
Site:	XXXX School, After school program, etc (can be pseudonym)
Date:	Month/Day/Year
Ensemble:	(list all of the children and other people you worked with even casually). Include names, ages, and grades (can be pseudonyms)
Activities:	activities that you conducted or observed during your interaction
Link to video/audio:	

I. General Site Observations

Consider the following questions throughout the semester:

- What happened (for you or even others) during the hour prior to the beginning of the interaction?
- What do you notice about the school/site as you come in? What is happening in the city, neighborhood right now? What is the nature of the political climate? What is in the news now that you are thinking about?
- What is the history of the space(s)? How is the space that you are entering closed off are connected to the broader cityscape?
- What is the feeling of the room, the general attitude of the children as a whole; what other activities within the school may be affecting the environment or atmosphere of the activities being conducted. What are the feelings of the other people involved; what types of interactions/activities are taking place between the students or people before the classroom activities begin (i.e., the ride to site, your conversations, etc.).
- The section is important, but can/should be brief.

II. Broad Overview of interaction

Concentrate on describing the interaction between you and the child(ren) (add more information about the environment around you, if relevant), as ACCURATELY and THOUGHTFULLY as you can. Generally, reflect on what went on at site, how you interacted with the child(ren), how they interacted with you, and how they interacted with each other. Be sure to note how you and the child(ren) came to engage in a specific activity, what their reaction was to the activity, and what difficulties or problems they encountered. *PAY close attention to dialogue, language use, and strategies the child(ren) utilized or attended to during the course of the interaction*. Remember that negative instances or ways the interaction break down, or misunderstandings about the interaction are just as interesting as positive instances; in fact, they can be more informative when we try to understand what supports or constrains learning and literacy development. *BE SURE to write your opinions and subjective assessments as OBSERVER*

COMMENTS (OC), because they are your ideas, assumptions, or hunches—inferences or reasons about why the events unfolded in a particular way.

III. Focus on Learning: Deep dive into the interaction
Provide a SHORT description of one part of the interaction (2-5 minutes). This section is about identifying what the child(ren) and you learned during a specific moment in your interaction AND what specifically led to that learning. For this part, it will be important that you identify what you and the child(ren) are bringing to the interaction. For example, what do they already know that will be leveraged in the interaction? (e.g., What are their histories of engagement with writing, math, etc that were leveraged in the interaction?) How are the tools that you designed for this interaction accomplishing or not what you planned? In this section, you can transcribe 2-3 minutes (or more) of the interaction. Identify who was doing what and how that was consequential for what transpired during this short clip of the interaction. Note any problems they may have encountered. *BE SURE to include include any assistance YOU provided, they sought, or were given by peers--and all the tools that mediated the interaction.*

In summary, this section is really about identifying what the child(ren) knew before they arrived to you in this specific interaction, what kinds of assistance was consequential or not for what they learned, and then finally what they learned, if anything at all. In short, how did you help them learn anything? What literacies were developed? How do you know? This section should really show us how learning transpired.

IV. Reflection/Analysis
This is your opportunity to reflect on the day's events and to make sense of them. All reflection notes are similar to observer comments and, in fact, your OCs should be useful to you in writing this section. *This section is extremely important because it is the beginning of your analysis and will help your subsequent joint work with the children; these reflections will also help you when you write your final paper*. Highlight the tools that you designed for this interaction and why you designed them in the way that you did; draw on the readings here to describe why you designed them. **Reflections must also include how you think your experiences are related to the concepts you are learning in class and how these theoretical tools influence or inform your analysis of ongoing learning activities--the processes of learning.** Reflection also provides an opportunity to begin to raise issues and questions you might have with the readings (i.e., learning experiences for which the readings do not account). Your analysis of practice through theory and theory through practice are not necessarily easy tasks but can be rewarding and serve as the source of very productive meaning-making and insight. *Reflection sections should end with two or more questions that you want to consider when you return to site*. Questions at the end of the cognitive ethnography field notes will help focus your attention for your subsequent work with the children.

It will help you in your final project if you make deep connections to the readings. Try and ask questions of the thinkers; we will do our best to identify how the thinkers from this class may have responded to your questions.

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List of possible aspects to attend to in the
Narrative Section of Cognitive Ethnography

"Task" Performance

Child(ren)'s understanding and interaction with a game

1) Child(ren) had no difficulty with the game; immediately gets into the game and can solve the game task; describe how s/he solves the presented problem. Does s/he solve it in the same way you would or differently?
2) Child(ren) has some difficulty; describe it: how did he or she go about solving it; how did you structure the situation for them; what kind of understanding did they have of the problem? Afterwards, were the children capable of solving the problem by themselves or did you need to still have an active role in structuring the situation continuously?
3) Can you identify the types of strategies they used in solving the problem (e.g., trial and error, testing a particular idea systematically; testing a curious hypothesis that as far as you could tell didn't have much to do with the way the problem is structured)?
4) Did they change strategies because of your help? Did they also become independent in solving the problem? Did they get a good grasp?
5) Facilitation or hindrance caused by another child. How did you handle it? When hindrance was created, what did you do to facilitate the interaction?
6) *One way to get to child(ren)'s understanding of a problem is to document how they might try to teach another child about it, or even teach you*. If this happened, explain how they did accomplish this. Did you notice anything interesting in their understanding? How much did you have to intervene or to ask specific questions?

Social Context of Interaction: Interaction between you and child(ren).
What role did you assume? Explain.

1. Told children that you didn't know the game and asked them to explain it to you.
2. Role of teacher (watching the child[ren] do something and only interfere when something goes wrong; you don't participate in the game)

3. Role of big-sib (you play together with the child; try to enter their world and lead them through in a subtle way; you create enough space for them to have control of the activity; but you interfere at crucial moments to shift the direction; your control is subtle and you redirect what they do, rather than tell them what to do)

Social Context of Interaction: Interaction between the children

1. Sequential turn-taking (a game each)
2. Turn-taking within a game
3. Collaboration (sharing a keyboard, sharing responsibilities, sharing the goal, etc.)
4. Joint activity, that is, the ensemble is not just working side by side but together toward a common goal; another way to think about this is "shared practice"
5. Competitive

Activity Context

Goal Formation in child(ren)'s activity

1. Child is immediately goal-directed; has already formed the goal about what she or he wants to do in a game, for the day, etc. and carries it out.
2. Child is a bit lost and needs your direction to form a goal for his or her activity; you negotiate the goal together.
3. Child wants to do something totally independent of the given activities or the game and he or she tries several means to accomplish this; you try to redirect, but may succeed or not. Why?

Degree to which the rules of the activity are followed

1. Does the child need to be reminded of the rules of the activity?
2. Does he/she follow them spontaneously, and even tell you (teach you or correct you about them)?
3. Does s/he try to avoid, even challenge the rules?

Computer Interaction

As you are observing and interacting with the children during game play, as an example, take notes about the "talk," actions, and activity around and with the computer. Observe how the children work with the keyboard, use of the mouse, boot games, flip disks, and make comments about particular pieces of the machine. Note how much help they ask for when trying to get a game started and record any questions or discussions that arise about the computer and its role in goal formation.

Suggestions for Successful Field Note Writing

1. Try to write your field notes immediately after your visit. Although they are not due until 10 p.m. the next night, you will be surprised to find how much detail *fades* away in a very short period of time!
2. As you write your field notes, try not to restrain yourself, (i.e., do not filter or select what should be reported or what should not). As you transcribe your notes, include all that you remember from your time with the children with as much detail as possible.
3. As much as possible, try to follow the field note format outline. Begin by trying to note how site "felt" that day--what you perceived to be the social organization of your selected site while you were there. Try to describe your role in the social system at site. In your focused observation section, take a closer look at the interactions that you were a part of during your visit. Try to note any cognitive, linguistic, and or social strategies used by the child/children. It is important to characterize these strategies with great detail.
4. Be very careful to place your reflections on and interactions of the day's events in the final section of your notes. In the first three sections, you will carefully describe what happened (behaviors, talk, actions, events). This description will become part of your empirical data! *In the fourth section, make inferences, draw conclusions, and make reasoned connections*. This is your ongoing analysis section. This section may include anything you have learned, discovered, questions you have about the site, challenges or concerns you might have, etc. Also, this section **should** include a discussion of the explicit connections between what you are doing and the content of the course readings and class discussions. In other words, this is the section in which you make connections between theory and practice.
5. The importance of being explicit cannot be overemphasized when writing your field notes. Remember, if you offer a conclusion or opinion, you must also offer evidence that helps explain your observation. You have probably heard the expression, "Show me, don't tell me" right? For the purposes of qualitative research, you can draw all of the conclusions you like. But, if you do not show how you were able to come to these conclusions, your cognitive ethnographies will NOT contribute to the research data set--they will NOT function as evidence. For example, it is one thing to write that a child learned a lot of new strategies and it is quite another thing entirely to say what the strategies were, how the child acquired them and how the strategies were made concrete during the activity. Your goal is to write thoughtful and evidence-based field notes that will help you better understand your own learning, as well as the student's.

Appendix B: Course Syllabus

ACADEMIC LITERACY

Course Description

This class will focus on the academic skills and practices in middle and high schools to strengthen the reading, writing, listening, speaking, and critical thinking abilities essential for functioning in an increasingly complex world. We will explore the development of reading and writing proficiently for acquiring knowledge across all content areas.

Course Objectives

Reading and writing are at the heart of contention and controversy in education. As teachers, it is our responsibility to make sure our students can do both and to examine their histories with these practices prior to their entry in school. Too often schools devalue the literacy practices students bring to the classroom. Teachers should not play the role that Bourdieu calls "agents of regulation and imposition" of official literacy parameters. Instead, teachers today are challenged to cross borders of discourse, forms of media, and ways of expression in our learning communities. In seeking to provide a liberatory approach, we begin with the premise that literacy is not an abstract skill, it is not an autonomous technical accomplishment. It is a negotiation of meaning with others, a negotiation framed by communities and social contexts. It is characterized by a give and take between participants.

Our schools assume that middle and high school students can read so there are no reading courses after 6th grade. And too often students have been turned off to reading and writing – intimidated, discouraged, or bored – by the time they come to us. And although writing is too often seen as only the province of English teachers, students find themselves needing to write effectively in other subjects as well as in their encounters with the world, whether in college, work, or social interaction. Consequently, all of us share the responsibility of teaching our students to read and write well.

As teachers of art, English, math, science, languages, and social studies, we are our students' reading and writing teachers. Reading and writing instruction have important equity implications. Struggling readers tracked in "basic" classes and English language learners who are not provided appropriate scaffolding for literacy instruction are closed off from skills in critical thinking and making meaning from texts. Such inequities perpetuate the achievement gap in our schools. For academic success, and for students' ability to negotiate the world with agency and effectiveness, they must be inducted into powerful reading and writing communities.

In creating this course, I have kept in mind the following essential questions about literacy that beginning and experienced teachers ask:

- What does it mean to be literate?
- How do we mobilize literacy and discourse practices that students bring to further their education?

- How do I help all students, including students behind grade level and English language learners, become readers of a variety of texts?
- How do I help all students, including students behind grade level and English language learners, become writers for a variety of audiences?
- What is the connection between reading and writing and learning in a subject area?
- What do I need to know about myself, and change about myself, to become an effective teacher of reading and writing?

Literacy is a complex phenomenon. We will begin this course by examining what it means to be literate from a variety of perspectives. The point of this critical examination of literacy is to understand better what it is we expect when we say we want our students to be literate and to negotiate meaning in multiple contexts and even with multiple media. It will also give us a point of reference as we engage others in discussion about education, ranging from cultural literacy to critical literacy and from Global Business English to African American Vernacular English.

In this course, we will deepen our understanding of "critical literacy," a concept that is best defined by Ira Shor as, "Habits of thought, reading, writing, and speaking which go beneath surface meaning, first impressions, dominant myths, official pronouncements, traditional clichés, received wisdom, and mere opinions to understand the deep meaning, root causes, social context, ideology, and personal consequences of any action, event, object, process, organization, experience, text, subject matter, policy, mass media, or discourse; thinking-in-depth about books, statements, print and broadcast media, traditional sayings, official policies, public speeches, commercial messages, political propaganda, familiar ideas, required syllabi; questioning official knowledge, existing authority, traditional relationships, and ways of speaking; exercising a curiosity to understand the root causes of events; using language so that words reveal the deep meaning of anything under discussion; applying that meaning to your own context and imagining how to act on that meaning to change the conditions it reflects."

Following a theoretical examination of literacy, we will look at reading from the perspective of teachers, researchers, and teacher-researchers. The goal of this part of the course is to provide you with specific strategies for improving your students' reading and writing. Towards this end, you will develop new tools for building on the literacy practices of youth and deploy them in your interactions with youth.

The course goals then are as follows:

- To define literacy as it relates to different disciplines.
- To connect thinking about literacy to the cultural and social/political context of the United States at the beginning of the 21st century
- To connect our students' learning in the subject areas with their growth as readers and writers
- To develop strategies to assess and improve the reading and writing of all students including readers and writers behind grade level and English language learners
- To learn, through analysis of student work, about our students' understanding and practice of reading and writing and the implications of that learning for instruction

Course Requirements:

The Teacher Performance Expectations (TPE's) comprise the body of knowledge, skills, and abilities that beginning general education teachers have the opportunity to learn in approved teacher preparation programs in California. This course addresses the following TPE's[22]:

3. Understanding and Organizing Subject Matter for Student Learning. Beginning teachers:
   - Introduces: 3.1 Demonstrate knowledge of subject matter, including the adopted California State Standards and curriculum frameworks. (week 2)
   - Introduces: 3.3 Plan, design, implement, and monitor instruction consistent with current subject-specific pedagogy in the content area(s) of instruction, and design and implement disciplinary and cross-disciplinary learning sequences, including integrating the visual and performing arts as applicable to the discipline. (week 6, 7, 8, 9)
   - Introduces: 3.4 Individually and through consultation and collaboration with other educators and members of the larger school community, plan for effective subject matter instruction and use multiple means of representing, expressing, and engaging students to demonstrate their knowledge. (week 6, 7, 8, 12, 15)
4. Planning Instruction and Designing Learning Experiences for All Students. Beginning teachers:
   - Introduces: 4.3 Design and implement instruction and assessment that reflects the interconnectedness of academic content areas and related student skills development in literacy, mathematics, science, and other disciplines across the curriculum, as applicable to the subject area of instruction. (week 6, 7, 8)
   - Practices: 4.7 Plan instruction that promotes a range of communication strategies and activity modes between teacher and student and among students that encourage student participation in learning. (week 6, 7, 8)
5. Assessing Student Learning. Beginning teachers:
   - Introduces: 5.7 Interpret English learners' assessment data to identify their level of academic proficiency in English as well as in their primary language, as applicable, and use this information in planning instruction. (week 2, 3, 4, 6, 7, 8)

Assignments (% of grade)

- Attendance/Participation in Class **(20%)**
  - Students are expected to initiate class discussions a few times during the semester. To initiate a discussion means to raise a series of questions about the week's readings to guide conversations in class. Students may choose to bring questions in writing with copies for everyone. Additionally, students may bring visual materials that complement/illustrate the readings in new ways. Feel free to bring in cases from your everyday life or how the readings may help us think through your pedagogical practices or even everyday dilemmas occurring throughout the world.

[22] Taken from the course matrix

    - In the past, students have also created matrices, tables, or written reflections on the readings. These were shared documents for the class. If you think this would be a good idea, then the people who are expected to initiate the class discussions can contribute to this shared document each week. We can decide on this after the first class.
- Everyday Routines Map **(10%)**: Due February 7
- Reading and Writing the City **(30%)**

Writing Assignments: Turn in here **(40%)**

- Writing Assignment #1 (Group paper; 2-3 pgs): Identify 3-4 dilemmas that frequently emerged in your interactions with youth. Provide some examples from your interactions. Please draw on the theories from class to help you examine why these dilemmas may be frequently occurring (you should draw on your CEs for this analysis). You can also discuss how you have been applying the theories from class to help you overcome these dilemmas and how you have been successful or not in advancing new learning for the youth. I highly recommend that you focus on dilemmas that show how you change in your pedagogical practice and how that change results in new forms of student learning and participation. Turn to the example papers to get a sense of the dilemmas that previous students examined.
- Writing Assignment #2 (Group paper; 4-5 pgs): Identify 5-8 codes and the corresponding text/video/photos/assignments associated with those codes in your cognitive ethnographies, along with your interpretation or synthesis.
- Group Paper: The course research paper is a 20-25 page analysis of your interactions with young people by exploring how you built new literacies with your students. This culminating project provides a structured opportunity for you to use the cognitive ethnographies, the readings, class discussions, and your experience with young people to write an evidenced paper about a literacy, learning, and culture. You will focus on the elaborated definition and examination of a construct you have examined in class: e.g., learning, resistance, culture, space, literacy. I have provided example papers from past students. In addition, I have provided the format for the research paper.
- Presentation: On the last day of class, you will share with us a brief overview of the shared narrative that you and your youth constructed of the city. Share with us the texts (written, video, audio, etc) that they produced. The purpose here is to give us a sense of how they aim to re-imagine the city tomorrow in their everyday lives. How do they plan to enact change to produce a city that matters and is meaningful to them? You will have 10 minutes to share. Or we may have a gallery walk. We can decide on this later as the semester progresses.
- Individual Self-Reflection (4-5 pgs): Turn in here. Each student is expected to individually write a final self-reflection paper. The purpose of the 3-4 page double-spaced self-reflection paper is to focus on your own learning and development throughout the course. Describe the aspects of the course/practicum that were most instrumental to your learning and that helped you link theory and practice. Use the guiding questions in the format, though you may also want to focus on other aspects of your experience in class and in your interactions with young people. I have provided a format for this assignment.

Schedule of Classes

Week	Essential Questions	Readings	Assignments
1. Introduction	What are literacies? Why does literacy matter in our everyday lives?	- Case study: - Video **Recommended** - Freire (1981) - Ybarra-Frausto (1991)	
2. Everyday Literacies	What is the relationship between sociocultural contexts and literacy practice? What are the different practices that youth engage inside and outside of the classroom?	**Required** - Scribner (1984) - Cortez & Gutiérrez (in press) - Martínez & Morales (2015)	
3. Learning and Literacies	How do we learn literacies? What are the histories of our literacy practices? What is the relationship between literacy and culture?	**Required** - Gutiérrez & Rogoff (2003) - Moll (1998) - McDermott & Raley (2011) ingenuity[23]	
4. Academic Literacies	What are academic literacies? How do we build on the literacies in the classroom?	**Required** - Pacheco (2015) - Gutiérrez (2008) - Lee (2001)	
5. Spatial Literacies	What is the relationship between space, place, and literacy?	**Required** - Kinloch (2010) **Recommended**	CE#1 due

[23] the quality of being clever, original, and inventive.

	How do we produce space? How is space enabling and constraining?	- Rojas (2010) Everyday Urbanism Book - Hood (2008) - Millar (2008) - Rojas & Chase (2008) - Wilson (2008) - Rojas (2013) - Rojas: interactive planning manual - Rojas Publications - Ladson-Billings (1995) Maps - Routes of least surveillance - Reading - LA water cycle - Reading - NYC Garbage Cycle - Reading - Atlantic Slave Trade - Jamaica Slave Revolt - Syllabus from School of Echoes: Anti-Gentrification	
6. Everyday Resistance	How is literacy is a practice of resistance? What role does language play in literacy development?	**Required** - Pacheco (2012) - Kelley (1994) Read Ch. 1&8 - Cruz (2014) **or** Diaz-Strong, Gómez, Luna-Duarte, & Meiners (2014) **Recommended** - de Certeau (1984) - Zentella (2003) - Anzaldúa (1987) - Lugones (2003)	CE#2 due
7. Literacies as a social achievement	How are literacies developed in social interactions? What does participation look like that centralizes equity as the outcome? What are the different ways that people engage in resistance practices as	**Required** - Gutiérrez, Rymes, & Larson (1995) - Goodwin (1994) - Case study: North Pole (watch a few episodes) **Recommended** - Gutiérrez, Baquedano-López, & Tejeda (1999)	CE#3 due

	they talk to one another?		
8. Writing Literacies	What are the different ways that youth can surface their histories? How can youth investigate and document their everyday lives?	**Required** - Cruz (2012) - Kirkland (2009) - Gutiérrez et al. (1999) - Case Study: Notes from the Field or Twilight **Recommended** - Means (1980) - Brecht (1935) - Rosa (in press) - de los Ríos (2017)	CE#4 due b
9. Digital Literacies	What are the affordances and constraints of digital technologies for learning? How can the digital space be leveraged in the classroom?	**Required** - García (2017) Ch. 4&5 - Philip, Olivares-Pasillas, & Rocha (2016) - Case Study: Cecile Emeke Strolling	- CE#5 due - Writing Assignment #1
10. Artistic Literacies	What is the purpose of art? How can artistic literacies be leveraged toward transformative and equitable ends?	**Required** - Hidalgo (2017) - Hidalgo (2017) - Wong & Peña (2016) - Case Study: Fotonovelas & AfroFuturism *Series* **Recommended** - Boal (1979) - Moskowitz - Lizárraga & Cortez (in press) - Lankshear & Knobel (2007)	CE#6 due
11. Public/Private Space	How do we enter into private spaces? What are the different points of entry? What is public space/private space?	**Required** - Frake (1975) - Case studies: Coco Fusco: Lecture excerpt & Art Forum Article Gomez-Peña Couple in a Cage NOMA Zanele Muholi	

		If Cities Could Dance Ep. 1 **Recommended** - Deutsche (1996): Agoraphobia Chapter - Kendon (1990)	
12. Workshop	What were the dilemmas that emerged within your interactions? How did you try to overcome them? How did youth create a shared vision of the city?	**Required** - Saldaña (2009)	Writing Assignment 2 Due at the end of class
13. Workshop	What were the dilemmas that emerged within your interactions? How did you try to overcome them? How did youth create a shared vision of the city?		
14. Workshop	What were the dilemmas that emerged within your interactions? How did you try to overcome them? How did youth create a shared vision of the city?	**Required** - Gutiérrez & Vossoughi (2010)	
15. Presentations	What were the dilemmas that emerged within your interactions? How did you try to overcome them?		**Individual Self-Reflection** **Final Paper**

	How did youth create a shared vision of the city?		

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Appendix C: Guidelines for Research Paper

The course research paper is a 20-25 page analysis of your interactions with young people by exploring how you built new literacies with your students. This culminating project provides a structured opportunity for you to use the cognitive ethnographies, the readings, class discussions, and your experience with young people to write an evidenced paper about literacy, learning, and culture. You will focus on the elaborated definition and examination of a construct you have examined in class: e.g., learning, resistance, culture, space, literacy.

On the last day of class, you will share with us a brief overview of the shared narrative that you and your youth constructed of the city. Share with us the texts (written, video, audio, etc) that they produced. The purpose here is to give us a sense of how they aim to re-imagine the city tomorrow in their everyday lives. How do they plan to enact change to produce a city that matters and is meaningful to them? You will have 10 minutes to share.

Format for the research paper:

1. Abstract
    a. Include a short abstract (summary) as part of your introductory section. Abstracts are italicized to separate them from the text.
2. Introduction
    a. General background needed to understand the importance and focus of the report.
    b. Explain the importance of your research. Placing your research in the context of some current debate is one strategy for indicating why a study is important.
    c. Often literature reviews are found in the introduction session. In this class, you will be utilizing the readings of the course to place your investigation in a broader framework.
    d. Remember to provide accurate and succinct definitions of theoretical terms and concepts.
    e. The introduction generally concludes with the specific research question(s) that will guide your study and its analysis.
    f. It is a good idea to tell the reader what you are going to do in the introductory section of the paper. (For example, I will demonstrate that…)
    g. In addition, a roadmap is very helpful for the reader.
3. Conceptual Framework
    a. Here you should detail the main theoretical components that your reader needs to be aware of before looking at the data.
    b. This section is designed to help the reader understand how you looked at the data.

c. If you find that you are using Vygotsky, for example, as you discuss your findings from your Cognitive Ethnographies, then you should outline the main aspects of Vygotsky that you think are pertinent to understanding your main argument.

4. Methods Section
    a. Include a description of:
        i. The setting
        ii. The participants
        iii. The researchers' relationship to participants
        iv. How you chose and analyzed the examples presented in the paper
        v. Data set: Cognitive ethnographies (#) collected over how much time; your coding system, and describe why those codes are relevant to your research questions
5. Analysis & Discussion (main body of paper/answering the research questions)
    a. At the heart of a research paper is an argument. Recall that arguments are used to convince the reader that your analysis is thoughtful and judicious. You will need to make claims that are substantive and then support your claims with relevant and compelling evidence. Your job is to decide which evidence you will use to support your points—balancing data and general claims.
    b. Since your evidence (your empirical data) is new to your readers, you will have to explain their intent and relevance. Tell your reader how to interpret excerpts of data.
    c. An important part of an argument is a warrant. Warrants are statements that you make which connect your particular claim to particular evidence. Warrants can be direct or indirect but work to help the reader understand why you are making particular claims in your analysis.
    d. As you present your data analysis, illuminate how your work relates to the theories/concepts of this course. As a consequence, you may find that your argument results in a blending of quotes or concise explanations of empirical data intertwined with quotes or restatements of theorists. Make sure you provide a clear and accurate representation of theorists' works as they pertain to your analysis.
    e. Organization of the core of the paper: identify sections of the paper with headings as advance organizers for your reader about what is coming, i.e., create a common ground for shared understandings.
6. Conclusion

a. Not a summary but rather four to five paragraphs to wrap up what you have argued and demonstrated in the report; restates your main point. You may want to qualify your conclusion, that is, the limits of your study. Your argument gains rhetorical strength when you acknowledge its limits.
b. Include what your findings might suggest for the relationship between curriculum and learning. What will you do with respect to learning and curriculum in the classroom, given this analysis and your findings? How do you create curriculum now? What has shifted for you?
c. It is common to close by pointing to a new significance or application; go beyond a simple restatement. You will likely address the "so what" questions you identified for your study.
d. If the significance of your analysis is particularly interesting to you, you may want to close with a call for continued analysis—the mark of a life-long learner.

****

Prior to submitting the final research paper, your research group will present your findings/tentative conclusions to the class in a presentation. The presentation should address the key component parts of the outline above, with particular attention to the tentative conclusions and argument you are building in the research paper. Include evidence that you use to build your argument in your presentation as well.

The presentation is an opportunity for you to share your ideas in a public forum with your colleagues, receive constructive feedback, and draw on suggestions to revise your final paper.

<u>In general, the report should demonstrate:</u>

- <u>Logical flow of ideas:</u> Appropriate transitions that link ideas in one section to the next; creating a logical flow of ideas will result in a coherent and more convincing analysis.
- <u>Clarity of writing: Make sure that</u> theoretical terms are clearly defined
- Consistent and accurate use of footnotes, citations; include list of references.
- **A SINGULAR VOICE among your group. Make sure that the paper and findings are woven together across all group members.**

Helpful Tips/Reminders

1. **Group Paper**: The course research paper is a 20-25 page analysis of your interactions with young people by exploring how you built new literacies with your students. This

culminating project provides a structured opportunity for you to use the cognitive ethnographies, the readings, class discussions, and your experience with young people to write an evidenced paper about a literacy, learning, and culture. You will focus on the elaborated definition and examination of a construct you have examined in class: e.g., learning, resistance, culture, space, literacy. I have provided example papers from past students. In addition, I have provided the format for the research paper. This is due two weeks after your group presentation.

a. To begin: What stands outs in your mind about your interactions with young people? What issues or child or event or activity or moments have struck you as most interesting or problematic? Have you come back again and again to something in your cognitive ethnography reflections? Here is your chance to dig deeper into some aspect of your experience with young people, but specifically relating it to everyday dilemmas and their relationship to curriculum in schools.
b. In the research paper, you will be expected to draw on the relevant key concepts and theories presented in the readings and discussed in class in your analysis of empirical data and discussion of findings. The concepts and theories addressed in the course should provide you with ample theoretical information to guide your analysis. The overall goal of this paper is to develop a clear and evidenced-based story that addresses an important "So what?" question.
c. Having trouble deciding or finding a topic? Read through yours (and your classmates') cognitive ethnographies. Take notes on patterns you notice. Think of scenes you remember. While working with young people, you should keep in mind your possible topic. Gear at least part of your cognitive ethnographies towards this topic. Feel free to informally interview young people or ask them to produce something for you, if applicable. If your group is doing a research paper about an individual, you might also want to collect other information about him/her besides the information you have in your cognitive ethnographies, by visiting him or her at school/home or maybe doing an informal interview.
d. I have provided example papers from past students. In addition, I have provided the format for the research paper.

Appendix D: Interview Protocol

History (background, choosing teaching, larger purpose of education)

- ❑ Tell me a little bit about your background.
    - ❑ Where are from?
    - ❑ Why this city?
- ❑ How did you come to be a teacher?
    - ❑ Why this university? Year at university? Program at university, why this program.

Your classroom

- ❑ Walk me through your last week in the classroom. What did your classroom look like Monday-Friday? What were you and the students doing? Be specific.
    - ❑ What was successful/unsuccessful?
    - ❑ What did you hope to accomplish?
    - ❑ What did students learn? How do you know?
    - ❑ What did discussions look like?
    - ❑ What did collaborative work look like?
    - ❑ What kinds of things were the students using? What were they expected to do?
    - ❑ How did you plan this week? Where did the ideas come from?
    - ❑ In what ways did last week connect to student's culture or everyday lives?
- ❑ What does your ideal classroom look like?
    - ❑ What are you and the students doing?
    - ❑ What are the students saying?
    - ❑ How are the students participating?
    - ❑ How do you decide what students learn?
- ❑ What does good learning look like?
- ❑ What is this big concept of equity, social justice? What are your struggles with it?
- ❑ What challenges do you face in putting into practice good learning?

Teacher Education

- ❑ What have been your most impactful courses at university? Why?
    - ❑ How have they shaped your thinking or practice?
- ❑ What readings/concepts from our course have spoken to you? Why
    - ❑ What have these readings done for you?
    - ❑ In what ways can you imagine them helping you with your practice?

Conceptions

- ❑ When you plan to teach (lesson or unit), how do you start?
    - ❑ Textbook, internet:

    - ❏ What tools/ideas do you use to begin planning?
- ❏ What are the most pressing issues you think youth need to know about? Why?
    - ❏ How do you plan to help youth respond to these issues?
- ❏ What kind of struggles <u>do you think youth</u> go through living in the city?
- ❏ What kinds of things <u>do students complain about</u> with respect to the city? What struggles have you heard students raise?
- ❏ How would you help youth respond to these struggles? What would it look like in your classroom?
    - ❏ What would you hope the students would learn? What would they be able to do?
    - ❏ What kinds of activities would students be doing? Why those activities?
    - ❏ What kinds of tools would you bring into the classroom to help students learn? Why these tools?
    - ❏ Would students collaborate with one another? What would collaboration look like?
- ❏ What are the most pressing practices or skills you think are important for youth to learn?
    - ❏ Why these practices?
    - ❏ How do you imagine these practices being applied in the everyday lives of youth?
- ❏ What would you want to know more about in order to help youth overcome their everyday struggles?

<u>Last questions</u>

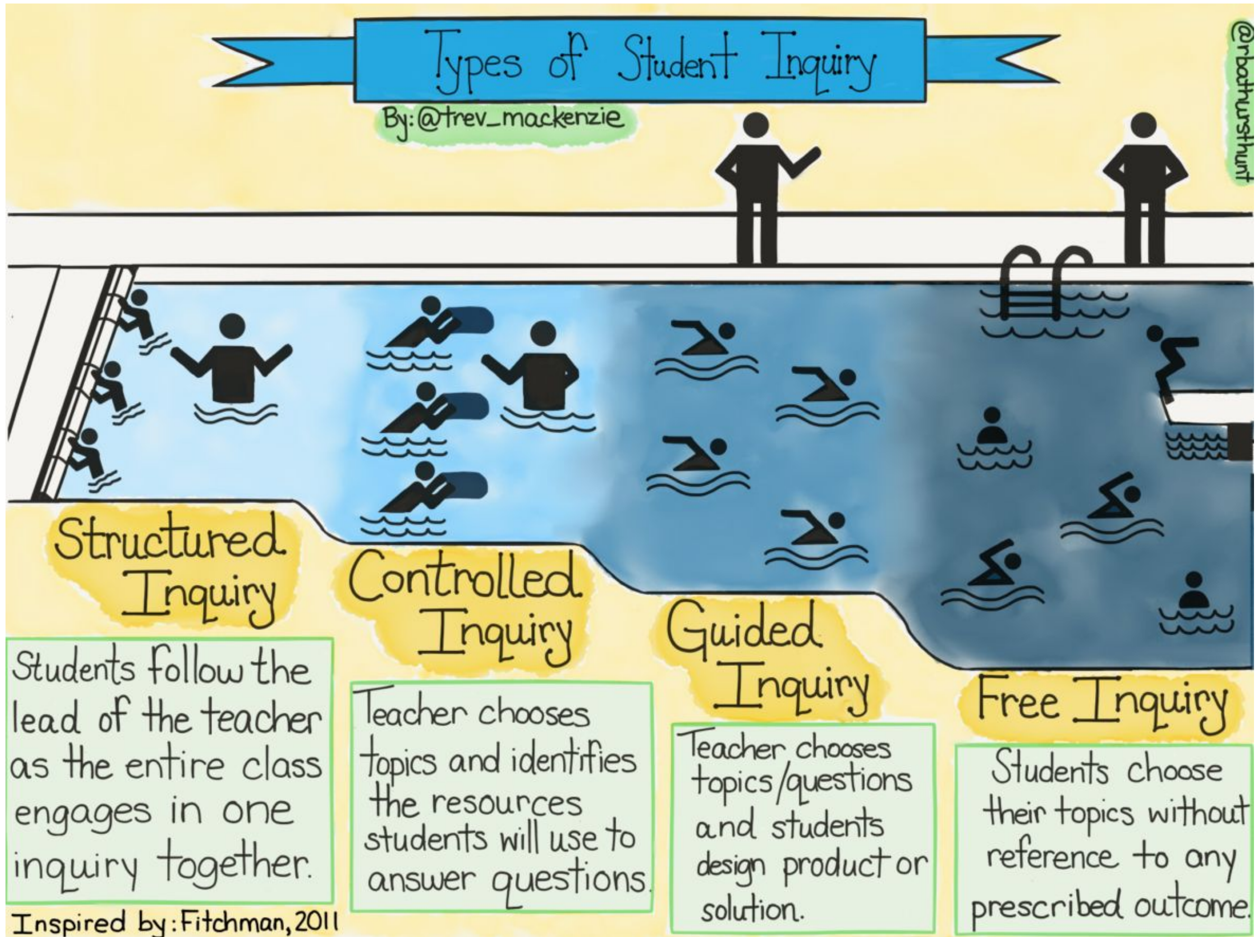
- ❏ What do you hope students will do tomorrow, next year, and in their adult lives with what they have learned in your classroom?

<u>Everyday mapping project</u>

- ❏ What did this assignment do for you?
    - ❏ What did you learn about your life? Anything new?
    - ❏ What everyday issues did this assignment surface for you?
    - ❏ What was it like to document your life in this way?
- ❏ If you were to adapt this assignment in the classroom, how would you do it? Why? How might inform your practice as a teacher, if at all?

Open for questions and informal convo about CEs.

Appendix E: A Diagram Shahid Brought To Class



Appendix F: Shahid's Transcript of CE#5A

1	Ms. Turner	First of all, in terms of vocabulary that you might need, can someone help us out with the definition of a subpoena. What is a subpoena? What does that mean?
2		(Laughter)
3	Ms. Turner	Why are you guys laughing at the word?
4	Jaali	Because it looks like 'sub' : 'peona'
5	Ms. Turner	Yeah, it does look like 'sub' : 'peona'
6		(more laughter)
7	Ms. Turner	But the definition, what does it mean?
8	Stephanie	A request for information
9	Ms. Turner	A request for information. (writing on board)
10	Ramond	I think the o and the e are switched
11	Ms. Turner	(long pause) Uh I don't know about that. Is that right?
12		Classroom chatter
13	Ms. Turner	Is it? Did I spell it wrong? (Looking at reading) Where is it? Oh yeah, you're right. You're right, thank you. (flips o and e on board) OK. A request for information… Everyone agree?
14		Agreeing murmurs from students
15	Ms. Turner	Any part of this you want to refine or make more specific, Jaali? (This is a classroom management move to get Jaali's attention and stop him from talking with Marco). Yeah Kyrie?
16	Kyrie	(Partially inaudible) This is something congress uses to, like, get you to do something?
17	Ms. Turner	In this context, yes, congress can use it. It has to do with a court, right?
18	Kyrie	[inaudible] (Asks a follow up question)
19	Ms. Turner	It's usually issued by a court. Well it's issued by a member of a court, right? So, like, someone who has the authority, right? So someone who has the authority over court, but, my question is actually about refining this part (points to the definition on the board) right? What does this request mean, what is it backed up by? Jaali I need your attention up here...ugh, that's gross.
20	Student	(inaudible)
21	Ms. Turner	Yeah.
22		(Jaali and another student are having some sort of small altercation around food and personal space that Ms. Turner. suddenly noticed.)
23	Ms. Turner	Nuh uh, stop. Face this way, and keep your hands to yourself. That

		is not appropriate. Thank you. (to other student) Are you OK, do you need to move?
24	Student	Nah, I'm good for right now.
25	Ms. Turner	Alright, let me know.
26		(Jaali is striking all sorts of poses with his hands on his body, literally keeping his hands to himself)
27	Ms. Turner	Jaali. Stop. :: So in terms of a request for information, basically you are compelled to respond, right? By force of law. Alright, so it is basically a requirement :: for you to produce something, whether that's for you to produce your testimony or produce documents or whatever is being requested by this court order.
28	Jaali	Why can't you call it a threat?
29	Ms. Turner	OK, so that's a subpoena. What Jaali?
30	Jaali	Why can't you just call it a threat?
31	Ms. Turner	A threat for information?
32	Jaali	Mmm hmm.
33	Ms. Turner	You could call it a threat if you want, yeah.
34	Jaali	But why not call it a threat?
35	Ms. Turner	Well a threat implies a lot and a requirement… this is required but the the requirement is this is required or else we can do something else to you which is why I say that it would be fair for you to require it for you to think of it as a threat.
36	Lena	(inaudible)
37	Ms. Turner	Yeah so we tend to try to like put things like genteely, when the law unless otherwise.
38	Student	Eeeew.
39	Jaali	Genteely?
40	Ms. Turner	Yeah.
41	Jaali	Like gentle?
42	Ms. Turner	Yeah.
43		(side chatter and noises and rustling of microphone)
44	Ms. Turner	Alright
45	Lena	Is it, is it...?
46	Shahid	Have you ever heard of legalese? Have you ever heard of legalese?
47		(Laughter, side chatter)
48	Student	Fuck!
49	Shahid	Legalese? It's a separate language. That's why lawyers cost so

		much. They go to school to learn a whole new language, right? And it's called legalese. (begins writing on board).
50	Student	Legalese?
51	Lena	Instead of legalese it's legalese?
52	Shahid	'Legal' : 'ese'
53	Student	Oh wow.
54	Student	Ohhhh I get it.
55		(Laughter)
56	Lena	Legalese!
57	Shahid	So you're right, a subpoena's a threat.
58		(Laughter)
59	Shahid	It's a threat. But they call it this so you have to pay a lawyer...
60		(More laughter)
61	Shahid	and so it doesn't sound so… threatening.
62	Ms. Turner	Right.
63	Kyrie	Can't you represent yourself?
64	Shahid	You could. And then they say subpoena and you don't know what it means and then you go to jail.
65	Kyrie	But if you know what it means?
66	Shahid	But if you know what it means. Right, yeah.
67	Lena	So you could be like, I'm filing a subpoena to get my money, and then…
68	Shahid	Hmmm
69	Ms. Turner	No.
70	Lena	Oh
71	Ms. Turner	A subpoena is about is this part about information is correct.
72	Shahid	Yeah
73	Ms. Turner	Right, so it's not about getting your money it's about getting information.
74	Lena	(Asking question about language).
75	Ms. Turner	OK, we're getting far afield from our topic at this point, so let's bring it back to our topic because we do want to talk about oversight in the 28 minutes we have left.