

## **UC Santa Cruz**

### **UC Santa Cruz Electronic Theses and Dissertations**

#### **Title**

It's Not About That Anymore: An ecological examination of the theory-practice divide in contemporary teacher education

#### **Permalink**

<https://escholarship.org/uc/item/91g7w6x2>

#### **Author**

Buchanan, Rebecca

#### **Publication Date**

2017

Peer reviewed|Thesis/dissertation

UNIVERSITY OF CALIFORNIA  
SANTA CRUZ

**It's Not About That Anymore:**  
*An ecological examination of the theory-practice divide  
in contemporary teacher education*

A dissertation submitted in partial satisfaction  
of the requirements for the degree of

DOCTOR OF PHILOSOPHY

In

EDUCATION

By  
**Rebecca Buchanan**  
June 2017

The Dissertation of Rebecca Buchanan  
is approved:

---

Professor Brad Olsen, Chair

---

Professor Emeritus Rod Ogawa

---

Professor Emerita Lucinda Pease-Alvarez

---

Professor Emerita Christine Sleeter

---

Tyrus Miller  
Vice Provost and Dean of Graduate Studies

Copyright ©

Rebecca Buchanan

2017

## Table of Contents

<b>Table of Contents</b>	<b>iii</b>
<b>List of Figures</b>	<b>vi</b>
<b>Abstract</b>	<b>vii</b>
<b>Acknowledgements</b>	<b>ix</b>
<b>Chapter 1: Introduction</b>	<b>1</b>
Attempting to Solve the Divide	9
Study Description	13
<b>Chapter 2: Theoretical Framework</b>	<b>17</b>
Institutional Theory	17
Learning as Identity Development	21
<b>Chapter 3: Methodology</b>	<b>26</b>
Ecological Systems Theory	26
Symbolic Interactionism	29
Research Design	33
<i>Case Study Sites</i>	33
Embedded Units	38
<i>Participant Selection</i>	38
<i>Data</i>	40
Program Level Data	42
Embedded Unit Data	45
<i>Data Analysis</i>	52
<i>Limitations</i>	56
<b>Chapter 4: Apprenticeship in Teacher Education</b>	<b>57</b>
Historical Master-Apprentice Model	58
Apprenticeship as a Site for Investigating Learning	62
Apprenticeship and PBTE	64
Teacher Education Programs' Goals and Apprenticeship	66
<i>Ecological Factors that Maintain the Master-Apprentice Model</i>	77
Student teaching practicum	77
<i>Solo days</i>	79
<i>Gradual release guidelines</i>	81
<i>Role of the cooperating teacher</i>	83
PK-12 demands	85
Program length	89
Marginalized coursework	92
CCTC requirements	97
Loose coupling of teacher educators	98
<i>Need to maintain relationships with cooperating teachers</i>	107

<b>Chapter 5: Learning to Teach as Performance</b>	<b>114</b>
Privileging Overt Behavior	119
Performative Technologies in Teacher Education	124
<i>Macro Level Performative Technologies: Discourse and Policies</i>	125
Accountability discourses	126
Teacher performance expectations	127
PACT/CAT	129
<i>Meso Level Performative Technologies</i>	137
Planning assignments	137
Solo days	140
<i>Micro Level Performative Technologies</i>	146
1:1 feedback	146
Performance in teacher educators' visions	152
Conclusion	156
<b>Chapter 6: Bricolage and Teacher Identity</b>	<b>161</b>
Grant	164
<i>Incoming Identity</i>	164
<i>Coursework Influences</i>	165
<i>Practicum Tensions</i>	168
<i>Post Program</i>	176
Scott	180
<i>Incoming Identity</i>	180
<i>Coursework Influences</i>	181
<i>Practicum Tensions</i>	184
<i>Post Program</i>	195
Conclusion	199
<b>Chapter 7: Teacher Thinking</b>	<b>202</b>
Student Teacher Thinking	203
Decision Making as the Teacher of Record	212
<i>Jamie</i>	212
<i>Manu</i>	216
<i>David</i>	219
Social Justice Continuum	224
<b>Chapter 8: Conclusions and Implications</b>	<b>232</b>
Changing the Core Technology of Teacher Education	234
<i>Supporting Professional Theorizing</i>	235
Following student thinking	236
Social justice continuum	237
<i>Making the Divide a Pedagogical Object</i>	237
Learning to teach as bricolage	238
Reframing the role of cooperating teachers	239
Closing	240

<b>Appendix</b>	<b>242</b>
Appendix A: Study Participant Survey	242
Appendix B: Complete Data Set	243
Appendix C: Data Collection Timeline	246
Appendix D: Coding Categories	247
Appendix E: Teacher Supervisor- Pre-service teacher Debrief	250
Appendix F: Cooperating Teacher and Pre-Service Teacher Debrief	252
<b>References</b>	<b>254</b>

## **List of Figures**

Figure 1: Conceptual Framework	33
Table 1: Focal Participants	40
Table 2: Coastal Academy Program Level Data	43
Table 3: Midlands Program Level Data	44
Table 4: Midlands Coursework and Practicum Hours	80
Table 5: Coastal Academy Coursework and Practicum Hours	80
Figure 2: Fraction Image from Worksheet	205
Figure 3: Social Justice Continuum	224
Figure 4: Ecological Model of Teacher Development	233

## **Abstract**

It's Not About That Anymore:  
*An ecological examination of the theory-practice divide  
in contemporary teacher education*

Rebecca Buchanan

This dissertation investigates a perennial problem in teacher education: the theory-practice divide. There has always been a rift between theory and practice; however, this gap and the responses to it take on different shapes and meanings based on the reforms, politics, and structures of the time. For example, in the 1980s and 90s Professional Development Schools sought to close this gap (Darling-Hammond, 1994). In the 2000s, this gap became a flashpoint for targeted attacks on university teacher education on the one side, and on eased-entry teacher preparation alternatives on the other (Cochran-Smith & Fries, 2005a). Currently, many reform circles are trying to address the theory-practice divide (and the various concerns it engenders) by advocating what is called a Residency Model (Berry, Montgomery, & Snyder 2008). This study investigates how two teacher education programs, both with social justice agendas, navigated this divide. I identified two teacher education programs in California, one residency and one traditional, and using stratified random sampling selected several pre-service teachers, practicing teacher educators, and cooperating teachers from each site, and then collected longitudinal data over the course of one year. I employed an ethnographic, ecological analysis of program structure, teacher educator practice, and pre-service teacher development as sets of intertwined learning processes.



My findings illustrate how the historical structure of apprenticeship made it difficult for both of the teacher education programs to meet their goals of developing social justice, change agents. The combination of the apprenticeship structure and a climate of accountability privileged the performance aspects of teaching, encouraging pre-service teachers to attend to the technical and visible aspects of teaching, rather than the more complex and nuanced aspects of teaching. Pre-service teachers experienced their training as fragmented, and pieced together a their teacher identity through a process of bricolage, which made it difficult to develop cohesive teaching philosophy aligned with the program's constructivists and social justice goals.

These findings complicate the hyper-practice-oriented emphasis of recent teacher education scholarship by demonstrating how a practice-based program, in fact, marginalizes coursework and professional thought and may inadvertently make it difficult for the field to develop critical-minded, social justice educators. Instead, this research suggests that teacher education should centralize the institutional divide between university and school and use it as a pedagogical object. This could support pre-service teachers in developing a cohesive set of teaching principles, which they can use to evaluate the efficacy of their own developing practice as well as the many mandates, reforms, and strategies they will encounter as PK-12 educators.

## **Acknowledgements**

This dissertation would not have been possible without the extensive support I received over the past several years from my committee members. Rod Ogawa provided me with his expertise on organizations and institutional theory. Christine Sleeter provided incredible insight and support on preparing critical, multi-cultural educators teachers, and Lucinda Pease-Alvarez has consistently pushed my thinking language, literacy, and teacher development. Brad Olsen has been an incredible advisor, supporting my work as a scholar, researcher, and teacher for the past six years. Working with him has shaped my understanding of how learning happens, the way society is constructed, and how methodologically rigorous research can help us investigate those phenomena.

I have also had the opportunity to work closely with a community other faculty members and doctoral students who have supported my thinking about teaching, learning, and research. I am particularly grateful of having the opportunity to work with Judy Scott, Cynthia Coburn, Maggie Clark, Alisun Thompson, Heather Schlaman, and Nora Lang.

I am also incredibly indebted to the focal teachers who participated in this study. They opened up their lives and shared their experiences with me during a significant transition in their lives.

Finally, I am extremely grateful for the unwavering support of my partner, Amber Munoz. This quite literally would not have been possible without her.

## Chapter 1: Introduction

Teacher preparation is a contentious field. Debates concerning who should be teaching, how they should be selected, what knowledge new teachers need, what program models are best, and how new teachers learn to teach are not mere questions of fact, but are rooted in political and ideological positions regarding the processes of teaching and learning and the purposes of schooling (Berliner & Biddle, 1996; Kozol, 2005; Rhee, 2013; Ravitch, 2010). Over the last 100 years, teacher education has been in a nearly constant state of reform, pulled in multiple directions by competing agendas (Clifford & Guthrie, 1988; Cochran-Smith & Fries, 2005a; Cuban, 1993; Kliebard, 2004). The history of teacher education is a story primarily characterized by the tension between the various attempts to professionalize and deregulate the profession of teaching. Wrapped up in these debates, which are carried out in the realm of teacher education programs and policies, are differing conceptions of what teachers need to know, what quality teaching looks like, who is best suited to teach, and who should be responsible for making decisions about professional entry and preparation. Over the last 30 years teacher education has been the subject of a great deal of public discourse and policy attention, mostly related to the best ways to recruit and train teachers. *A Nation at Risk*, a 1983 report on education commissioned by the White House, argued that American education was in a state of crisis and framed this crisis as a threat not only to the economy, but also to national security. Competing movements responded to this call, both with goals of improving the teacher workforce. One sought to professionalize teaching (Carnegie Forum on Education

and the Economy, 1986; Holmes Partnership, 2007) and the other sought to deregulate entry into teaching, making it easier for content area experts to enter the classroom. Debates between these two agendas have been vociferous (Darling-Hammond, 1994; Kopp, 1994; Ravitch, 2010; Rhee, 2013), and buried within them are differing approaches to a third reform agenda, social justice. The social justice agenda overlaps with the other two, as both sides argue that their approach leads to better educational opportunities for low income students and students of color. A place that these two agendas have merged most recently is around what is being called Practice Based Teacher Education (PBTE). PBTE emphasizes the practicum component of teacher education; something that deregulation supporters argue is primary process for learning to teach. It also holds that this preparation should be pre-service, meaning that teachers are not learning how to teach while they are also responsible for PK-12 students. PBTE takes multiple forms, and can be thought of more as a discourse about teacher education than a particular program model. And it has garnered support from a variety of scholars, educational activists, and policy makers (Ball & Forzani, 2009; Berry, Montgomery, & Snyder, 2008; Darling-Hammond, 2010; Grossman, 2010; Rust, 2010; U.S. Department of Education Press Office, 2009; Zeichner, 2010a).

Alongside this growing support for PBTE are mandates for change from both within and outside of the field of teacher education. Scholars promoting PBTE argue that practice based models can connect programs more closely with the local community and provide opportunities for pre-service teachers to practice equity-

oriented pedagogies (Glass & Wong, 2013; Zeichner & Payne, 2010).

Simultaneously, organizations outside of teacher education are also calling for change. The National Council on Teacher Quality, a non-profit organization that promotes market-based approaches to educational change, has conducted multiple reviews ranking teacher education programs in an effort to incite policy action against programs that NCTQ deems unsuccessful<sup>1</sup> (Greenberg, McKee, & Walsh, 2013, 2014). Stanford University's SCALE, Pearson, and AACTE have collaborated to create a teacher performance assessment, which they hope will grow into a national measure of teacher preparedness. And the newly formed Council on Accreditation of Educator Preparation (CAEP) combined the TEAC, INTASC, and NCATE groups in order to develop a uniform body for accreditation of teacher education programs<sup>2</sup>.

There has also recently been an unprecedented level of federal policy attention to teacher preparation. In the fall of 2016, the federal department of education released its teacher preparation accountability guidelines, which require that states collect data on program graduates and rank programs, applying federal sanctions to programs that perform poorly (US Department of Education, 2016). While, these requirements were dismantled once the administration took office in 2017, it demonstrates a (potential) shift toward greater federal involvement in teacher preparation and a state of flux in teacher education policy.

---

<sup>1</sup> There have been considerable critiques about the methodological rigor and empirical quality of NCTQ's reviews (see Strauss, 2013).

<sup>2</sup> Participants in CAEP's accreditation process is voluntary, as most teacher education programs are accredited by the state where they operated. But it signals another movement within the field to promote change by creating a national, unified accrediting body.

This investigation of contemporary teacher education is situated within this cultural milieu, and it examines how a perennial problem in teacher education - the theory/practice divide - manifests in two different program models. Many programs are conceptually fragmented, and, therefore, pre-service teachers do not experience the kind of universal socialization that many novices in other professional preparations do (e.g. medicine or law) (Goodlad, 1990; Zeichner & Liston, 1987). This fragmentation is related to a lack of coherence, or discontinuity in program experiences for pre-service teachers. Coursework, field experiences, and student teaching are often disconnected from one another and frequently lack a shared conception of what schooling is for and what quality teaching looks like. Teachers are (generally) expected to come to their preparation courses with subject matter knowledge, so education preparation tends to focus on developing pedagogical content knowledge, pedagogical strategies, and particular dispositions. One of the chief mechanisms for learning to teach is through practical experience. Traditional teacher education has always had a clinical component, often referred to as the practicum or student teaching. Zeichner (2010b) describes clinical preparation as training that occurs “in the context of a classroom under the guidance of a strong mentor” (p. 1), and he recommends that pre-service teachers receive a minimum of 450 hours of clinical preparation. He argues that during their time spent in the classroom, teacher candidates should be provided opportunities to observe, practice, and receive feedback on their teaching practices; this time should be structured in a way that scaffolds the responsibility of a teacher candidate from observing classroom

practices to full lead teaching responsibilities (Zeichner, 2010b). Clinical preparation, should ideally serve as an opportunity for student teachers to participate in guided reflection of teaching models and their own teaching experience (Grossman, 2005). Pre-service teachers should have the opportunity to connect the concrete experiences that they observe in their classrooms with the abstract concepts that they frequently learn about in their coursework (Edwards, 2014; Dewey, 1904). Pre-service teachers often need support from teacher educators to help them uncover these connections and turn abstractions into teacher actions. However, many teachers who enter through a pre-service university-based teacher preparation program are not necessarily experiencing high quality clinical preparation. The practicum becomes an opportunity for imitation of teaching practices that they observe instead of a place to engage in critical reflection of those practices. Pre-service teachers are often so concerned about carrying out the performance aspect of teaching that they fail to make the theoretical connections, focusing instead on the present practical concerns (Edwards, 2014; Feiman-Nemser & Buchman, 1985).

This often lamented theory/practice divide is rooted in the philosophical debate between rationalists, who believed that knowledge originated in the mind, and empiricists, who believed that knowledge came from experiences in the world (Olsen, 2008; Ellis & Orchard, 2014). While much of epistemological philosophy has dealt with collapsing this dichotomy, these debates are still relevant in our understandings of how new teachers acquire knowledge for teaching. Do they learn theories in university classrooms and then apply those learnings to their PK-12 classrooms? Or

do they generate understandings of what it means to teach from first-hand experience - practice in the classroom? While educational research has come to understand learning to teach as a connection of real-world experiences with mental abstractions, practice and structure in much of teacher education treats teacher learning as if it is simply a matter of transferring knowledge from university settings to their placement and future classrooms (Olsen, 2008). In fact, one of the ways that teacher educators describe the challenges of the theory and practice divide is the *problem of enactment*-the ability to actually carry out educational theories, concepts, and methods that they learn about in university settings (Darling-Hammond, 2006). However, the theory/practice divide is often less about difficulty enacting educational theories, and more about the mismatch between the kinds of theories and pedagogies taught in teacher education programs (which are frequently constructivist and student-centered) and what the practices that take place in PK-12 classrooms (which are frequently didactic and teacher-centered) (Britzman, 1991; Feiman-Nemser & Buchmann, 1987; Olsen & Buchanan, 2017). This mismatch makes it particularly challenging to establish the kinds of linkages necessary to understand teaching at both concrete and abstract levels. Pre-service teachers need both conceptual and practical tools in order to build a knowledge base that is firmly grounded in aligned theory and practice (Darling-Hammond & Baratz-Snowden, 2005; Grossman, Hammerness, McDonald, & Rondfeldt, 2008). Otherwise, even with particular philosophical commitments, understandings, or dispositions, if teachers lack the ability to put those theories into



practice, they are likely to revert to the patterns of schooling that they experienced or that takes place in their schools (Britzman, 1991).

The theory/practice divide is most often articulated as a conceptual divide between the abstract principles of learning theory and the practical realities of enacting concrete practices with real students. As goes the refrain “it’s a great idea, *in theory*”, indicating that it does not always work in real life. However the theory/practice divide is not merely conceptual, it is also a structural divide between the two institutions involved in teacher education. The two worlds are physically separated. Pre-service teachers take courses in universities, but complete practicums in PK-12 classrooms. Based on their role in the teacher education process, teacher educators are spread across these different physical locations. Faculty members and lecturers teach their courses at the universities, teacher supervisors (who are employed by universities) spend most of their work time in the field, observing and debriefing with students, and cooperating teachers (who are rarely integrated into the formal teacher education process) spend all of their time in the PK-12 classrooms where pre-service teachers are apprenticing. Further complicating this fragmentation is a lack of cooperation and partnership between the two worlds. Teacher education is not a shared endeavor that both universities and PK-12 schools engage in. Rather, serving as a cooperating teacher is a favor that PK-12 educators do for the profession or a recruitment strategy that PK-12 principals use to evaluate new teacher candidates for their schools. There is often very little communication between teacher education programs and PK-12 cooperating teachers about the kinds of pedagogies the

programs are attempting to foster (Fives, Mills, & Dacey, 2016; Goodlad, 1990). Theory and practice are not only divided across university (in coursework) and PK-12 schools (in practicums), they are also fragmented within the teacher education program (Zeichner & Liston, 1987; Goodlad, 1990; Grossman, Hammerness, & McDonald, 2009). Theory is separated from practice in the structure of most teacher education coursework. Foundations courses, especially those that address issues of race, class, and culture, are often separated from methods courses on how to teach subject matter. Additionally, teacher educators frequently fail to exhibit the kind of theories and instructional practices that they try to instill in their pre-service teachers, leaving prospective teachers with few examples of what constructivist and/or culturally relevant pedagogy might actually look like in practice. These issues may be particularly pronounced for teacher education programs committed to preparing teachers to work with historically marginalized students and communities. In the last decade, schools serving low-income students, students of color, and English language learners have faced enormous accountability pressures as federal policies (purportedly designed to address issues of equitable education) resulted in increased standardization and less teacher autonomy (Pease-Alvarez & Thompson, 2011). The differential demands placed on the two-worlds lead to a fragmented form of professional preparation. The lack of coherence makes both the experience of learning to teach and the practice of trying to educate new teachers particularly challenging and complex.

## **Attempting to solve the divide: Professional development schools and teacher residencies**

There have been multiple attempts over the last 30 years to try and bridge the university - school divide by creating partnerships for research and teacher training. One of the most significant (and successful) ones was the creation of Professional Development Schools (PDSs). In the mid-1980s, the Holmes Group, a consortium of education college deans, developed a proposal for a new model of teacher education called Professional Development Schools (PDS). PDSs would link university-based education departments with local schools where new teachers would be trained (The Holmes Partnership, 2007). The design focused on creating training sites that mirrored the teaching hospital – a practice based training site that was linked to the preparation component of medical schools (Darling-Hammond, 1994; Boyle-Baise & McIntyre, 2008). The goal of the Holmes Group was to increase the quality and status of teaching in the U.S. by reimagining the structure of their entry-level training. PDSs were designed to bridge the gap between colleges of education and PK-12 schools. They sought to integrate practice-based knowledge into theory and research, and restructure both institutions in order to create a new environment where collaboration was valued and integral to the work that happened in both places, including new teacher preparation. PDSs endeavored to alter the relationship between higher education and PK-12 schools by fostering collaborative connections that centralized practitioners and PK-12 schools in the work of university departments of education. The hope was that if high quality PDSs were sites of induction into the profession for

all new teachers, they had the capacity to reshape the entire profession of teaching (Darling-Hammond, 1994). PDSs were intended to be a model of professional practice – an environment where teacher candidates could learn from and among highly successful practitioners, and where practitioners would engage in continued professional development through their relationship with the university (NCATE, 2001). This true collaboration was (and is) difficult for PDSs to achieve, because they exist in the contentious spaces that connect two established institutions with entrenched structures, neither of which encourage or reward collaboration. The work of PDSs often demands that both school based practitioners and university faculty go above and beyond their standard job descriptions in order to engage in this collaborative work (Darling-Hammond, 1994, Wong & Glass, 2009). Although PDSs are still going strong in pockets across the country, they have fallen out of the high profile position they once held in the world of teacher education reform. This is partly because the kind of radical restructuring of both PK-12 schools and colleges of education that was needed in order for PDSs to become the cornerstone of professional learning in education never occurred, which was (and is) difficult because the funding that would support such restructuring has not been consistently available.

A new model of teacher preparation has gained popularity in the last decade that also attempts to address this endemic problem in teacher education: the residency program. Residency programs are partnerships between teacher education programs at universities and PK-12 school districts. Teachers are prepared for a specific school

district (which is typically urban) where they commit to teach once they complete the program. Residents (as the pre-service teachers are called) spend all day in a mentor teacher's classroom for an entire school year. Supporters argue that this extensive clinical preparation will better prepare new teachers for the demands they will face once they become teachers' of record. Residencies might offer an opportunity to resolve the two-worlds divide by more closely aligning the work of PK-12 schools and teacher education. For example, some programs operate through a mediating organization that connects the school district and the university, which can allow for greater flexibility than either organization typically has. This connection, specifically the dedicated pipeline of teachers to a particular district, may create a powerful avenue for change by creating a critical mass of like-minded educators in one school district.

Residency programs also seek to bridge the theory and practice divide by integrating the two during teacher preparation. Urban Teacher Residency United, a national network of residency programs, defines teacher residencies as “programs [that] offer a unique synthesis of theory and practice, combining a yearlong classroom apprenticeship with a carefully aligned sequence of master's-level coursework” (utruncated.org, 2014). What particular theories residency programs are committed to or exactly how the learning experiences are structured so that residents see theory and practice as essentially linked are not usually addressed in program literature. Some preliminary evidence suggests that different residency programs are relying on very different theories of teaching and learning.

How residency programs engage in the integration of theory and practice varies widely. The Newark Montclair Urban Teacher Residency (NMUTR) works to integrate their commitment to inquiry learning into the training of teachers themselves, modeling the practices that they hope their residents will engage in (Klein et al., 2013; Strom, 2014). The Boston Teacher Residency partners with a local university, but then staffs all of the courses with their own instructors in order to ensure training that is aligned with the goals and needs of the district (Solomon, 2009). Match Teacher Residency has created their own graduate school of education that allows them to center all of their resident teacher preparation on prescriptive skills that teachers can master (Sawchuck, 2013). Even with limited empirical research on residency programs, it is becoming clear that some programs understand knowledge for teaching to be mastery of a prescribed list of skills (Gatti, 2012; Sawchuck, 2013). However, to what extent programs see learning as situated experience, as a transfer of particular knowledge, skills, and dispositions, as an opportunity to develop adaptive expertise, or as a social reconstructionist project remains an open question and warrants closer investigation.

What may be lost in a seemingly benign call for an integration of theory and practice are differences among competing theories of teaching and learning. And like all social theories, they are political. Theories of learning, schooling, and teaching do not merely describe what pedagogies pre-service teachers should develop, but also carry with them visions of what schooling is for (e.g. assimilation, democratic participation, workforce training) and frame historically marginalized students in

particular ways (e.g. deficit vs. asset based views). Aside from the different kinds of theories that residency programs may employ in their training, they also face structural challenges in integrating theory and practice across organizations. In some cases partnerships between a residency program that is run by a school district, foundation, or non-profit organization and a university that provides coursework, an established connection to state certification, and the ability to grant graduate degrees simply reify the theory and practice divide, as the university provides the theoretical part of the training and the founding organization handles the residency, or practical part of the program, with low levels of actual integration (Gatti, 2012).

Residency programs may offer a solution to the two worlds divide by restructuring teacher preparation to more closely align the work of universities to the needs of local schools and communities. However, restructuring a program alone is not sufficient or particularly informative for researchers and practitioners. Very different visions of teaching and teacher education can be promoted through a residency program and investigation into this new model should examine how a program's structures, visions, and participant interactions influence and shape pre-service teacher learning.

### **Study Description**

Cochran-Smith and Villegas's (2015) recent review of research in teacher education reveals three broad areas of study: research on teacher quality, policy, and accountability; research on the changing conceptions of learning and knowledge; and

research on preparing teachers to work with diverse populations. The research on teacher quality, policy, and accountability, broadly, covers the macro levels of the field of teacher education by investigating policies, like those surrounding alternative certification programs, and using large scale datasets to evaluate teacher quality. This research has demonstrated that comparing training pathways (e.g. alternatively vs. traditionally trained teachers) yields little definitive information, because there is greater variation within program types than between them. This area of research also tends to tell us very little about the kinds of experiences that pre-service teachers have in their programs. The other two areas of research overwhelmingly explore what happens in coursework and fieldwork experiences, usually by close, qualitative study of one course within a program, which provide little information on how these experiences fit into an overall course of study.

My dissertation integrates all three of these areas of research and addresses several of the concerns raised by Cochran-Smith et al. (2015). I investigated how two forms of contemporary teacher education, a university-recommending and an alternatively organized program, navigate the theory/practice divide in the preparation of social justice oriented teachers. I examined the experiences of pre-service teachers over one calendar year, and I sought to understand their experiences holistically within the program, in order to investigate how the multiple (often fragmented) program experiences shaped their teacher identity.

The sites for study were two pre-service teacher preparation programs in California. Midlands University is a traditional university-based teacher preparation



program, and Coastal Academy is a residency program that operates as a partnership between several regional universities and a large school district. The conceptual framework for the study integrates institutional theory (Scott, 2008) and social practice theories on identity development (Holland, Lachiotte, Skinner, & Cain, 1998; Lave, 1996; Olsen, 2008) in order to examine pre-service teacher learning as an individual process embedded in and shaped by organizational and institutional contexts. This combination of frameworks allows for attention to both the macro-level forces that teacher preparation programs must navigate as well as the micro-level processes that occur between individuals.

Using stratified random sampling, I selected four focal pre-service teachers in each program, and engaged in a year-long ethnographic study of their learning-to-teach experiences. I collected data on the programs, teacher educators across institutional boundaries (instructors, supervisors, and cooperating teachers), coursework and placement experiences, and tracked the development of each pre-service teacher. The analysis offers an ecological examination of how factors operating at macro, exo, meso, and micro levels shape new teacher learning within and across the two institutions where teacher education operates. The findings illustrate how the structural features of apprenticeship dominated the learning-to-teach experiences of new teachers and make it difficult for the programs to meet their goal of training change agents.



## **Chapter 2: Theoretical Framework**

This study examined how programs seek to prepare new teachers by linking forces from multiple ecological levels that affect pre-service teacher learning. This involved investigating the micro-level interactions between participants in a program as well as how those interactions (and the learning that happens within them) are shaped by educational policies, organizational structures, and teacher educators' visions. The project drew from two different theoretical perspectives (institutional theory and sociocultural identity development) in order to understand how programs attempt to resolve the theory/practice divide, how a program's features shape the learning-to-teach experience, and how pre-service teachers make sense of the programmatic social interactions they experience. Institutional theory was employed to understand the ways that outside forces shaped the two worlds and the program's features (e.g. structures, visions, and relationships) within them. Sociocultural perspectives of identity development were used as a tool for examining teacher learning within the programmatic context. This combination of frameworks integrated the macro-level forces that teacher preparation programs must navigate as well as the micro-level processes that occur between individuals.

### **Institutional Theory**

Institutions are structures in society that shape human reality. They "provide stability and meaning to social life" (Scott, 2008, p. 48). Through their regulative, normative, and cultural cognitive elements, institutions structure the possibilities of

social life. What kinds of organizations develop, what kinds of activities take place inside those organizations, and what individual actors believe and value are influenced by institutions.

Institutions have three major pillars: the regulative, the normative, and the cultural cognitive (Scott, 2005). These three pillars, or elements of an institution, provide different avenues for investigation of how institutions get reproduced in organizations and social activity. The regulative pillar involves policies, laws, sanctions, and codified rules. The actor in the regulative pillar is most commonly the state and the mechanism for compliance is coercion. States create laws that individuals and organizations must abide by. The normative pillar is associated with professions. Professional norms, codes of conduct, and standards for entry and practice shape both the types of participants organizations recruit as well as their behavior and participation within an organization. Individuals and organizations are socially obligated to comply with professional norms; to fail to do so would render them illegitimate. The cultural cognitive pillar is less concrete. It involves unconscious, taken for granted ways of thinking about the world that individuals and organizations rarely reflect on. The cultural cognitive pillar represents how institutions are regularly seen as *just the way things are*. Cultural cognitive aspects of institutions are just *common sense*, and they are reproduced through mimetic means: everyone does it. If an organization or individual were to defy a cultural cognitive aspect of an institution without a sound rational explanation, others would be confused (Scott, 2005; Scribner & Donaldson, 2001).

Institutions are reproduced in organizations and society by symbolic systems, relational systems, routines, and artifacts (Berger & Luckmann, 1966). Symbolic systems may include regulations, values, categories, and even specific language. Relational systems include governance systems, authorizing agents, and isomorphism, or common organizational structures and practices. Routines include standard operating procedures, clearly defined roles, or taken for granted scripts. Artifacts are material objects that comply with a certain specification, meet the professional standard, or carry symbolic value. These carriers permeate organizations and reproduce institutions through an organization's formal structures, by defining who can participate and what roles they take on, by outlining what activities take place, and by determining what materials are appropriate (Scott, 2008).

According to Selznick (1957), "to 'institutionalize' is to *infuse with value beyond the technical requirements of the task at hand*" (italics in original, p. 17).

Organizations seek legitimacy by adhering to institutions. The additional value that institutions offer is that they can render social activities and collectivities as legitimate. Organizations often expend a great deal of energy and effort seeking legitimacy through regulative, normative, and cultural cognitive means. Institutions supply the rules of the game and organizations must play along with those rules. This results in institutional isomorphism, or many organizations of the same type that look almost identical; one elementary school tends to look like another. "There exists a remarkable similarity in the structural features of organizational forms operating within the same organizational field" (Scott, p. 152). Isomorphic pressures push

organizations to conform to a common structure in order to be rendered legitimate (Meyer & Rowan, 1977). In teacher education, accreditation policies may push teacher education programs to structure coursework requirements in ways that match the accrediting agency's standards. However isomorphic pressures do not only come from governing agents. Organizations must also be recognizable to the public in order to be considered legitimate; prospective students expect to take a set of predetermined courses when they enroll in a preparation program. Organizations with vague goals are particularly susceptible to the isomorphic pressures of institutions, because they are often unable to prove legitimacy through the rational means of goal attainment.

The three institutional pillars and the carriers that transmit them operate differently in the two worlds that teacher education occupies, which contributes to structural fragmentation in teacher education across institutions. For example, the world of the university and the world of PK-12 schooling operate under different regulations. PK-12 schools and teachers are accountable for their students' performance on annual standardized achievement tests, and poor performance leads to sanctions. PK-12 student performance on standardized achievements tests means little to university-based teacher educators, and they often try to teach their pre-service teachers to focus on other methods of assessment as indicators of student learning. There are also different professional norms. University-based faculty members are often expected to produce several pieces of published research annually, usually in journals or books that are not commonly read by PK-12 practitioners. In fact, the further from practice the research is, the more status it often has. Conversely,

practitioners often see research as esoteric and knowledge from teaching as produced through personal experience. As teacher education programs navigate this divide, they must negotiate these differing institutional pillars and their carriers.

### **Learning as Identity Development**

Teacher education programs are places where pre-service teachers are expected to learn the knowledge and skills necessary to be an effective beginning teacher. This study understands learning to teach as a process of identity development. Prospective teachers bring their personal and professional histories with them into a teacher preparation program, and through practice, develop a beginning teacher identity. This process occurs chiefly through interactions with others - teacher educators, PK-12 students, and other pre-service teachers. These interactions are shaped by the regulative, normative, and cultural-cognitive institutional forces that operate within the overlapping worlds (the university and PK-12 schools) where teacher education occurs.

Understanding learning to teach as identity development is rooted in situated perspectives on learning (Lave, 1991, 1996). Situated perspectives understand learning as inextricably linked to context and part of a social practice (Greeno, Collins, & Resnick, 1996). They take into account the way that macro (like history and culture) and micro (like local practices and environments) are part of the learning process (not simply an influence on it). From a situated perspective, learning is a process of becoming. As participants construct new understandings, they also

construct new versions of themselves. Learning is inextricably linked to the social location where it happens. Social activity with others does not simply result in a transmission of knowledge from one person to another, but in intellectual, personal, and practical development. Learning changes who a person is. In this decentered view

Learning is recognized as a social phenomenon constituted in the experienced, lived-in-world, through legitimate peripheral participation in ongoing social practice: the process of changing knowledgeable skill is subsumed in processes of changing identity in and through membership in a community of practitioners (Lave, 1991, p. 64)

Through social activity with others learners "begin to think in new ways, undergo identity shifts, adopt new ways of using language, reformulate relationships to the world, and produce both artifacts and memories" (Olsen, 2008, p. 17).

Identity construction is an active (if not always conscious) process.

Participants author their identities and, therefore engage in the process of learning with the available means, which are situated within their local context (Holland et al., 1998). This process involves drawing upon their own personal understandings and experiences and constructing themselves using the tools available within their socially, historically, and culturally constrained context, or figured world. One of the most readily available tools that individuals use to construct their understandings of themselves and the world around them is language. "Words are the media through which senses of self are developed" (Holland and Lave, 2001, p. 12). Language mediates our understandings and provides an avenue for creating and communicating a self-perception through a dialogue between the self and the not self. Individuals author themselves both in relation to others and through the ways in which they



choose to respond to the institutions, histories, and discourses circulating in the social world (Holquist, 1990). However, neither the individual nor the opportunities that exist for them to respond to are context free. Both are shaped by institutional forces that operate at multiple levels within the two worlds of learning to teach.

The dialogue<sup>3</sup> of self-construction is constant as pre-service teachers draw upon and are shaped by a multiplicity of other voices, including their own personal histories, formal teacher preparation, the school context where their placement occurs, colleagues, media representations of teachers, and educational policies.

"Teaching must be situated in relationship to one's biography, present circumstances, deep commitments, affective investments, social context, and conflicting discourses about what it means to learn and be a teacher" (Britzman, 1991, p. 8). These external influences may become part of a teacher's identity when they are integrated into his/her internally persuasive discourse. Authoritative discourse, the powerful discourse of structures and institutions, shapes the discursive possibilities of teaching and can often come into conflict with the internally persuasive discourse of new teachers. The process of teacher preparation often brings about conflict within the identity formation of pre-service teachers. The theories and practices proposed by progressive, constructivist-oriented programs may clash with the practices that teacher candidates have observed during their time as students or within their teacher

---

<sup>3</sup> This dialogue is both literal and figurative. Individuals construct themselves through the interactions with others and through an internal dialogue with themselves. Dialogue also figuratively demonstrates how identity is constructed relationally between an individual and other people, expectations, policies, influences, social norms, media, etc...

education program (Olsen, 2008). Conversely, some new teachers enter the classroom in hopes of eschewing traditional models of teaching in order to create more collaborative, student-centered learning environments (Britzman, 1991).

Teachers draw from both personal and professional experiences in their self-construction. Personal experiences, like that of being a PK-12 student, fuel the internally persuasive discourse of new teachers and shape images of what a "good" teacher should look like. The personal experiences that influence identity formation are not always critically interrogated by new teachers, particularly because teacher education programs have often failed to offer the space to reflect on core commitments and the teacher identity that new teachers bring with them into a program (Britzman, 1991; Olsen, 2008). Identity is both a process and a product. Pre-service teachers are in constant conversation with the sociohistory of the profession, their personal history, current representations and discourses about teaching, their local programmatic context, and institutional structures as they form and reform their teacher identity through the activities they engage in with others.



### **Chapter 3: Methodology and Research Design**

This study drew from ecological systems theory and symbolic interactionism in order to conceptually integrate the two theoretical perspectives described above with the research design and analytical methods.

#### **Ecological Systems Theory**

Ecological systems theory was originally developed by Urie Bronfenbrenner (1979) to understand how an individual interacts with factors that operate at multiple levels within his/her environment. Bronfenbrenner believed that in order to understand human development, one must take into account the ecological context surrounding an individual. He outlined five ecological levels: micro, meso, exo, macro, and chrono;<sup>4</sup> factors operate at multiple levels to influence human development. These factors are bi-directional, meaning they also affect factors at other ecological levels. Ecological systems theory encourages examination of how contextual factors are related to one another as well as how those factors shape individual development.

Institutional forces operate at multiple ecological levels through institutional carriers, and are therefore a part of the identity development process. In order to investigate how factors at multiple levels shape pre-service teacher identity development this study analyzes institutional carriers at macro, exo, meso, and micro levels. The macro-level included histories, discourses, regulations, reform

---

<sup>4</sup> The chronosystem, which is not used in my framework encompasses how time relates to the ecological context.

movements, and professional norms in the fields of higher education and PK-12 schooling. This included federal regulations like *No Child Left Behind* and the accountability requirements that emanated from it. Those accountability demands are not merely a regulation that must be fulfilled but also gave rise to a discourse defining school, teacher, and student success in terms of measurable, objectively determined (by means of a standardized assessment) academic achievement. Macro forces, even within teacher education, operate quite differently on the university and PK-12 schools. For example, while state educational policies played a formative role in both worlds, they were not usually the same policies. As will be explored more fully in chapter four, while the university programs dedicated a significant amount of time and resources to the completion of the PACT assessment, a state requirement, this had little impact on what was happening in PK-12 schools (other than the fact that pre-service teachers had to complete a portion of the assessment in their placement). Similarly, the Common Core State Standards (CCSS) and newly aligned Smarter Balance Assessment Consortium (SBAC) assessments shaped curricular decisions in PK-12 schools, but were not a major area of concern for the university programs<sup>5</sup>.

---

<sup>5</sup> This is not to say that course instructors did not attend to the new standards, but merely that it was not a defining feature of program design and that when the new standards and assessments were brought up, it was much more likely to be an area of concern for cooperating teachers and pre-service teachers. This is not necessarily surprising. These are essentially two accountability systems, one for programs (TPA) and one for PK-12 schools (SBAC). The point is merely that while state and federal policies affect both university based programs and PK-12 schools, different policies that apply different kinds of forces. While there is a similarity here around assessment and accountability (a common force in both worlds), the systems are different. Although, it should be noted that there is a minor link between the two. The PACT assessment demanded that teachers design a lesson sequence aligned to the CCSS.

The exo-level involved the particular university and school district settings that intersect around the work of teacher education. Examining exo-level forces included investigation into organizational goals, which were communicated through artifacts (e.g. teacher education program mission statements and PK-12 instructional program models), and requirements placed on teacher educators at each organization (e.g. mandated PK-12 curricula or publishing expectations). The meso-level is the actual teacher preparation program. Within the teacher preparation program, analyzing program features illuminated particular routines (e.g. roles of different teacher educators) or relational systems (e.g. a cohort model for teacher candidates) that either carry or attempt to intentionally subvert institutional forces. The micro-level involved the communication (and simultaneous reconstruction) of various institutions through the interactions that occurred between pre-service teachers and their teacher educators, within both the university and PK-12 school settings. Institutionalization occurs through multiple processes, but several of these processes take place at the micro-level through person-to-person interactions. Shared values, norms, and expectations are communicated through these interactions. This process of objectification renders these values, norms, and expectations as fact, not as contextually produced (Scott, 2008). Simultaneously, as the profession of teaching secures the commitment of new members (through the structures and relationships within a teacher education program), it communicates professionally aligned actions and behaviors.

These four levels of analysis are not disconnected from one another. They are interrelated and dialectical, continually influencing and informing one another. For example, teacher education program structures (meso-level) are shaped by federal and state requirements (which are macro-level regulations) as well as accreditation requirements (which are an instantiation of professional norms and values). Understanding how teacher education navigates the theory/practice divide required investigating how institutions operate at these multiple levels and what this means for the teaching and learning interactions that occur between pre-service teachers and their teacher educators.

### **Symbolic Interactionism**

While institutions are important influences in the structure of teacher education programs and the identities that their pre-service teachers develop, institutional theory is often used as an overly deterministic approach to understanding social reality. One of the major critiques is that it leaves little room for individual agency (Blumer, 1969; Woods, 1996). This study sought to connect the macro and the micro - the powerful institutional forces and the individual practices and identities of teacher educators and pre-service teachers, not only to investigate how institutions are instantiated by individuals, but also to examine how pre-service teachers make sense of institutions and other influences as part of their formal learning-to-teach process. In order to examine the micro-level identity development process of teacher preparation, this study employs symbolic interactionism, a methodological approach

that privileges the meanings that individuals construct in interaction with others using symbolic tools available in the world around them.

Symbolic interactionists typically find that meaning is constructed in the *process of interaction*, and have always insisted that process is not a neutral medium in which social forces play out their game, but the actual stuff of social organization and social forces. (McCall & Becker, 1990, p. 6)

An interactionist approach invited inspection into the lived experiences of pre-service teachers and teacher educators in order to identify how language and relationships shape the teaching and learning that occurs within a teacher preparation program. It focused on the meaning-making processes that happened as individuals made sense of their social interactions. This meaning-making process involved interpreting (and using) various symbols: such as language, artifacts, roles, and expectations. These symbols were often (though not solely) institutional carriers. Investigating meaning making of individuals not only introduced agency into an overly deterministic process, but it also allowed for examination of how teacher identity development was simultaneously shaped by institutional forces and individual experiences. It is through interactions that some of the institutionalization processes described above (e.g. securing commitment and objectifying shared norms) were carried out. As teacher educators fulfilled their organizationally defined roles, they engaged common scripts, or practices, that communicated both explicitly and implicitly how pre-service teachers were expected to behave. These interactions activated certain schemas that offered particular frames through which pre-service teachers interpreted their programmatic interactions. As will be explored more fully in Chapter 5, these scripts differed based on teacher educator role. Teacher supervisors invited the pre-service



teachers into personal reflection of their practice, while cooperating teachers dispensed advice.

However, symbolic interactionism emphasizes that while individuals may be inclined (by institutional forces) to behave in particular ways, they are not bound by them. “The interactionist emphasis on process stands ... as a corrective to any view that insists that culture or social structure determines what people do” (McCall & Becker, 1990, p. 6). Furthermore, investigating interactions illuminated the identity development (i.e. learning processes) at work in a teacher education program. It offered a way to examine processes like legitimate peripheral participation (Lave, 1991) by emphasizing the way that individuals called upon and interpret various symbols as they interacted with one another in a professional learning context. These symbols were communicated by others through interactions, and pre-service teachers made sense of themselves and their place within the social world by interpreting these symbols and deciding on an appropriate response.

Any human event can be understood as the result of the people involved (keeping in mind that that might be a very large number) continually adjusting what they do in light of what others do, so that each individual’s line of action “fits” into what the others do. (McCall & Becker, 1990, p. 3).

Symbolic interactionism was used to investigate the patterns of these interactions and situate them within their local context in order to understand how the situation and participants’ perspectives relate to one another. These meaning-making processes were where new teachers not only made sense of interactions, but also of themselves

as they decide<sup>6</sup>d whether or not to incorporate the expectations, values, practices, and commitments that were explicitly and implicitly communicated into their own professional identities.

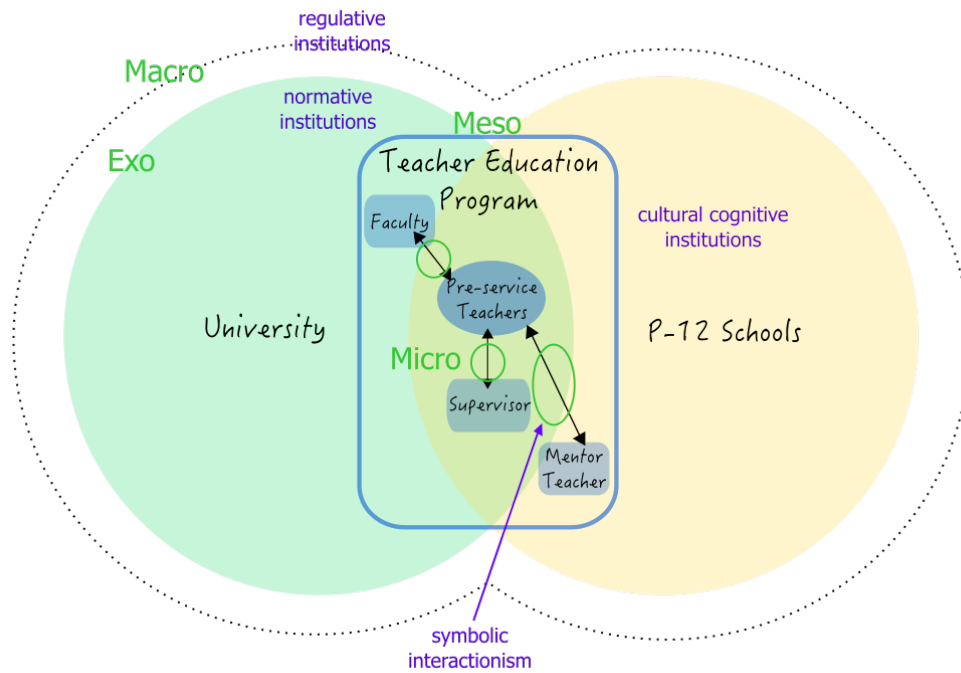
Mead describes the self as having two parts – the *I* and the *me* (Mead, 1934; Woods, 1996). The *I* is the active, doing part of the self. And the *me* is the part of a self that an individual can reflect on – only after the action has taken place. Therefore, we can never truly know the *I*, we can only know the *me*. Because once the *I* has been reflected on, it becomes part of the *me*. The *me* is constructed out of the perceived attitudes and expectations of others, and the *I*'s actions are constructed in relation to this generalized other. Therefore the self is the interaction, the constant negotiation between the *I* and the *me*. This is not unlike Bakhtin's notion of a self, which is constructed out of the *I-for-itself* and everything else, or the *not-I-in-me* (Holquist, 1990). Bakhtin understands a self to be authored out of a dialogue between these two parts. Identity is, therefore, relational, only able to be understood in relation to other influences, roles, and factors in the social world. One area for examination is how conscious or overt this self-construction process is. While both perspectives centralize an active agent, the identity development process is both active and passive. Identity construction is sometimes a matter of deliberate choice, but it is also a product of internalized histories, discourses, and positionalities that may or may not be critically examined by the individual. The conceptual framework below demonstrates how

---

<sup>6</sup> Decide may indicate a process that is more active, or deliberate than what actually occurs. This point is taken up below.

these four conceptual tools are combined to examine pre-service teacher learning in contemporary teacher education programs.

**Figure 1: Conceptual Framework**



### Research Design

In order to adequately contextualize the complex work of teacher education, this study used case methods to investigate two different teacher education programs. Case study design allowed me to investigate the teacher education programs and the interactions that occurred within them in context, with attention to the way that programs attempted to connect theory and practice and what those attempts mean for the learning-to-teach process. Case study design enabled me to holistically analyze

processes, structures, and relationships within each teacher education program (Yin, 2009; Stake, 1995; Baxter & Jack, 2008; Bogden & Biklen, 1998; Patton, 2002). This holistic design provided an in-depth understanding of the program and how it was embedded within multiple ecological levels that influenced one another. Using case analysis, I examined the learning-to-teach processes within this sociopolitical context where the interrelationship of macro level institutional forces, exo level (university and PK-12 school) policies and structures, meso level (teacher education program) organizational features, and micro level interactions between program members shape the learning experiences of pre-service teachers.

### **Case Study Sites**

This project employed a multi-site comparative case study design. Multi-site case studies allow a researcher to gather robust evidence (Yin, 2009) and compare how the same processes are carried out in different sites. Bogden and Biklen (1998) describe how comparative cases are selected: “to compare and contrast, you pick a second site on the basis of the extent and presence or absence of some particular characteristic” (p. 63). The two sites for this study were purposefully chosen because of their different structural characteristics. The first, Midlands University, was a traditional, 5<sup>th</sup> year, Masters/credential university-based teacher education program. The second, Coastal Academy, a one-year post-baccalaureate residency program, was designed specifically to address the challenges of the two-worlds divide by partnering a university-based program with a large nearby school district.

Midlands was a “traditional” university-based teacher education program. Traditional is in quotes, because the label may represent a uniformity that does not actually exist between all university based programs. What traditional does represent here is a program that was primarily located in a university; therefore, this site matches the kind of program where the majority of new teachers are prepared. This makes it a “typical” teacher education program. This program had a social justice focus and was interested in preparing new teachers to work with culturally and linguistically non-dominant students. Multiple subject pre-service teachers completed two practicums (one each semester). Courses were taught by a mixture of tenure-track faculty, short-term lecturers, and teacher supervisors. All courses took place on campus at the university. Cooperating teachers were recruited by the program, but were very loosely affiliated with it. Midland’s pre-service teachers generally completed their student teaching within the county where Midlands was located. This county included a midsized city that served predominantly middle class students and rural farming community with a large immigrant population. This program was on the campus of a large research university, but the teacher education program was relatively small, preparing about 75 students each year. Pre-service teachers moved through the program in a cohort, regularly taking classes with a consistent group of peers. The teacher supervisors were the primary point of contact for the pre-service teachers over the course of the year, providing pre-service teachers with administrative as well as academic support.

Residency programs, like Coastal - the second research case - have become a popular form of teacher preparation that prioritizes clinical training by placing candidates in a mentor teacher's classroom for a full year. This particular residency program operated as a partnership between two universities<sup>7</sup> and a local school district. Teacher candidates who attended Coastal committed to working in the urban school district where they were trained after they completed their preparation. Coastal trained new teachers specifically for high needs areas in this school district. Pre-service teachers were enrolled at a partner university, where they completed coursework in the evening. They also worked in a placement classroom four and a half days a week in the partner school district and attended a weekly seminar focused on the context of the local school district where residents were placed and where they commit to teaching after their preparation is complete. Coastal trained about 20 residents each year. Secondary residents took courses at one partner university while multiple subject pre-service teachers took courses at a different one. In order to enroll into the program, residents had to be accepted at both the partner university and the residency program. Coastal had originally been designed with the intention of developing partner "academies" in the school district where they could concentrate the placement of student teachers. It had proved logistically difficult to develop those kinds of partnerships, so during the year of data collection, residents were placed at schools across the partner district. While Coastal Academy offered a cohort model,

---

<sup>7</sup> Coastal partnered with two different universities. One of the partner universities provided the coursework for the secondary residents (in math or science) and the other for the multiple-subject (or elementary) residents. This study primarily investigates the partnership with the university that multiple subject residents attended, as the focal participants were multiple-subject candidates.

the partner university where multiple subject residents completed their coursework did not. This meant that they were in courses with other teacher candidates who were not a part of Coastal Academy's residency program, and often were not even student teaching. Courses at Coastal's partner university were taught by a combination of tenure-track faculty and short-term adjunct faculty. Teacher supervisors were employed by the partner university, but hired by Coastal Academy, so the knowledge they had about the demands of the partner university varied based on the individual's prior experience. For example, one of the teacher supervisors at Coastal had very little knowledge of the university protocols, procedures, or program requirements. The other had previously worked as a teacher supervisor at the university, before being hired by Coastal, so his knowledge was more extensive. These individual differences shaped their capacity to serve as an effective bridge between the two worlds.

These programs were purposefully selected in order to deeply analyze how two different models of teacher preparation attempted to resolve the theory-practice divide while training teachers to work with culturally and linguistically non-dominant students. The two programs were structured differently, which made them ideal sites for comparing the relationships between program structures, program visions, teacher educator visions, and the professional learning that occurred within programmatic social interactions. While two sites cannot possibly represent the range of teacher

preparation pathways available,<sup>8</sup> limiting the study to two purposefully selected sites allowed for an in-depth exploration of program structures and participant experiences.

**Embedded units.** Yin (2009) describes two kinds of case studies – holistic and embedded. Holistic case studies focus on the case (e.g. the teacher education program) as a whole; case studies with embedded units are utilized when there is more than one unit of analysis. This design allowed me to analyze the case as a whole (each teacher education program) and collect data on particular subunits within the case, by closely examining the experiences of several pre-service teachers within each program. The embedded units provided an opportunity to examine the learning-to-teach process by collecting interview data with pre-service teachers regarding their teacher identity development and collecting observational data between pre-service teachers and teacher educators to analyze the programmatic learning opportunities made available for pre-service teachers.

**Participant Selection.** Four multiple subject participants were solicited from each site; a total of eight pre-service teacher participants was a large enough sample size to provide a variety of backgrounds and a cross-section of programmatic experiences, but was a small enough number to allow for deep analysis of teacher development. In order to recruit participants, I visited the programs (one in person and one virtually), explained the project to all multiple subject pre-service teachers, and distributed a survey to all multiple subject pre-service teachers that were willing

---

<sup>8</sup> For example, both of these programs are pre-service pathways, not early entry ones.



to be considered for participation. The survey<sup>9</sup> collected self-report information regarding race/ethnicity, socioeconomic status, and whether or not pre-service teachers were seeking a bilingual authorization for their credential. Using stratified sampling I selected at least one participant of color, one participant from a low-income background, and one participant who is seeking a bilingual authorization from each site.<sup>10</sup> The fourth participant had none of these characteristics.<sup>11</sup> Stratifying the selection to specifically include pre-service teachers of color and pre-service teachers from low-income backgrounds was useful for examining how pre-service teachers with different economic, ethnic, and racial identities interacted with program visions and structures. Since this study focused on teacher education programs that sought to prepare teachers to work with historically marginalized students and communities, including pre-service teacher candidates that were seeking a bilingual authorization for their credential provided particular insight into how teacher education program structures designed to prepare bilingual teachers at each site influence pre-service teacher learning. An identity perspective of teacher learning indicates that personal background experiences and characteristics can influence professional identity development, therefore these background characteristics were used to sample participants who likely had diverse personal experiences, and who were positioned differently in society based on characteristics like race, class, and native language.

Table 1 provides information on the focal participants.

---

<sup>9</sup> See Appendix A.

<sup>10</sup> These three sampling categories were not mutually exclusive.

<sup>11</sup> This sampling category was mutually exclusive, meaning this participant was both white and middle class, matching the demographic of a traditional teacher candidate.

**Table 1: Focal Participants**

<b>Coastal Academy</b>	<b>Midlands University</b>
Grant <sup>12</sup> : White, Upper Middle Class Male	Scott: White, Middle Class, Male
David: Latino, Working Class, Male, BCLAD <sup>13</sup>	Manu: Latino, Upper Middle Class, Male, BCLAD
Vida: Latina, Working Class, Female, BCLAD	Jamie, White, Working Class, Female, BLCAD
Ami: Latina, Working Class, Female, BCLAD	Yaotl: Latina, Working Class, Female, BCLAD

Teacher educators who were connected with each of the pre-service teachers were also selected from each site. I attempted to interview each pre-service teacher's cooperating teacher and teacher supervisor<sup>14</sup>. Additionally, program faculty member(s) who were teaching courses that the focal pre-service teachers were enrolled in during the period of data collection were also interviewed. Teacher educators in these different roles are traditionally positioned differently within a teacher education program and within the two worlds. The universities employed faculty members, whereas PK-12 schools employed cooperating teachers. Teacher supervisors navigated both worlds. They were employed by the university and

---

<sup>12</sup> All names are pseudonyms.

<sup>13</sup> BCLAD stands for Bilingual, Cross-cultural, Language and Academic Development. It is the certificate in California that grants a Bilingual teaching authorization.

<sup>14</sup> There was one cooperating teacher and teacher supervisor at Coastal Academy who I was unable to interview (they agreed to interviews, but never returned repeated scheduling requests).

sometimes served as adjunct lecturers, but they spent much of their time observing and meeting with pre-service teachers in PK-12 schools. Interviewing this cross-section of teacher educators provided data on the cohesiveness of the program vision. Interviewing teacher educators who were linked to the multiple subject pre-service teacher participants allowed each to examine teacher educator beliefs, visions, and pedagogical techniques and then analyze how those beliefs, visions, and pedagogical techniques shaped their interactions with pre-service teachers and influenced pre-service teacher learning.

## **Data**

Data were collected over the course of one calendar year. I used ethnographic methods, primarily interviews and observations, in order to develop a thorough and situated understanding of the participants' experiences. Data were collected at two levels. In order to understand how each teacher education program navigates the two worlds divide, data were collected on the program as a whole. In order to deeply investigate the embedded unit of pre-service teacher learning, data were also collected on individual pre-service teachers and their learning-to-teach experiences within the program.<sup>15</sup> All interviews were semi-structured, approximately 60 minutes long, audio-recorded, and transcribed. I also observed various interactions between pre-

---

<sup>15</sup> For the purposes of explicating data collection, these data collection procedures distinguish between program and person level data, although in practice those distinctions dissolve, because people are members of programs.

service teachers and teacher educators. Field notes were always taken and, in cases where appropriate,<sup>16</sup> I audio-recorded and often times transcribed.

**Program level data.** Several forms of data were collected on the teacher education programs in order to understand how the programs navigate the multiple demands of the overlapping worlds teacher education occupies. Particular attention was paid to programmatic visions and structural features, specifically how the program envisions quality teachers and how best to prepare them. This data also includes investigation of program structures, with attention to how those structures seek to resolve the theory/practice divide. Included below are two tables that outlines program level data for each program.

---

<sup>16</sup> Appropriateness was determined by a combination of three things: ethics, whether or not logistics allowed, and predicted usefulness of the audio recording. For example, I audio recorded observation-debrief conversations between teachers and teacher supervisors, but not teacher education course sessions.

**Table 2: Coastal Academy Program Level Data**

<b>Coastal Academy</b>	
<b>Data Source</b>	<b>Purposes</b>
Interview with Teacher Education Program Director	Provided information on program goals, vision, structures, and challenges
Program Documentation on curriculum, mission, vision, and approach	Provided information on program goals, vision, and structures
Interview with University Liaison	Provided information on the university partnership with the residency program, and allowed me to compare and contrast visions and goals across the multiple institutions.
Interview with a School Administrator	Provided a school based perspective on the program, information on how the partnership operates, and allowed me to compare and contrast visions and goals across the multiple institutions.
Observation of a Steering Committee Meeting	To investigate how partners work together to make decisions about the direction of the program
Interview with Director of Clinical Education	Provided information on program goals, vision, structures, and challenges
Observation of Residency Interview Day	Provided insight into how Coastal selects new residents, which illuminates their vision of teacher quality
Four course observations	Provided insight into how program visions are operationalized in coursework and allowed me to examine alignment and misalignment across institutions
Interviews with three course instructors	Provided information on program and teacher educator visions as well as program structures

**Table 3: Midlands Program Level Data**

<b>Midlands</b>	
<b>Data Source</b>	<b>Purposes</b>
Interview with Teacher Education Program Director	Provided information on program goals, vision, structures, and challenges
Observation of a Supervisory Meeting	Allowed me to investigate how teacher educators work together to make decisions about the direction of the program
Program Documentation on curriculum, mission, vision, and approach	Provided information on program goals, vision, and structures
Observation of Supervisor Planning Meeting	Provided information on how supervisory session goals are selected and planned for, and served as an opportunity to examine teacher educators' vision of teacher quality.
Observation of Meet the Districts Job Panel	Provided information on the visions of teacher quality operating in local schools and school districts as well as examples of how pre-service teachers present themselves
Observation of County Office Interview Panel	Provided information on the visions of teacher quality operating in local schools and school districts
Interview with a School Administrator	Provided a school based perspective on the program, and allowed me to compare and contrast visions and goals across the multiple institutions.
Interviews with two course instructors	Provided information on program and teacher educator visions as well as program structures
Seven course observations	Provided insight into how program visions are operationalized in coursework and allowed me to examine alignment and misalignment across institutions

This program level data provided information on the relevant contextual features, program goals, and how the program attempts to achieve those goals. The embedded unit data, described below, added detail to the processes and practices at play within each program. Embedded unit data captured the interaction of structures, visions, and practices at work in the learning-to-teach process. While not everyone who participated in the program was interviewed or every event observed, the combination of program level data and embedded unit data represent an in-depth, meaningful collection of program features and allowed analysis of how those features relate to pre-service teacher learning.

**Embedded unit data.** Data collection for the embedded unit within each of the two cases focused on pre-service teacher learning. In order to investigate pre-service teacher learning within the program, several forms of data were collected. The first was interactional data. Because I presumed that learning occurred within social interactions, interactions between pre-service teachers and teacher educators were important opportunities for learning and sites for investigation. Interactions included different types of conversations with teacher educators, student teaching experiences, and required coursework. These interactions were used to investigate meaning-making processes, and, consequently, how making meaning of social interactions influenced teacher identity development. Meaning making, identity development, and program interactions are interconnected processes. Meaning making is a difficult phenomenon to capture; therefore, multiple forms of data were collected, analyzed, and triangulated in order to indirectly represent these processes. As pre-service

teachers made meaning of programmatic social interactions, their teacher identity developed. These meaning-making processes occurred in the moment, but were also continuous as pre-service teachers processed the interaction, reflected on their experiences, and tried out new practices in the classroom. In order to approximate how learning occurred within a teacher education program, I observed pre-service teacher and teacher educator interactions and student teaching, interviewed pre-service teachers and their teacher educators, collected coursework, and conducted a pre and post survey of pre-service teachers. These data are explained more fully below.

#### 1. Pre-service teacher and teacher educator interactions:

There are several different kinds of interactions that take place between pre-service teachers and teacher educators that were observed. These include the following:

- Observation Debrief Discussions between each pre-service teacher and his/her teacher supervisor
- Course sessions being led by a faculty member in the program that each focal pre-service teacher is attending
- Student Teaching Seminars in each program
- Conversations between each pre-service teacher and his/her cooperating teacher

I attempted to collect multiple instances of each of these interactions for each focal pre-service teacher. These interactions provided valuable data that were used not only



as opportunities to investigate learning but also as to probe for during interviews. These interactions allowed me to investigate how each teacher educator's vision of quality teaching and how best to prepare new teachers were connected (or not) to his/her instructional interactions with pre-service teachers. Secondly, these interactions represent key instructional opportunities in a teacher education program. Although data collection only captured a subset of the overall interactions, I was still able to determine overall coherence of the program experience. Coherence is a particularly useful analytical lens, because these three types of teacher educators occupy different institutional positions inside of the teacher education program (as well as within the two-worlds where teacher education operates).<sup>17</sup> These interactions were also analyzed to understand how the structural features of a program influenced the learning-to-teach opportunities for pre-service teachers. Finally, a sociocultural perspective of learning understands interaction as the place where learning occurs. Therefore, investigating these structured programmatic interactions allowed me to capture learning in action and analyze how pre-service teachers make meaning of these programmatic interactions.

## 2. Teaching Observations:

Another kind of interaction that I collected data on were at least two observations of student teaching for each of the pre-service teachers, and one

---

<sup>17</sup> For example, LaBoskey and Richert (2002) found that when there is a lack of coherence between cooperating teacher practices and program visions, thoughtful field supervision could help teachers reconcile the dissonance they experienced.

observation after they became teachers-of-record. Student teaching represents two empirically valuable processes simultaneously. Firstly, student teaching is an opportunity for pre-service teachers to demonstrate their professional learning by engaging in the practice of teaching. These instances were analyzed to see the extent to which the visions represented by the program and teacher educators and the instruction that occurs in the other key interactions influence the kinds of teaching practices that pre-service teachers engage in. Second, since teaching is a practice – something novices learn while doing (and because this is practice teaching: something that you try out before engaging in it completely independently) – student teaching also operated as a learning opportunity for pre-service teachers. The interactions that take place between pre-service teachers and the PK-12 students were opportunities to observe the influence of the program visions and structures as well as the identity development process of pre-service teachers. Observations investigated multiple forms of thinking, talking, being, and interacting. For example, I created a diagram of how the classroom was arranged, documented how students were grouped, tracked interactional patterns between the pre-service teacher and PK-12 students (e.g. Who do they call on to participate? How do they talk to students?), and collected information on the content and structure of each pre-service teacher's lessons. These observations were compared to program and teacher educator vision in order to investigate how closely pre-service teacher practices correlated with program goals. Multiple observations of student teaching also allowed me to investigate change over time.

### 3. Survey:

A brief pre and post survey was conducted with all eight of the focal teachers. The survey collected background information (e.g. is anyone in your family a teacher, why did you decide to become a teacher), asked them to describe their future plans, what they believe quality teaching looks like, the characteristics of a “good” teacher, and to create a definition of teaching. As a pre and post survey, the responses were compared after pre-service teachers completed their program and analyzed for the ways that their personal visions may have changed as a result of their programmatic experiences. The post survey also asked them to reflect on their program experiences and identify the most valuable program components.

### 4. Interviews:

In addition to programmatic social interactions, I collected interview data with each of the focal pre-service teachers and their corresponding teacher educators. Interview data were important for two reasons. First, how pre-service teachers made meaning of programmatic social interactions was mediated by who they were. Pre-service teachers use their past personal and professional experiences, perspectives, beliefs, and commitments to make sense of the learning opportunities structured by the program. The interviews offered opportunities to collect data on pre-service teachers’ individual characteristics. Interviews also allowed me to inquire into how pre-service teachers made meaning of programmatic social interactions that they

engage in with teacher educators and through their student teaching experiences. Each pre-service teacher was interviewed five times: once at the beginning of data collection, twice after key interactional observations (e.g. student teaching), once at the end of their program experience, and once during their first year as a teacher-of-record. These in-depth, semi-structured interviews with each focal pre-service teacher allowed me to collect data on their learning-to-teach process in order to investigate how the programmatic features and their interactions with teacher educators influence their professional identities.

Similarly, teacher educators' visions of what makes a quality teacher and how best to prepare them are influenced by their own personal and professional identities. Interviews with teacher educators helped me uncover how their visions were shaped by their professional identities and/or program structures. Interviews also investigated how their visions relate to the observed interactions with pre-service teachers. Each teacher educator was interviewed once. Interviews focused on their personal visions, their instructional approaches, and their experiences as teacher educators; interviews also served as an opportunity to unpack the pre-service teacher learning opportunities (visible in observed interactions). Additionally, if pre-service teachers' professional learning is a process of identity development, then teacher educators should know their pre-service teachers well and use this knowledge to design personalized learning opportunities for each pre-service teacher. Interviews with both teacher educators and pre-service teachers allowed me to gather data on how well teacher educators knew their pre-service teachers and to what extent they personalized their instruction and

interactions. Finally, interview data with teacher educators served the additional purpose of fleshing out the program level data. Interviewing a cross-section of teacher educators (faculty, supervisors, and cooperating teachers) not only allowed me to collect data on how those various teacher educators influenced pre-service teacher learning, but also on how coherent the program vision is amongst members who are located in structurally different positions.

While the data collected was not an exhaustive catalog of the teacher education experience for each of the pre-service teachers, each teacher education interaction observed (student teaching observations, course observations) provided a snapshot of both program structure and learning-to-teach experiences. The combination of these multiple data sources<sup>18</sup> allowed me to triangulate different kinds of data in order to deeply analyze how programs attempt to resolve the theory/practice divide and how those approaches shaped pre-service teachers' learning experiences.<sup>19</sup> These multiple sources of evidence increase the construct validity and reliability of the study (Yin, 2009). Multiple data sources also allowed me to ecologically situate and analyze the interrelationship between a program's

---

<sup>18</sup> For a brief description of the complete dataset, see Appendix B. For a data collection timeline, see Appendix C.

<sup>19</sup> In a recent review of literature on student teaching's contribution to the preparation of teachers for urban and low-income areas, Anderson and Stillman (2012) found that an overwhelmingly amount of the research focused solely on pre-service teacher beliefs and attitudes. While beliefs and attitudes are important components of effective teaching for culturally and linguistically non-dominant students, they highlighted how research should also examine what pre-service teachers actually do. This study seeks to understand teacher beliefs and practices holistically, as a part of their professional identity and investigate this development through interviews and observations.

visions and structures, the individual teacher educators' visions and interactions with pre-service teachers, and pre-service teacher learning.

### **Data Analysis**

I developed bi-level analytical coding scheme that attended to developing content area themes as well as investigating the affects of ecologically situated factors on program structures and pre-service teacher identity development. I combined a deductive and inductive approach to the coding scheme by beginning with information from the literature to generate an initial set of codes, particularly in identifying factors that influence teacher education program design and pre-service teacher learning at the macro and exo levels. For example, literature on teacher education and my own prior research demonstrates the influence of the standards and accountability policies on teachers and classroom instruction (Achinstein & Ogawa, 2006; Buchanan, 2015; Cuban, 2007; Ravitch, 2010). So, I knew ahead of time that I wanted to code instances where standards, testing, and accountability influence teacher education and pre-service teachers' experiences. Similarly, literature demonstrates how prior work and educational experiences shape teacher motivation and identity (Day, Elliot, & Kington, 2005; Olsen, 2008; Olsen, 2010), so I knew that I wanted to code for pre-service teacher's prior work experiences. Once data collection began, I added grounded codes. These codes arose out of the observational and interview data. They allowed me to code for meso-level factors that were situated and particular to these two programs. For example, once data collection began it

became clear in both programs that the teaching solo days (and weeks) were key features of the pre-service teachers' experiences. These were organized and structured by the programs, and while they are not a major feature of literature on learning to teach, they organized a great deal of the pre-service teachers' preparation experience, and were therefore important to capture with qualitative codes. The content area codes were organized using Bogden and Biklen's (1998) categories for qualitative coding, which included personal background, perspectives held by subjects, setting, process, activity, strategy, and relationship. The ecological codes, which investigated how factors operating in the environment of teacher education, were organized by the four ecological levels that were part of the study's conceptual framework. The entire coding system can be found in the appendix.

All of the interview and conversational data were transcribed and coded using these coding schemes. Field notes were also coded. Once coded, data were sorted by codes, and analysis sought to ecologically situate and connect themes across person, program, and the broader context. In order to do this, I began with ecological level analysis, sorting coded data, and creating memos that identified the key factors that influence teacher development at the different levels. I created models that illustrated how those factors were connected to each other across the ecological levels and wrote analytical memos that examined linkages between an ecological factor and pre-service teacher experience (as documented in interviews, surveys, and/or observations). For example, accountability policies shaped cooperating teachers' ideas and practices. Sean, a cooperating teacher at Midlands was concerned about

state testing. His concern meant that he limited the kinds of practices his student teacher, Scott, could engage in. This shaped the practices he was able to develop as well as his perspective on the importance of state tests. Chapter 7 will explore his experience in more detail. During the process of memo writing, I returned to the literature during this process in order to help generate explanations for pre-service teacher experiences. For example, the literature on adaptive expertise helped me make sense of how and why some teachers who participated in Coastal Academy's residency program struggled to manage the demands placed on them while others did not. I was able to identify how their different program experiences helped some of them develop adaptive expertise. In order to develop themes that cut across individual codes and ecological levels, I took the main findings in all of my analytical memos and began to group them into larger categories. This refining process happened several times and was informed by conversations with my dissertation committee, peers, and review of the literature.

A parallel analytical process involved developing cases that traced the identities of the focal participants and their teacher educators. These cases included important background information (like prior professional experiences), key experiences during the program (especially instances of disconnect/conflict), and personal beliefs and principles. I moved back and forth between my coded data and analytical cases. These cases were particularly useful as I began refining my themes and developing analytical models that traced pre-service teacher learning. Specifically, these helped me move beyond surface-level structural differences



between programs in order to understand how those structures shaped identity development.

Alongside the content analysis, I engaged in sociolinguistic analysis of the conversational data collected between pre-service teachers and their teacher educators. I used tools from conversational analysis and pragmatics (Schiffrin, 1994; Schiffrin, Tannen, & Hamilton, 2001) to investigate the structure and content of these conversations. This included counting the number of turns by role. For example, in sessions between cooperating teachers and pre-service teachers, cooperating teachers did the vast majority of the talking. Whereas in conversations between pre-service teachers and teacher supervisors, the ratio was much more balanced. These findings provided detailed illustrations of the learning-to-teach process in action and how the different structural positions of teacher educators resulted in different kinds of interactions with pre-service teachers.

These three parallel analysis techniques (coding using both schemes, case development, and sociolinguistic analysis) allowed me to triangulate my findings. As I developed themes, I sought out disconfirming evidence, often looking specifically for data that was analyzed using one of the other procedures. This allowed me to refine my themes so that they accurately represented the experiences of program participants.

## **Limitations**

There are several methodological limitations to this study. Data collection occurred over one calendar year rather than one academic year. This allowed for observations and interviews of the teachers both during their teacher education year and during their first year of teaching, but it meant that I was not able to collect firsthand data on courses and practicum experiences during the first half of the teacher education coursework. Pre-service teachers and teacher educators could provide personal accounts of those experiences, however these accounts could not be verified by observation. This timeline may inadvertently privilege the practicum experience, because it was a larger of Midlands' program during the second semester. Additionally, the study only examines two programs, both of which are small. The small sample size means that the findings are not generalizable to all teacher education programs.

## Chapter 4: Apprenticeship in Teacher Education

While the two research sites for this study were chosen to compare how two different program structures influence pre-service teacher learning experiences, the analysis demonstrated (instead) that pre-service teacher experiences were quite similar across the two programs. The findings, therefore, will primarily address similar patterns of experience across the two programs, and the institutional carriers that shape them, rather than comparisons between them.<sup>20</sup> During data analysis it became clear that the structure of apprenticeship within both of these teacher education programs had an immense effect on how the programs were organized, whether or not they could meet their goals, and the experiences of pre-service teachers. So while I did not set out looking to examine the influence of apprenticeship in teacher education, it arose from the data as one of the most important features. This chapter will explore the role of apprenticeship in teacher education broadly, examining it at the intersection of theory and practice. It will then discuss how the structure of apprenticeship made it particularly difficult for these two programs to meet their goals of developing educators who can serve as innovative agents of change in PK-12 schools and describe the ecological factors that maintain this form of apprenticeship and preserve the status quo in classroom teaching.

There are two kinds of apprenticeship that are pertinent to teacher education: apprenticeship as a conceptual tool for understanding learning and apprenticeship as a

---

<sup>20</sup> The programs were not entirely the same, and some findings were experienced more intensely at one place than the other. For example the structural fragmentation between the two worlds was more severe at Coastal Academy than at Midlands University. Issues like this will be discussed where pertinent in the findings chapters.

historical social structure. The theory/practice divide in teacher education can also be seen in these two forms of apprenticeship. Scholars investigating situated forms of learning have highlighted apprenticeship as a site of real world learning and these sociocultural perspectives on learning are prominent in the educational commitments and scholarly work of teacher educators in both programs (Cole, 1996; Lave & Wenger, 1991). The historical practice of apprenticeship both inside and outside of teacher education has been a longstanding form of career preparation in skilled trades, and more recently in formal professional education. Both of these facets of apprenticeship have a significant influence on the structure of teacher education programs and, therefore, the learning-to-teach experiences of pre-service teachers. This chapter will describe these two facets in detail and unpack how they manifest in the goals and structures of these two teacher education programs. The latter form of apprenticeship will be taken up first.

### **Historical Master-Apprentice Model**

This practical form of apprenticeship has a long history in work training, where a novice works alongside and trains with a master. While it is likely that this form of training has been around for centuries (Rogoff, 1990), the apprenticeship as formal social structure is historically attributed to the guilds class that developed in feudal Europe (Epstein, 1998) and came to prominence during the 16th century. Guild apprentices usually studied with a master for a number of years (5-9), and masters were responsible for the moral and physical well-being of their apprentices in

additional to providing occupational skills. The process and responsibilities of the master-apprentice relationship was codified in law in some European countries (Aldrich, 1999) and this arrangement provided the bulk of labor training until the Industrial Revolution when the division of labor changed the structure of relationships between apprentices (as they were often still called) and their employers.

Despite the global impact of the Industrial Revolution, apprenticeship as both a social structure and model for professional training has continued in some trades (electricians, plumbers, and craftsman of various sorts) and has received renewed policy attention in recent years (Dolphin & Lanning, 2011). Most importantly, the notion of learning in and from practice has been a consistent feature of multiple forms of professional (not merely trade) learning. Medicine and law as well as construction and engineering have consistently used some form of apprenticeship throughout history in their professional training (Aldrich, 1999; Clarke, 1999). This historical master-apprentice structure is underpinned by two (often unexamined) assumptions. The first is a transmission orientation to learning,<sup>21</sup> and the second is that the novice learns by studying alongside a master. So the master transmits his/her knowledge and skills to the novice - who eventually masters the material and can practice the trade on his/her own (Guile & Young, 1999).

---

<sup>21</sup> This may seem contrary to the notion of learning as situated, which is addressed below. But right now, the focus is on the historical impacts of apprenticeship as a social structure. And historically (much like today in non-education circles - and sometimes even within them), knowledge and skill was understood as a thing that can be transmitted from the knowledgeable to the ignorant.

The concept of apprenticeship as a social structure is important to understanding its impacts on the teacher education programs in this study. Using institutional theory to understand apprenticeship's influence throughout history, it becomes evident that the underlying assumptions of a historical master-apprentice structure are difficult to challenge and change. Institutional theory demonstrates how stable institutions are in people's lives. Apprenticeships, and their use in teacher education, can be understood through the normative pillar. Historically, apprenticeships were not typically governed by official regulations (although there are some instances of this in Europe, see Aldrich, 1999). There was a regular pattern to apprenticing in a variety of trades and occupations. Apprenticeships were the training *de jure* of practical trades from blacksmith, to builder, to hairdresser. And the normative features of apprenticeships shape organizations and the people within them. This means that the underlying principle mentioned earlier - that a master transmits knowledge and skill to a novice - becomes a taken-for-granted component of apprenticeships, which has a considerable amount of influence over the ways individuals engage in the practice of apprenticing, whether they are the master or the apprentice. More importantly, these assumptions work towards the maintenance of the status quo in the profession, so the social structure of an apprenticeship (rooted in its historical function and organization) complicates a process of professional transformation, and operates with the assumption that novices should learn to emulate their masters.

While apprenticeships began in craft guilds, they also have long histories in other forms of professional preparation: law, medicine, engineering, social work, nursing,

and law enforcement. In Flexner's report on medical training in the 1930s, he envisioned the new model of medical training where medical students would train alongside a practicing physician, apprenticing to their problem solving, diagnostics, bedside manner, and inquiry<sup>22</sup> (Dornan, 2005; Cook, Irby, Sullivan, & Ludmerer, 2006). Flexner's report had a considerable influence on medical training, and his vision of apprenticeship set the stage for the next 70 years of physician preparation. In the modern forms of professional preparation most novices enter formal school-based training either before or during their apprenticeship experiences (i.e. doctors enter a residency after medical school - but there are also some apprenticeship components to their medical school training, most notably clinical rounds). In teacher education, there has been a component of apprenticeship since the development of normal schools in the mid 1800s. What is now called student teaching bears quite a resemblance to the experiences of early Normal School students (Goldstein, 2014). Goldstein provides this excerpt from the journal of the Principal at the Lexington, Massachusetts Normal School.

Twice every day the Principal of the Normal School goes into the model school for general observation and direction, spending from one half hour to one hour each visit. In these visits, I either sit and watch the general operations of the school, or listen attentively to a particular teacher and her class, or [teach] a class myself, and let the teacher the listener and observer. After the exercises have closed, I comment upon what I have seen and heard

---

<sup>22</sup> Flexner imagined a medical profession where practicing physicians worked as doctor-investigator, and that new medical findings would come out of the work of in-practice medicine and doctors sought to better understand the ailments of their patients. The fact that medical research and scholarship has gone a quite different direction (often very distant from the patients themselves) has actually led to a modern quandary in medical preparation, because new doctors no longer have the kinds of masters to apprentice to that Flexner imagined.

before the teachers, telling them what I deem good, and what faulty, either in their doctrine or their practice, their theory or their manner...In these several ways, I attempt to combine, as well as I can, theory and practice, precept and example. (p. 25)

Typically (both then as now), pre-service teachers engaged in formal coursework in both content areas and pedagogy and also did some practice teaching in a school (what is now typically called student teaching) under the guidance of a practicing teacher. They received feedback on their performance from both their practicing teacher and the teacher educators who taught their classes. In contemporary teacher education, student teaching requirements vary broadly, and its function as a normative professional requirement has been challenged by early entry pathways into the profession (which may eschew pre-service practice teaching altogether). However, this institution's history as a technical, trade, transmission form of training had profound implications on the ability of both teacher education programs in this study to prepare thoughtful, intellectual, and innovative educators. This point will be explored more fully below.

### **Apprenticeship as a Site for Investigating Learning**

The traditional assumptions of the social structure of apprenticeship have been challenged over the last 25 years as scholars in education, psychology, and anthropology have examined social forms of learning (Cole, 1996; Engeström, 1987; Holland et al., 1998; Lave & Wenger, 1991; Scribner, 1997; Werstch, 1993). Through an investigation of Vygotsky's psychological theories of learning, these scholars reimagined (and at times renamed) apprenticeship as a metaphor for all forms of



learning - not simply a structure for mastering a particular trade. This approach to reframing apprenticeship came both as a recognition of the complex cognitive activities of “uneducated” workers as well as an expansion of our understanding of how learning occurs, particularly in real world environments.

Lave and Wenger’s (1991) foundational work on situated learning argued that our traditional understandings of learning (which is normally based on formal, institutional processes that happen in schools) fail to take into account how knowledge is distributed throughout a community, how learning is also an act of becoming, and how participation in cultural activities is a form of authentic informal instruction. They argue that a newcomer (nee novice) learns through the process of legitimate peripheral participation, and by engaging in the cultural practices of the community he/she moves from periphery towards the center. Their work is built on the empirical investigation of tailors, quartermasters, midwives, butchers, and alcoholics, because they sought to investigate the experiences of individuals learning in “real-life” not “school-based” situations.

Vygotsky’s theories of learning have also been used to reimagine what happens in schools - reframing ideas of transmission learning to cognitive apprenticeships (Collins, Brown, & Newman, 1989; Dennen, 2004; Hennessy, 1998; Resnick, 1987), meaning that students can apprentice to the thinking processes of thinkers (i.e. teachers) who have a more advanced conceptual understanding of the content being taught. Through the lens of cognitive apprenticeship, Vygotsky’s theories have been applied to more traditional “school-based” forms of learning and teaching. The

conceptual uses of apprenticeship are not necessarily in tension with the traditional master-apprentice model. Instead it offers an alternative conceptualization of how learning occurs: in and through practice. However, a commitment to situated learning perspectives may make teacher education program leaders less likely to examine how the historic master-apprentice model is in tension with program goals of preparing new teachers whose commitments and practices are significantly different from the current practices in PK-12 schools.

### **Apprenticeship and PBTE**

Both the practical (historical master-apprentice) and theoretical (analytical tool for investigating learning) forms of apprenticeship are operating in teacher education today. Scholars and teacher education leaders think of the practicum portions of teacher preparation as a form of situated learning. They recognize the complexity of learning practical skills and believe that *in situ* practice teaching is absolutely necessary for new teachers to be fully prepared. The practical components of preparation are a central feature in modern debates about high quality teacher preparation, particularly the move towards practice based teacher education (PBTE), which has become a popular solution to the demands for change in teacher education. And there are several reasons for this. The first is that it is has been driven by educational discourse and policy over the last 30 years pushing for educational systems to deregulate entry into the profession. The underlying assumption of the deregulation agenda was that teachers do not need much professional training before

entering the classroom; the act of teaching is best learned through classroom practice. Policies promoting the deregulation agenda have increased the number of early entry (sometimes called alternative entry) pathways into the professions, like Teach for America. However, university based teacher educators have typically been critical of early entry pathways, particularly because teachers who enter through these pathways frequently teach the most vulnerable populations (Darling-Hammond, Holzman, Gatlin, & Heilig, 2005; Labaree, 2010; Zeichner, 2009). However, there has recently been some coalescence around the Practice Based Teacher Education agenda, particularly as it relates to development and proliferation of residency programs, which tend to be (but are not exclusively) connected to universities, function as a pre-service form of preparation, and emphasize the practice-based portions of training. PBTE operates as both a backlash against “theory-driven programs” (Sawchuck, 2013) as well as recognition that teacher education must better bridge the theory-practice divide, because after over 40 years of teacher education being (mostly) the purview of university-based programs, classroom instruction has not matched the constructivist, student-centered visions that university programs have been promoting for over four decades.

The second reason that PBTE has gained prominence as an educational reform is that it aligns with modern learning theory that centralizes activity, participation, and contextually-situated approaches to learning (Engeström, 1987; Lave, 1996s; Cole, 1996). Sociocultural learning theories, broadly-speaking, see learning as happening in and through practice in real-world activities, whereas more traditional forms of

university-based professional preparation expect students to learn things in their university-based courses and apply the skills, techniques, and knowledges they develop outside, which hinges on an understanding of knowledge as portable and transferable. This notion of transfer and the capacity that individuals have to transfer knowledge and skills from one place to another has been debated by learning theorists (Beach, 1999), but scholarship in the socioculturalist tradition typically decentralizes the idea of transfer by emphasizing learning in and from real-world situations (rather than simply assuming that what happens in formal schooling institutions is the only place to investigate learning) (Lave, 2011).

The third reason that apprenticeship has been prioritized in modern teacher preparation is that many teacher education programs are interested in connecting with localities and preparing teachers to work in culturally and linguistically non-dominant communities (Noel, 2013). PBTE offers a structural opportunity to build those connections by communicating the commitment to local schools and engaging in localized preparation activities. This frequently helps programs, like the two in this study, meet their social justice goals.

### **Teacher Education Programs' Goals and Apprenticeship**

While both of the facets of apprenticeship shaped program design and teacher educator decisions, they were rarely disentangled by teacher educators involved in the two programs that were the focus of this study. While that may not be a problem in professional preparation programs that seek to train their newcomers to use the same

approaches as current practitioners, both of these programs had a social justice focus and sought to develop change agents: teachers who had the commitment and capacity to make schools, and therefore society, more equitable through practices that challenged the dominant culture's status quo by examining how power operates in society and using classroom practices that were inclusive of diverse students. Change agents see schooling as a historically oppressive institution. Organized to control the population, assimilate immigrants, and transmit knowledge and social norms (Tyack, 1974; Nieto, 2010). However, they also see it as an important democratic institution (Fullan, 1993; Labaree, 1997; Sleeter, 2013) that can be transformative for students and society more broadly. Most teachers enter the profession with a moral purpose (Fullan, 1993) not merely a technical interest, and tapping into and developing this moral purpose (or what are often called dispositions in the literature on teacher capacity) is important to developing educators as change agents.

Both programs hoped that their social justice orientation would manifest in multicultural, student-centered instruction and an effort on the part of their graduates to reform processes and structures within PK-12 schools more broadly. This meant that the teachers they were hoping to produce were qualitatively different from the current body of professionals, which complicated the use of an apprenticeship model, because the major feature of a traditional apprenticeship is to work alongside a master and learn her craft or trade just as she does it. This tension made it particularly difficult for the programs to meet their goals. While the particulars differed slightly, both programs believed that PK-12 education should be more constructivist in

orientation and better support the needs of historically marginalized students and communities. Both saw education as a tool for creating a more equitable society, and believed that teachers, and more specifically teacher training, were key to providing not only high-quality academic instruction but also more inclusive cultures within schools and outside of them. These commitments are illustrated in each programs' vision.

Midlands described its overarching goal in the student handbook. "The overarching goal of the program is to develop teachers who are advocates for social justice dedicated to fostering equitable and effective schooling and life opportunities for all students." The vision at Midlands was organized around three principles: inquiry-oriented classrooms, sociocultural learning theories, and inclusivity. The program faculty drew heavily from sociocultural theories of learning and sought to develop teachers who believed that learning occurs through interaction with others and the environment. The program hoped that new teachers would develop instructional experiences that emphasized dialogue and collaboration. Related to the foundation of sociocultural learning theory is that instruction should be inquiry-oriented and student (rather than teacher) centered. This meant that PK-12 students should be able to investigate and make meaning of concepts by engaging in instructional activities that encourage them to explore and construct (rather than listen, memorize, and reproduce). Finally, one of the strongest tenets of the Midlands vision is a commitment to inclusivity, which meant that pre-service teachers should embrace a diverse student population and develop a commitment to ensuring that all

students, particularly those from historically-marginalized backgrounds, are given the supports needed to access and master the lessons taught in the classroom. When asked what social justice meant for Midlands, the program director described how multiple program structures reinforced the program's social justice commitment.

I think it means that the student teachers are placed intentionally in schools where there's historically marginalized students, underserved students. There's a real intention to have that as an aspect of the program. I think that there's also in the course work a real unpacking of white privilege and what that means as you go forward as a teacher. I've also seen a real strong strand, which is [also] part of the state law and that is to develop teachers who know how to work with English learners. I think those are the components of equity and social justice in our program.

Notice how the program director draws attention to the programs' emphasis of particular needs of English Language Learners, which is "a part of the state law", invoking a carrier of the regulatory pillar. While it is possible (and I think likely) that this would be a central feature of Midlands curriculum whether or not there was a regulatory demand, this demonstrates how external policy demands influence program design and teacher educators' work. The program director draws attention to the importance the program places on the locations of student-teaching placements, by intentionally placing pre-service teachers in schools that serve historically marginalized populations. This is reinforced by recent research on teacher effectiveness that found that "teachers appear to be more effective when the student demographics of their school are similar to the student demographics of the school in which they did their student teaching" (Goldhaber, Krieg, & Theobald, 2017). Midlands hoped that this practice (and their social justice focus more broadly) would encourage their newly trained teachers to seek out diverse environments, particularly

ones with large numbers of English Language Learners, as the places they would teach after they left the program. But like most traditional programs, there was no requirement that their graduates do so. While three of the four focal participants from Midlands took jobs working with culturally and linguistically non-dominant students, for two of them it was a matter of necessity more than desire. Midlands also hoped that the teachers they produced would become leaders in their school sites.

I think we hope to produce teacher leaders. Teachers that have the tools to really think critically about the schools and the students that they're working with and to really move towards creating access to knowledge for kids who might not have access. (Program Director)

These visions are in line with much of the current literature in teacher education by not only combining constructivist pedagogies and equity-oriented dispositions, but also understanding the two as integrally linked (Garcia & Guerra, 2004; Villegas & Lucas, 2002; Zeichner, 2009). These perspectives draw from sociocultural investigations of the link between culture and learning (Au, 1998; Cole, 1998; Moll, Amanti, Neff, & Gonzalez, 1992), but also understand traditional, didactic instructional as rooted in dominant cultural practices and marginalizing students from non-dominant backgrounds (Brice-Heath, 1983; Cazden, 2001; Sleeter & Stillman, 2005). While the program's vision of a change agent wasn't directed by policy, even the program director's discussion of a disruptive professional weaved in regulative institutional carriers.

At Coastal Academy, the vision was even more specific: they hoped to prepare social-justice oriented teachers to work in a particular school district that had a high rate of teacher turnover. One of the goals stated in their Program Impact Goals



document was to “develop and support a pathway from pre-residency through early teacher leadership that serves to increase diversity and teacher retention in the [partner school district]”. Coastal’s partner school district served predominantly low-income students of color. Coastal hoped that over time they could build capacity in the school district by training a cadre of teachers who have similar commitments and were interested in staying in this particular school district long-term. When describing the kinds of teachers Coastal Academy was trying to produce, the program’s director described teachers with a constructivist pedagogy and a commitment to social justice.

We want people to really have strong content knowledge in the content area they're teaching. We are looking for people that have an approach to learning that is really sort of student centered and inquiry based and constructivist. We are looking for, and again trying to produce, people who are collaborative and easy to work with. Not only get along well with their colleagues but are able to really quickly assume leadership positions within their schools and departments. Then, the last thing I would add to that is looking for people and trying to cultivate residents who have a real explicit commitment to equity and social justice.

Like Midlands, Coastal Academy’s vision of a change agent emphasized constructivism and social justice. However, as a residency program and partnership, Coastal’s commitments were not simply to affect the teaching profession broadly by training constructivist, social-justice oriented educators, but to build enough capacity of like minded educators in one school district that they could change the culture of teaching within the school district. This is aligned with the urban teacher residency movement as they seek to address the issues of teacher turnover as well as teacher quality (Berry, Montgomery, & Snyder, 2008; Solomon, 2009). Coastal hoped to achieve these goals through a combination of recruitment and preparation, as this

program director points out when he says, “we are looking for, and again trying to produce”.

Both programs wanted to train change agents - teachers that were qualitatively, demonstrably, and meaningfully different from current schoolteachers. Both programs were designed with this goal in mind. The commitment to social justice was a part of the admissions process, addressed in coursework, and shaped the selection of placement sites. The vision of change for both programs was that the teachers they produced would not only provide high-quality educational experiences for diverse students, but also create lasting change within schools (and in the long-term, outside of them). They also believed that the kind of preparation they were providing was different in some important aspect than what pre-service teachers received in other kinds of credential programs. While other programs may be training schoolteachers, these two programs saw themselves as training future leaders. As one of the teacher educators at Midlands put it, both programs sought to train *teachers* not *schoolteachers*.

A big thing for me always is the tension between developing teachers and developing schoolteachers. They're not the same. A lot of the philosophy of the program is we want to develop teachers. We want to develop these people who are autonomous, capable agents to do things well in whatever circumstance they are, whereas school pressure is always about doing the school thing called teaching...Now this goes back to a fundamental tension we have with cooperative teachers altogether. They're all schoolteachers.

This teacher educator highlights one of the primary tensions of teacher education: the desire on the part of programs to prepare transformational educators when a large portion of that preparation takes place in schools and with cooperating teachers that

maintain the status quo. Finding cooperating teachers whose pedagogical orientations align with progressive, constructivist teacher education programs has been a consistent challenge for teacher education programs (Britzman, 1991; Feiman-Nemser & Buchmann, 1987; Olsen & Buchanan, 2017). For these two programs, the ability to meet their goals of preparing teachers, or transformational educators, instead of schoolteachers was constrained by a variety of structural and contextual forces, chiefly the primacy of the master-apprentice model and the way it shaped multiple facets of program structure and pre-service teacher experience.

Apprenticeship was the organizing structure of both programs in both explicit and implicit ways, and its history as an institution for preparing technically proficient tradesmen had significant ramifications for these programs' capacity to prepare transformational educators. The rest of this chapter will outline the ways that apprenticeship was enacted and experienced by the teacher education programs.

At Coastal Academy, the apprenticeship structure was quite intentional, grant requests and online materials promoted it as one of the key features of the program.

Their original grant application described the program this way:

Based on the medical training model, Coastal Academy teacher candidates (known as "residents") integrate master's level coursework with a full year apprenticeship alongside accomplished teachers (known as "demonstration"<sup>23</sup>

---

<sup>23</sup> During the year of study, Coastal Academy had shifted from the term "demonstration teacher" to the term "cooperating teacher", this was done to signify collaboration and cooperation and de-emphasize an exemplar model. One of the Coastal Academy staff put it this way: "I intentionally changed it on all the documentation because I wanted to signal that, this is a cooperation and a collaboration. It's not about somebody having it all figured out, because we know the best mentors are often the people who don't have it all figured out."

teachers”) in urban classrooms before they become the teachers of record the following year.

This quote makes clear the reasons that residency programs like Coastal Academy emphasize apprenticeship as a key feature. First, residency programs draw (in name, mostly) from a medical education model. The status of medicine and medical training as compared to teaching and teacher training provides legitimacy for this as a professional training strategy. Notice that they do not highlight craft or trade apprenticeships as the comparative profession, but focus instead on a profession with higher status. Attempts to emulate medicine in teacher preparation is not new; that was also the vision behind Professional Development Schools (Holmes Partnership, 2007). Medicine has also been held up as the profession that teaching should seek to emulate in terms of status (Department of Education, 2013), licensing (Darling-Hammond et. al., 1995), preparation (Carnegie Forum on Education and the Economy, 1986; Holmes Group 1986), and development of a research base (Pring, 2004; Goldstein, 2012). The residency name is as much a symbolic part of this emulation process as it is about actual programmatic structures and practices. Medical residencies are actually structured quite differently from teacher residencies.

Prospective doctors (in the United States) spend four years in medical school, which includes extensive coursework and some clinical preparation, and then begin a residency program embedded in a teaching hospital after receiving their M.D. New

---

Her quote signifies a recognition that their cooperating teachers are not necessarily exemplar models who pre-service teachers should seek to imitate, but rather are partners in the teacher development process. Despite this linguistic shift, other Coastal Academy structures encouraged a traditional master-apprentice model.

residents are granted a medical license after completing a minimum of one year of postgraduate training (state requirements vary). Teacher residency programs, like Coastal Academy, embed the course work and clinical preparation into the same program, at the end of which, teacher residents receive a teaching credential and often a Master's degree. This linguistic harkening of medicine is also seen in teacher education's discussion of *clinical preparation*, *clinical experience*, and *clinically-based programs* (Grossman, 2010; Levine, 2010; Zeichner, 2010b). In a quest for higher status, this desire to emulate medicine may encourage programs (perhaps inadvertently) to rely on a more traditional master-apprentice model, which undermines their goal of developing transformational educators. Medical residency programs induct new doctors into the profession by training them in the skills of professional practice through observation of, interaction with, and emulation of practicing experts. Medical training is organized and directed by the American Medical Association, a professional association of practicing physicians; it is not a co-constructed, collaborative effort on the part of residents and the physicians they practice under.

Midlands did not centralize the word apprenticeship in their program vision and description, but, as will be explained below, the structures implicitly encouraged pre-service teachers to think of their placement experiences as apprenticeships. One of the teacher supervisors at Midlands did describe the program explicitly as an apprenticeship approach.

We assume an apprenticeship model in the whole [program]. The way I understand it is the model's basically coming out of a community of learners

model. There's this community of people we call teachers. They want to enter into that community. [They're] in the periphery to start with. What do [they] need to do to get more and more into whatever that thing that's called teachers? Student teachers are supposed to bring in some experience with them, but then we settle them into this notion of whatever that practice is by connecting them with practicing teachers.

Drawing from Lave & Wenger's (1991) notion of a community of practice, this teacher supervisor articulates how pre-service teachers are supposed to be guided into the profession through the process of legitimate peripheral participation. This represents that theoretical understanding of apprenticeship as tool for conceptualizing learning. This conceptual tool is being compared here to the practical reality of preparing new teachers, but there is an unresolved (and in this case unexamined) difference between the transformational educators that the program wants to produce and the contextually constrained practices of schoolteachers whose classrooms they are placed in. Teacher educators, like this one at Midlands, are (for both conceptual and political reasons) committed to situated forms of learning, but because they are trying to prepare teachers (knowledgeable, intellectual, innovators committed to social justice) instead of schoolteachers (who maintain the status quo in education), the ability for programs to meet their goals is in tension with the primary structure they use to prepare new teachers. Institutional carriers that operate at multiple ecological levels maintain the institution of a historical master-apprentice structure. How this operates is explored below.

## **Ecological Factors that Maintain the Historical Master-Apprentice Model**

As an institution in teacher education, the feature of apprenticeship as a common-sense, taken for granted part of teacher preparation not only shaped particular structures in both programs, but its primacy was also reciprocally reinforced by the practices, experiences, and unexamined assumptions of program participants (including pre-service teachers and teacher educators). This section describes how factors operating at multiple ecological levels both demonstrate a manifestation of the historical master-apprentice model and serve to maintain it as an institution.

**Student teaching practicum.** The student teaching component was the primary organizing feature of both programs. Pre-service teachers at both Coastal and Midlands were in a PK-12 classroom for a full academic year. At Midlands, the multiple subject<sup>24</sup> pre-service teachers completed placements in two classrooms. They spent the Fall semester in one placement and the Spring semester in a classroom at a different school and grade level. They spent increasingly more time in their placement throughout the school year: two days a week at the beginning of the year, everyday of the week by the end of the school year. As a residency program, Coastal Academy required pre-service teachers to spend a full year as a resident in one teacher's classroom. They were expected to spend five days a week in their practicum placement throughout the entire school year and attend all professional development

---

<sup>24</sup> California teacher credentials are designated as Multiple Subject (K-8) or Single Subject. Multiple subject candidates typically intend to teach in self-contained K-6 settings.

sessions, site meetings, and grade level meetings that did not conflict with their credential coursework. The significant commitment of instructional time that both programs provided for the practicum and student teaching components were aligned with scholarship promoting practice-based teacher education (Darling-Hammond, 2006; Zeichner, 2010b), but a consequence was that it may have communicated to pre-service teachers that other program components were secondary to the student teaching practicum. Focal participants dedicated more time and attention to their practicum demands than any other component of their teacher preparation and frequently named their practicum as a key part of their program experience. For example, when asked what was the most important part of his teacher education program Grant, a resident at Coastal Academy, said, “being in the school full time.” The implicit privileging of the student teaching practicum combined with the traditional master-apprentice relationship between pre-service teachers and cooperating teachers (which will be explored more fully below) complicated the programs’ goals of preparing change agents.

In both cases the placements operated more like a traditional apprenticeship than Dewey’s (1904) vision of a lab school. Dewey (1904) felt that a lab school approach to teacher education (in contrast to the more traditional apprenticeship form of normal school training) would encourage pre-service teachers to treat their placement classrooms like labs, where they investigate closely how children learn, rather than seek to emulate the classroom teacher. He argued that close investigation of the learning processes of children was the ideal way to bridge the theory/practice



divide in teacher education and that apprenticeships alone focus on “equipping the teacher” with skills. He argued that given the brief length of professional training and the cultural practices of schoolteachers (which does not afford time for theoretical study) teacher preparation should emphasize the linking of theory and practice through the observation and investigation of PK-12 student learning.

It is not necessary to assume that apprenticeship is of itself a bad thing. On the contrary, it may be admitted to be a good thing; but the time which a student spends in the training school is short at the best. Since short, it is an urgent matter that it be put to its most effective use; and, relatively speaking, the wise employ of this short time is in laying scientific foundations. These cannot be adequately secured when one is doing the actual work of the profession, while professional life does afford time for acquiring and perfecting skill of the more technical sort. (p. 252)

He criticized this approach, because (much like Midlands and Coastal Academy) he envisioned teachers as problem-solving intellectuals, rather than technicians who could adeptly implement a variety of managerial and instructional techniques. There were multiple features of the student teaching practicum that resulted in it operating as a traditional apprenticeship and emphasizing the technical aspects of teaching.

*Solo days.* One of the program requirements at both Coastal and Midlands that encouraged this model of apprenticeship was the practice of solo teaching days. At both programs pre-service teachers were expected to slowly take over teaching responsibilities, and one of the ways this operated was through solo teaching days - where teacher candidates served as the sole instructor (not a co-teacher). These requirements built slowly, one day at first, then two, building up to a two-week solo at the end of the school year. Tables 4 and 5 show the amount of time pre-service

teachers spent in coursework, in their practicum, and the percentage of that practicum dedicated to teaching solos.

**Table 4: Midlands Coursework and Practicum Hours**

Midlands			
Quarter	Coursework Hours Per Week*	Practicum Hours Per Week	Percent of time spent on teaching solos
Fall	8.5	16	0%
Winter	7.5	16-24**	10-15%
Spring	1.5	35	23%

\*\* 16 was required, teacher supervisors encouraged 24

**Table 5: Coastal Academy Coursework and Practicum Hours**

Coastal Academy			
Semester	Coursework Hours Per Week*	Practicum Hours Per Week	Percent of time spent on teaching solos
Fall	12.25	35	0%
Spring	10.75	35	24%

\* Bilingual Candidates were in class for about 1 additional hour per week.

Solo days were seen as one of the most important program experiences in both programs (by the focal participants and their teacher supervisors) and served as the major practice-teaching requirement in both programs. One teacher supervisor at Midlands described the initial solo days this way:

It's a first step where they're getting scaffolded into doing the whole deal themselves. This way they are working tightly with their cooperating teacher and the cooperating teacher may be in the classroom. And the cooperating teacher's there to either give them signals of, "Don't do that, no." behind the scenes.

This supervisor's description of solo days describes a scaffolded process for apprenticing the practice of teaching. The pre-service teachers take over responsibility of the classroom and engages in the visible aspects of managing a

classroom and leading students through instructional activities with in-the-moment cues and support from their cooperating teacher if those tasks become difficult. This structure of practice supports pre-service teachers in developing a set of schoolteacher practices, not necessarily those of a transformational educator. As the pre-service teacher engages in a scaffolded process of enacting the same routines, scripts, and techniques as their cooperating teacher, this process transmits the institutions that maintain the status quo in education. In this way the solo days operate as an institutional carrier, socializing pre-service teachers into the common practices of PK-12 schooling and simultaneously strengthening the practice of apprenticeship.

Additionally, teacher candidates did very little preparation for the individual solo days, they merely made a copy of their cooperating teacher's planning book and led the students through the routines and structures that they had become accustomed to. When asked about how she prepared for her solo day of teaching, Jamie, a Midlands pre-service teacher said, "I didn't really....The preparation, all it took from me was to look at her plan book." In this way solo days reaffirmed the nature of the practicum as a place to try out being a teacher, rather than a place to explore new topics, techniques, or approaches aligned with each pre-service teachers own interest or guided by their program's vision of quality teaching. The first solo day at Midlands was even called "Teacher for a day". This practice reaffirmed the traditional master-apprentice model by explicitly encouraging pre-service teachers to develop practices (and therefore a professional identity) that matched that of their cooperating teachers.

*Gradual release guidelines.* Coastal Academy also developed a set of gradual release guidelines that they shared with cooperating teachers. These guidelines, both in name and format encouraged an apprenticeship structure as cooperating teachers were directed to have residents take over small parts of instruction over the course of the year. The term gradual release invokes a traditional master-apprenticeship model, as the master scaffolds work for the apprentice by gradually releasing more and more responsibility over time. The format of the guidelines was broken down with month-by-month directives on what kinds of responsibilities the pre-service teacher should be taking on. Each month these responsibilities increased slightly. The document listed a series of teacher skills, most of which were visible, and did not explicitly address theories of learning, conceptions of pedagogy, or ideas about social justice and equity in schools. The guidelines main function was to ensure that some sort of gradual release was in place - so that solo days would not become the only time that residents had to practice teaching. However, they communicated to cooperating teachers, residents, and supervisors that the practicum's primary structure was that of apprenticing. For example, one of the January guidelines was to have residents "Take on some responsibilities of the "teacher of record" such as Take attendance, Dismiss class, Create assessments, or Grade student work, etc." These guideline were directives to students and teachers, communicating a decontextualized, abstract, and authoritative perspective on the "correct" way to learn to teach. The also foregrounded easily identifiable, visible, teaching skills and backgrounded the more complex, less visible aspects of teaching. Taking over small parts of instruction

leading up to a solo day, week, and then two weeks is the ideal format if the goal of the practicum is for teacher candidates to practice the skills that are modeled by their master teacher. However, the guidelines undermined Coastal's goal of having the residents develop qualitatively different skills and challenging them to think about how to develop and enact a comprehensive teaching philosophy rooted in social justice by requiring them to reproduce their cooperating teachers' practices.

***Role of the cooperating teacher.*** Another factor that reinforced the traditional master-apprentice approach was how cooperating teachers understood their role. They were encouraged to see themselves primarily as models of good teaching, rather than coaches or even mentors. As one of the cooperating teachers put it: “[Pre-service teachers] get a chance to see teaching being modeled and practice their skills.” This cooperating teacher understood his role as someone who serves as an exemplar for pre-service teachers to imitate, and solo days served as structured opportunities for pre-service teachers to engage in just this kind of practice teaching. Cooperating teachers could potentially conceive of their role as a coach who supports pre-service teachers as they explore their own pedagogical interests or as an intellectual sounding board helping them unpack thorny issues of pedagogy (Smith & Avetsian, 2011). Instead these cooperating teachers understood themselves as models who demonstrates what good teaching looks like and attempts to pass those skills onto new teachers, which was quite likely similar to their own student teaching experiences.

Learning how to enact theories learned in university courses is non-linear, thorny, and complicated. Pre-service teachers need support in exploring the relationship between theory and practice from practicing teachers, particularly if the kinds of pedagogies they want to engage don't fit a traditional teacher-centered model of instruction. Jamie, a pre-service teacher at Midlands demonstrates this complexity as she tries to negotiate what it means to link Vygotsky's concept of the Zone of Proximal Development (ZPD) with her practice teaching in a fifth grade classroom.

The concept of ZPD on paper sounds perfect, but then when you're actually in the classroom and there's a bunch of people raising their hand, like who do I go to first? Who needs my help the most? Who can probably figure it out by talking to their partner? Or who is actually completely lost?

Jamie was interested in the conceptual ideas about teaching and learning, but she wasn't always sure how they applied, because the linkages were not direct. The questions she raised above are the kinds of questions she could have been exploring with her cooperating teacher as she developed conceptual and practical links between abstract ideas and classroom teaching. But these were not the kinds of conversations pre-service teachers had with their cooperating teachers. As will be discussed more fully in the next chapter, pre-service teachers were quickly socialized into a PK-12 school practice that eschewed these complex theoretical ideas in order to attend to the immediate and daily demands of their classrooms. This disconnect demonstrates the conceptual fragmentation (Zeichner & Gore, 1990) that often accompanies the divide between university and school and between theory and practice and can result in under-theorized classroom practice. Teachers engaging in activities for reasons they may not be entirely clear about: because it worked once before, because that's what

they were told to do, or because that's how the curriculum does it (Ertsas & Irgens, 2017). These kinds of tacit, unexamined explanations for instructional choices are encouraged by the traditional master-apprentice model, which does not demand that pre-service teachers inquire and question the evidence that supports particular approaches (or the learning theory that undergirds them), but rather that they enact the practices like their cooperating teacher does it. One of the major challenges of tacit teacher knowledge that isn't explicated, is that pre-service teachers may not have access to the ways that practicing teachers negotiate, internalize, adapt, and merge various perspectives on learning and purposes of schooling. Without the explication available, they often make assumptions based on what is immediately visible, or draw from their own experiences as a student. Instead of opening up their understanding to the situated nature of education and the complexity of teaching and learning, this causes them to look for simplistic solutions to complex problems. For example, Jamie, who was a white woman student teaching in a bilingual class of Latino students, talked often about how she was committed to culturally relevant instruction, but when I asked her to describe the ways she engaged in culturally relevant instruction in her classroom, she would talk about it in terms of student interest and pop culture. This isn't necessarily incorrect, youth culture is a type of culture, but it is not the kind of culturally relevant instruction that draws from students funds of knowledge and engages them in content that links their cultural identities to academic material.

**PK-12 demands.** In addition to the structure of the practicum itself, there were also constraints placed on both cooperating teachers and pre-service teachers that made it even more difficult for pre-service teachers to practice the kinds of equity pedagogies aligned with their programs' commitments. While solo days operated as one of the few opportunities for pre-service teachers to engage in practice teaching, they were constrained by state, district, and school requirements. Standardized testing, mandated curricula, and particular program models often limited the instructional choices that pre-service teachers were able to make. Yaotl, a Midlands pre-service candidate described it this way:

I felt like that's a challenge as a student teacher is there's what your cooperating teacher wants. Maybe it's not even what they want, but it's what the school wants. Then there's what you want to do. I've heard student teachers who felt like shot down like, damn my creative genius isn't being appreciated. I've heard some really great ideas for people who've wanted to integrate social studies and their cooperating teachers have just shot them down and been like, "Why are you going to make it difficult on yourself? The PACT<sup>25</sup> is just looking for this, just give them that."

Yaotl, a Latina woman in her late 20's entered Midlands teacher education program after working for several years as a preschool teacher and elementary school tutor. She had immigrated to the U.S. with her family as a young child, and grew up in a family of rural farmworkers. Yaotl had always wanted to become a teacher, because of positive schooling experiences she had as a child. During college, Yaotl became involved in her university's service-learning program, which caused her to re-examine her own experiences as an immigrant, English Language Learner, and queer

---

<sup>25</sup> This is the performance assessment required by the state, and will be discussed more fully below.



woman of color through the lenses of social justice and equity. She chose Midland's program because of its emphasis of social justice and equity, but struggled to find opportunities to engage in these practices during her student teaching practicum, because of the organizational structures and policies at her school site. The school district where Yaotl completed her student teaching required that all school teach reading using a Response to Intervention model that leveled students across grade levels. They also required a scripted ELD curriculum that focused on decontextualized language skills. And Yaotl's cooperating teachers was incredibly concerned about meeting all of the state standards for fifth grade, and therefore adhered to a tightly scheduled scope and sequence. Yaotl description of how pre-service teachers have to negotiate multiple demands as they practice teaching illustrates how these institutional carriers that privileges traditional schooling practices hampered her ability to practice pedagogies aligned with her commitments. She draws particular attention to cooperating teachers' practices, school based requirements (which were driven by district, state, and federal policies) and the state required performance assessment, all of which were carriers of regulatory and normative institutions.

Some pre-service teachers were not able to complete their full two-week solo until after the state exams were administered, because of cooperating teachers' concerns about covering all of the material before the exams. This meant that their culminating teaching event did not occur until the last two weeks of school (which no one thought was an ideal time). Others had to use whatever was in the curriculum

map during their solo days and/or state required performance assessment (PACT) lessons. Yaotl had to design her PACT lessons around the social studies standards at her grade level that her cooperating teacher had already planned to cover in the curriculum. This meant that she was not able to infuse the social justice focus that she wanted to into her lessons, because of both the need to address state standards and the plan her cooperating teacher already had in place and was unwilling to deviate from.

My lessons focus on the influential mind of the American Revolution. Originally, I wanted to focus on [women], I asked my cooperating teacher “Is this a standard they have to know about: the specific men?” And she’s like, “Yes that’s why I’m having you do them.” I was just like, damn it. That’s a constraint that I felt.

Although Yaotl had developed a social justice commitment aligned with her program's goals, she was not able to try out practical strategies aligned with that commitment because of the constraints in place in her practicum. Yaotl’s experience demonstrates how forces operate across ecological levels to shape her learning experiences. As mentioned above, she entered her program with an interest in developing an equity-oriented pedagogy focused on providing students with opportunities to unpack how power operates in society. These goals were reinforced by her program coursework, and aligned with the program’s vision. However, the constraints in her cooperating teacher’s classroom (e.g. required curriculum linked to state standards) combined with teacher education regulations (e.g. the demands and timeline of PACT) meant that she had few opportunities to practice those commitments during her student teaching practicum.

Institutional carriers privileging traditional practices in PK-12 schooling sustain the structural fragmentation of teacher education because it sits at the intersection of two differently organized institutions (Feiman-Nemser & Buchmann, 1985; Zeichner & Liston, 1987). And there were very few formal attempts in these programs to align work between the two worlds. Pre-service teachers were expected to attend to those external demands in whatever ways their cooperating teachers did, which frequently meant acquiescing without question. The structural and conceptual fragmentation was interwoven, as the differing external demands placed on the two worlds furthered the conceptual divides. The increased accountability policies that PK-12 schools have faced over the last 15 years has resulted in a greater degree of decontextualized, didactic instruction (Achinstein & Ogawa, 2006; Cuban, 2007; Smagorinsky, 2010), actually serving to reinforce the structural and conceptual divides between the two worlds. When combined with traditional master-apprentice model of learning from experience, this makes it more difficult for pre-service teachers to develop practices aligned with their programs' commitments.

**Program length.** Another factor that contributed to the fragmentation that pre-service teachers experienced was the programs' length. Both Coastal and Midlands are one-year credential programs (they also offer MAT degrees - at one program, they receive both in one calendar year, in the other they must take one additional semester of course work to receive the MAT). This meant that the pre-service teachers were full-time students, preparing for their student teaching, completing coursework, and fulfilling credentialing requirements. Some had additional jobs to help support their

study, even though it was discouraged by both programs. This meant that some of their courses were rather brief in length - offered during summer or interim sessions. While course instructors sought to make the coursework both relevant and rigorous, students in both programs commented that they did not work as hard as they had in their previous studies, because time simply did not allow it. This meant they engaged less in the complex conceptual and analytical parts of teacher preparation than the practical/technical parts, inadvertently privileging those parts of their preparation.

When describing how he approached his coursework reading, Grant said:

There was a lot in the reading but there was no accountability for doing the reading and I have a very busy schedule, and I don't know if I got to that page or chunk of pages. I just talked to my advisor who also taught that course. She actually said, "I'm going to pull back on the reading because I realized nobody was doing it because it was so much." It's like I don't know what to read and what not to read so I just won't read anything.

The short program length meant that pre-service teachers were engaged in full time coursework and working between three and five days in their student teaching practicum<sup>26</sup>, and, in two cases, working extra jobs for additional financial support. This meant that there was little time for reflection (other than the times they were required to do it as a follow-up to a lesson they just taught), observation, or integration of the many things they were learning. The compressed design of these programs also affected teacher educators, who were trying to meet the particular instructional demands of their course and ensure that it met requirements laid out by the California Commission on Teacher Credentialing. This, at times, required them to

---

<sup>26</sup> This varied based on program and time of the year. At Coastal, residents were in their student teaching placements for all 5 days all year. At Midlands, their time in the student teaching placement increased over the course of the year.

add or change particular assignments. In this way macro-level forces (from a regulating body) shaped meso-level structures (the courses within a program) and the micro level interactions that happened within them. For example, the teacher supervisors at Midlands University coached pre-service teachers through their completion of the PACT, by providing individual feedback on each of the its tasks. This took a great deal of time for both pre-service teachers and teacher supervisors, and shaped many of their interactions, as they discussed how best to meet the demands of the assessment.

Attention paid to policy demands combined with the limited program length left little time for connecting what students were learning in other classes to their coursework demands, or even connecting with other teacher educators. While course instructors frequently asked students to draw from their placement in order to answer in class questions or think about a particular practice or concept, these connections had to be made solely by pre-service teacher. There was not a direct connection between the course instructors and cooperating teachers - or knowledge of their practices. This practice happened less frequently at Coastal Academy, because residents were taking courses at a University and were integrated with other pre-service teachers that may or may not be student teaching at the same time. Therefore, course instructors could not make connections to placements a requirement for most course activities. There was also no program-wide attempt in either program to ensure that a shared pedagogical vision that was explicated through particular concepts, ideas, or practices was addressed in every course. This may be in part due to things

like academic freedom, and the course instructor's autonomy and prerogative. But it also meant that there was not necessarily intentional cohesion among teacher educators, even those who worked at the same university. This lack of cohesion was more pronounced at Coastal, because the residency was a collaboration between several organizations. While there was certainly a common theme and several key concepts that were introduced at the orientation and carried through the weekly practicums that students attended, this was not necessarily directly related to the experience or content they had in their university coursework - which actually served to exacerbate the divide between university and PK-12 schools. In fact, the residents experienced the two as disconnected, when I asked them about their experience with the Coastal Academy, they understood it to be the placement, their practicum courses, and their supervisor. They saw the university and those courses as something separate.

**Marginalized coursework.** When combined with the short timeline and the centralization of the practicum, the other parts of the program (most notably the coursework) were marginalized. This was particularly true for Coastal Academy, where the partnership across institutions served to further the divide between university and PK-12 schools rather than narrow it. Not only did the focal pre-service teachers exert less effort than they had in their previous schooling experiences, the coursework was implicitly deemed as less important by the ways the program was structured. And all of the focal participants were students who had enjoyed their

previous academic experiences<sup>27</sup>, and they had purposefully sought out teacher education programs that they thought would be academically rigorous. All of the participants spoke proudly of collegiate experiences that had challenged them - which, in part, had guided their decisions to become teachers and enter the specific programs they had selected. As Vida, one of the Coastal Academy residents put it,

I also feel like with the amount of work that I had to do this year, I was not able to produce my best work. I feel like I did way better in my undergrad than what I did this past year.

So the coursework marginalization was not merely a matter of students who were not interested in the schoolwork portion of the programs. However, the pre-service teachers felt the demands of their placement outweighed the coursework requirements. And coursework instructors, understanding that pre-service teachers were overextended, would alter the course requirements by changing (or removing) assignments and reducing the amount of reading required for the course. One of the course instructors at Midlands described her course adaptations this way:

Rather than hitting my head against the wall, trying to get them to do the readings that they weren't doing, I sort of changed things around so that we were doing some reading in class. So that rather than having them do all of the reading [we would] jigsaw the reading, or even just taking out sections of it integrating it more into a Power Point so they had it to refer back to. I guess that's about being open to their needs, and that means sometimes sacrificing the content.

Pre-service teachers prioritized their placement demands because there were real students depending on them, their placement took up a great deal of their time, and

---

<sup>27</sup> This could also potentially be due to a selection bias in participant recruitment. It may be that pre-service teachers who would submit to potentially being part of a study are more interested in academics.

those demands were felt daily. This privileging of practical demands over abstract coursework is a consistent trend in the research on learning-to-teach (Feiman-Nemser & Buchmann, 1987; Fuller & Bown, 1975; Kagan, 1992; Sleeter, 2001). Much like Wideen, Mayer-Smith, & Moon (1998) found in their review of research on learning to teach, “The practical pressure of the student teaching experience appears to limit the ability and inclination of pre-service teachers to do anything other than just survive (p. 156).”

Since courses offered the primary opportunity to ponder, inquire, and explore how conceptions of learning and equity goals may be in tension with common school practices, this marginalization of coursework made it even more difficult for programs to meet their goals of developing change agents. And when course instructors reduced the amount of engagement that pre-service teachers had exploring and processing the complex nature of learning and how schools operate as oppressive institutions, they may be less likely to develop a cohesive philosophy that would allow them to navigate the traditional PK-12 structures and practices that maintain the status quo in education. It also implicitly communicates to pre-service teachers that the student-teaching practicum **is** the most important part of their teacher education experience and implicitly endorses their decision to prioritize it. This may have been an instance where course instructor’s equity commitments (which encourage to take the needs of pre-service teachers into account in their instructional planning) inadvertently undermined their goals of developing change agents.



The marginalization of coursework was more severe at Coastal Academy for two reasons. The residents spent a full academic year in their placement teacher's classroom for four and a half days a week, and they attended courses at the university at night. Whereas the practicum component progressed at Midlands: in the fall quarter, pre-service teachers spent three days in their placement teacher's classroom. In the winter quarter, it was three and a half days, and during the Spring quarter it was full time. At Midlands when their practicum demands increased, their coursework requirements decreased. By the Spring quarter, they had finished their foundations and methods coursework and took only one student teaching practicum course. The second reason that coursework was more marginalized at Coastal was that the courses that Coastal residents took were more disconnected from their placement experiences. For example, all of the university methods courses at Coastal required the residents to plan a curricular unit as the culminating activity. This was a university decision that was made in response to accreditation demands, to ensure common experiences across multiple course sessions. However, the residents never taught these units in their placement classrooms (not only would it have been logistically challenging, given the PK-12 constraints described earlier, but it could not be required as some of the other pre-service teachers in their classes were not student teaching at the time). Instead of being valuable learning opportunities, the residents found these assignments to be a waste of time. They felt like they took time away from the things they needed to prepare for in their placement classrooms, and that as classroom teachers, they would be given a curriculum - so creating units from scratch seemed

both unnecessary and like unrealistic representation of what they would do in their own classrooms. When discussing those assignments, Grant pointed out how much more valuable the one case study he was asked to complete during his credential experience compared to all of the curricular units he had to develop for his methods courses.

Yeah, because what it would be is the number one thing: every single class had one project, which was to develop a weeklong sequence of lessons...I would say what they should do is do a lot more of that [case studies]. Don't worry about you coming up with some curriculum because you're going to be handed a fucking book on day one anyway. Observe a student, see what they struggle with, see when they have success, how they feel when they have failure, those sorts of things. It'd be so much more powerful, I think, than pretending like I didn't just go on to teachers-pay-teachers to find an activity.

This disconnect between planning assignments for methods courses and the kind of planning schoolteachers do represents another example of the difference between the kinds of teachers the programs had hoped to develop (one's with the capacity and autonomy to make all of the curricular decisions and develop materials) and the common practices of schoolteachers, which are driven by external demands. It also demonstrates one of the key differences of formal classroom-based education, which occurred in the teacher education program coursework; and informal apprenticeship-based learning, which occurred in the student teaching practicum. Formal learning is general and decontextualized, meant to provide the students with transferable experiences; whereas, informal learning is context specific and localized, meant to be applicable for a particular situation (Lave, 2011). One of the disconnects that pre-service teachers experienced was that both of these were happening for them, simultaneously, and their formal requirements (developing curricular units) were not

applicable to their current student teaching practicum, which already took up a great deal of their time. And because of the difference in practices between the programs' requirements and the kinds of planning that their cooperating teachers engaged in, they did not even see the skills they were gaining as transferable. Since this disconnect was more pronounced at Coastal, teachers at Midlands felt more positive, in general, about their coursework experiences. They also had more complex ideas about teaching and learning that were directly informed by things they had learned in class. However, for teacher candidates in both programs, these complex ideas rarely translated into the instructional choices they made during their teaching solos, because of the apprenticeship nature of the practicum experience. This will be explored more fully in Chapter 7.

**CCTC requirements.** Another contributor to the maintenance of the traditional master-apprentice model was state credentialing requirements. The state of California has required the completion of an approved performance assessment since 1998.

During the year of data collection, both programs were using the Performance Assessment for California Teachers (or PACT<sup>28</sup>) to fulfill that requirement. PACT is

---

<sup>28</sup> The Performance Assessment for California Teachers (PACT) was developed by a consortium of university programs to serve as an alternative to the Teaching Assessments (TPAs), which were commissioned by the CCTE (California Commission on Teacher Credentialing) and developed by Educational Testing Services (ETS). A decade after PACT's initial development, the PACT designers engaged in a national campaign with AACTE (American Association for Colleges of Teacher Education) and Pearson, Inc. to develop a national performance assessment for teaching. The outcome was edTPA, a national teacher performance assessment aligned to the Common Core State Standards. 12,000 U.S. teachers recently piloted edTPA, and the assessment is currently being used across 34 states. Seven states have adopted state-level licensing policies for using edTPA (edTPA, 2014), and supporters

designed to assess pre-service teacher performance during a specific teaching event of between three and five lessons. The assessment sought to integrate and assess four different parts of what is typically thought of as a lesson cycle: planning, instruction, assessment, and reflection. Teacher candidates were expected to design their teaching event around content area and academic language goals for their students. The assessment itself was a series of prompts that pre-service teachers must respond to. It asked them to outline both what they did during each part of the lesson cycle and provide their rationale for it. They also had to submit a video recording of their lesson and student work samples that they assessed. In addition to PACT, multiple subject candidates must also complete three Content Area Tasks (CATs) that required them to complete some component of the lesson cycle in math, social studies, and science (PACT had to be completed in English-Language Arts). Collectively, the PACT and CAT assignments were focused on planning and instruction rather than close analysis of student meaning-making. While both PACT and one of the CAT assignments required pre-service teachers to assess students and analyze those assessments in order to examine student learning - these assignments were so narrowly focused on one lesson that they did not necessarily encourage deep, longitudinal investigation of student thinking and, therefore, encouraged a teacher-centered rather than student-centered orientation to the profession<sup>29</sup>. And at Midlands, teacher educators found that students had trouble locating authentic assessments from their placements that would

---

hope that edTPA will become part of a national licensure process (Darling-Hammond, 2010).

<sup>29</sup> This will be explored more fully in the next chapter.

serve as useful artifacts for one of their CAT assignments, so they decided to supply completed sample assessments to their pre-service teachers for analysis, in order to support their completion of the assessment. However, this meant that the assessments pre-service teachers were analyzing were not completed by a student that they knew and were, therefore, disconnected from a holistic understanding of this student, which communicated that a disconnected and fragmented perspective of student learning is sufficient (if not preferred), because it was all that was necessary for completing a state credentialing requirement.

**Loose coupling of teacher educators.** The program participants best positioned to mitigate the tensions of these other factors were the teacher educators. However, due to the way that their work was organized and fragmented, they were not able to do so. Both programs employed teacher educators in three different roles: course instructor, teacher supervisor, and cooperating teacher. All three are common in most pre-service teacher education programs. In both programs courses were taught by a combination of tenure-line faculty members and adjunct instructors/lecturers<sup>30</sup>. These adjuncts/lecturers were teacher supervisors, PK-12 teachers who taught at local schools during the day, graduate students or former graduate students, or retired faculty; their affiliation with and connection to the teacher education program varied widely. At the university that Coastal Academy partnered with, instructors were required to include particular common assignments (in the methods courses, these were the curricular units discussed above) to ensure

---

<sup>30</sup> Midlands University defined them as lecturers. Coastal Academy defined them as adjuncts. In both cases, these were contract, temporary, and/or part-time employees.

that pre-service teachers had a comparable experience across different sections of the course.

There's some collaboration about what to do. We just had a CCTC review, which is sort of like a commission. And they wanted to see some common assignments for each class and common readings, and we adhered to that because of CCTC. But it actually was a good process. It made us a little more aware of each others' work.

At Midlands, most of the courses only had two sections, and the extent to which course instructors collaborated around the course material varied, but there were no official requirements. When I asked one of the course instructors how she worked with other teacher educators in the program, she said it really depended on the instructors.

Depending on people's just willingness and availability, I think last summer with one of the other instructors, we tried to coordinate, she had shared her syllabus with me and it wasn't exactly the same... We were trying to be on the same page, using the same resources and movies and things. I really like collaborating with people, but sometimes ... There was another lecturer, and we just couldn't coordinate with her. She was on a different day, she lived somewhere else, it just never worked out and so we would send her things in the email and I had no idea what she did in her class.

During data collection, I observed a number of courses in both programs, while both programs had tenure track faculty who regularly taught courses, none of the classes I observed were taught by current tenure-line faculty members. The disconnectedness of course instructors is, in part, a manifestation of neoliberal forces on the university; as public funding has decreased universities have hired more part-time faculty across the board to cut costs. This contributed to a fragmented coursework experience, since course instructors were not regularly working together and because courses were often taught by different instructors each year, based on things like enrollment

numbers and faculty sabbaticals. While hiring adjunct instructors was an understandable program response to externally imposed burdens (like funding cuts and unstable annual budgets), it also demonstrates how teacher education program courses and instructors were treated as interchangeable components. This fragmentation demonstrates what institutional theorists call loose coupling (Meyer & Rowan, 1977; Weick, 1976). The different program components are not tightly coupled, or linked together and, therefore, pre-service teachers did not experience a cohesive preparation. Additionally, when teaching is understood as linked to each teacher's identity, instructors aren't interchangeable. This meant that firstly, each year the experience provided to pre-service teachers is different. And secondly, courses are frequently taught by instructors that are peripheral to the program, and these instructors are likely less aware of the history, environment, and philosophy of the program. Therefore, they may be unable to make explicit connections in their courses to other program experiences, especially with such minimal collaboration. Since coursework offered the primary opportunity to develop change agents, it needed to be cohesive and integrated. Since it wasn't, it failed to combat the institution of apprenticeship.

The second teacher educator role was teacher supervisor. Supervisors oversaw student teachers in their placement, observing them regularly and providing feedback. They also led weekly supervisory sessions with a small group of student teachers. In both programs, teacher supervisors were a mixture of retired teachers and teachers who had left the classroom after a decade or so. Some supervisors worked full-time,

but most worked part-time, using this work to supplement their retirement. They had no formal preparation for the work of supervising pre-service teachers, and the training for new teacher supervisors was mostly ad-hoc support from other teacher supervisors. One of the new teacher supervisors described it this way.

I haven't known the big picture. I have basically come in knowing that there's going to be a lot of work, but I don't know what that work is, and just assuming that I really can't ever rest because if I'm resting it's because I don't know what I should be doing. I have basically survived as well as I have because of the collaboration of the other multiple subject supervisors. One of them, particularly, has very much taken me under her wing. She does receive my emails of, "Help," and gets back to me very quickly. I have to know what questions to ask sometimes, but often she will also let me know as soon as she thinks of it what I need to know. I have been coached through her. There's never been any formal, "Please help her," but she has taken it on to a certain extent to support me.

Teacher supervisors had typically served as teacher leaders in some capacity during their classroom careers. Some had worked as induction mentors, others had developed curricula, and some had pursued graduate coursework. They also had established connections to local schools, which, as will be addressed below, was an important feature of their work.

The third teacher educator role was cooperating teacher. While cooperating teachers are not always included in discussions of teacher educators (and in fact may not even consider themselves teacher educators), they serve an incredibly important function in the development of pre-service teachers (Clarke, Triggs, & Nielsen, 2013; Feiman-Nemser & Buchmann, 1987; Izadinia, 2015). The cooperating teachers that supported the focal participants in this study were all very experienced (had at least 10 years of teaching experience); most (six out of the eight) had served as cooperating



teachers in the past, but they had little preparation for their work supporting pre-service teachers.

The structural locations of these different teacher educators influenced how connected they were to the rest of the program, how they interacted with pre-service teachers, and how they understood their purpose and role. And the structural fragmentation across the two worlds of the different kinds of teacher educators actually served to reinforce rather than mitigate the issues posed by the master-apprentice structure. Teacher educators ought to serve as a bridge between theory and practice, explicating the implicit understandings about inequity, power, learning, and teaching within the institutions of school and examining how they are either sustained or thwarted through instructional practices. However, because of the disconnected nature of their work across institutions, teacher educators were not able to effectively bridge this divide. This demonstrates how loose coupling occurred not only within the coursework, but also across the entire program experience for pre-service teachers.

Teacher educators were separated from each other in both formal and informal ways by the role they occupied. This varied slightly based on the different program structures, but the patterns were similar across the two programs. The connection between course instructors and supervisors depended on individual connections. One course instructor at Midlands described her experience this way:

I tried to email supervisors and talk to supervisors, but more about problems, or problematic students that were having issues or ... There are a few times that I was noticing things in their work that I think was coming from those classes that was either helpful or not helpful for my class and so trying to check in about things, but I don't ... I don't know what it's like for others. My sense is that people just don't have the time.

Course instructors had no formal, direct contact with cooperating teachers. In a few cases long-term work with the program and living in the local community meant they had friendly relationships with local teachers who also served as cooperating teachers, but there were no formal partnerships that linked coursework experiences with pre-service teachers' practicum.<sup>31</sup> However, members of both programs expressed interest in developing closer partnerships with local schools by building on relationships with program graduates who were teaching in the community. For example, at Midlands Academy, a course instructor brought in a former student/current teacher in the area to observe a class and discussed the hope of building a partnership where pre-service teachers could observe the science instruction happening in this alumnus's classroom. At Coastal, alumni were part of the program's selection process, and were being groomed to serve as future cooperating teachers (however, there was no discussion of connecting them with university coursework, which is an example of the increased fragmentation based on program structures).

Cooperating teachers also had very little knowledge about coursework experiences. At Midlands, several of the cooperating teachers were actually graduates of the program, but because of the time that had elapsed since they graduated, they were still relatively unaware of what the pre-service teachers were learning about in their classes. The only teacher educators that they had direct contact with were the

---

<sup>31</sup> At least none that were observed as part of data collection, which did not include all of the classes that pre-service teachers took. However, none of the cooperating teachers or pre-service teachers brought up connections that had occurred during the year.

teacher supervisors, and the supervisors varied in how much they knew about the coursework experiences and requirements. One supervisor at Midlands put it this way:

I think that might be another thing that I can say is that as a new person coming in, I haven't really known the scope of the program and how it is all integrated. It would've been nice to have some kind of preparation in that way, where I could understand how people are networked together and how the overall program is designed in a cohesive way. I have had to pick up bits and pieces, and that's natural and normal to some extent, but I just think that some of that could be bridged with an orientation.

Since supervisors were the only teacher educators who really bridged the divide between the universities and the PK-12 schools, their experience with and knowledge about program coursework was incredibly important. However, they did not make explicit connections between course material and the student teaching they observed since they were not well integrated.

Supervisors were also positioned quite differently in each of the programs. At Midlands, the teacher supervisors were employed by the university, taught their supervisory sessions at the university, and visited students in their placement classrooms. They had regular supervisory meetings with both the teacher education program director and faculty director of the program, and they partnered with ladder faculty members to screen new applicants to the program (there was little other formal collaboration between ladder faculty and teacher supervisors). The teacher supervisors at Midlands were mostly retired teachers and they worked between 75% and 100% time for the program. They led supervisory cohorts of between 9 and 17 students and were required to conduct two formal teaching observations each quarter

with each student teacher and one Teacher Performance Expectation session with the student teacher and cooperating teacher. These TPE meetings were the only required time that supervisors and cooperating teachers met together. They also conducted several informal observations each quarter with each student teacher, but the number varied based on need and schedule. There were times when teacher supervisors would check in with a cooperating teacher quickly and verbally (when they were dropping in for their observations), but they tried to keep the additional demands on cooperating teachers to a minimum. In fact managing the relationships with the cooperating teachers was an important part of the teacher supervisors' job at Midlands (also true at Coastal Academy, but to a lesser extent). Teacher supervisors at Midlands were responsible for locating potential placements and placing student teachers. This required an extensive set of local contacts that would essentially do them a favor by accepting student teachers, as cooperating teachers at Midlands were not materially compensated for their work. Teacher supervisors wanted to ensure that cooperating teachers did not feel overworked, so that they could maintain a positive relationship between the program and placement sites. At Midlands, teacher supervisors contacted cooperating teachers frequently by email, so that cooperating teachers were aware of the university based demands, but most of the information they provided was logistical (like scheduling quarterly TPE meetings). At Coastal, the teacher supervisors were selected by the program, but employed by the university. They were retired teachers as well as teachers who had left their classrooms to work in teacher education. Like supervisors at Midlands, they led cohorts of between six and twelve

residents. They were expected to observe their student teachers once a week and hold quarterly TPE meetings with the resident and cooperating teacher. They also conducted weekly supervisory sessions, which took up the first hour of the Friday afternoon practicum meeting. However, they were never physically at the university, in fact, one of my focal participants erroneously told me that they were employed by Coastal Academy and not by the University, because the residents experienced Coastal's program as relatively distinct from their university coursework. This meant that the teacher supervisors at Coastal had even less awareness of what was happening in their residents' coursework.

Rebecca: Did you have a sense of what they were doing in their coursework?

Supervisor: Somewhat, yeah. Not formally asking them, but we'd talk sometimes in private. They'd ask me about something or ask for help with the little things.

This structural disconnection meant that teacher supervisors' ability to serve as the theory-practice bridge between the two worlds and support teacher learning as they navigated the contested perspectives on learning, the purpose of schooling, and teacher capacity. This furthered the divide between the formal learning of the teacher education program and the informal experiences in the student teaching practicum, which encouraged pre-service teachers to treat their student teaching experience as an apprenticeship.

*Need to maintain relationships with cooperating teachers.* One of the final factors that further complicated some of the previous factors was that there was a relatively tenuous relationship between cooperating teachers and the teacher

education programs they worked with. High quality cooperating teachers were difficult to come by, even though both of these programs were relatively small. The director at Midlands put it this way,

We're not sure that we have enough cooperating teachers and really great school settings. Just the sheer number of matches that we need to make with excellent cooperating teachers might be a constraint.

Cooperating teachers were essentially doing the program (and/or the profession) a favor when they opted to take on a student teacher. This oriented the program (and the teacher supervisors, whose job it was to locate placements and/or maintain these relationships) as grateful recipients of the cooperating teachers' sacrifice of time. If simply the act of serving as a cooperating teacher is going above and beyond professional duty, it is particularly difficult for programs to try and reorient their practice in a way that prioritizes pre-service teacher development and more explicitly supports the vision of the teacher education program. It also makes it challenging for the teacher supervisors to influence the practices in place in local schools. At Coastal Academy, teacher supervisors were asked to coach not only their residents, but also the cooperating teachers that residents worked with in the local schools. Supervisors, perhaps understandably, resisted this kind of work, because they felt like it was not their place to coach the classroom teachers, and they realized it could jeopardize a relationship where they were already asking full-time classroom teachers to go above and beyond their regular duties. As one supervisor put it,

There seemed to be this expectation from Coastal that we would be teaching teachers as well, cooperating teachers. And as a teacher for many years, I was thinking from my perspective, I would not let some supervisor walk in and tell me anything.

As the only formal bridge between the two worlds teacher supervisors were tasked with maintaining relationships with cooperating teachers so that the programs would have enough placements in the future. The cooperating teachers were not oriented to the program with the expectation of receiving instructional coaching. Instead, as demonstrated above, they expected to serve as models to their pre-service teachers. There was not an agreed upon expectation that this would be a mutual, collaborative, co-learning activity. As such, teacher supervisors felt uncomfortable asserting this position in their work with cooperating teachers.

This demonstrates how loosely affiliated (or coupled) cooperating teachers were to the rest of the program. When examined inside of the master-apprentice model, the cooperating teachers can be understood independent artisans, rather than teacher educators who are fully integrated into a professional training program. Teacher education programs are essentially contracting out the apprenticeship component to these independent artisans. The structural fragmentation between the worlds of university and PK-12 schools that create this environment where programs need to contract out the master teacher role is rooted in this historical divide between universities and PK-12 schools (Clifford & Guthrie, 1988; Herbst, 1989; Labaree, 2004). However, the cooperating teachers were not able to apprentice pre-service teachers into the practice that the program envisioned and promoted. For the sake of comparison, imagine that I wanted to become a woodworker. I might go to a master woodworkers association and ask them if I could train to become to woodworker. They agree, but instead of they assigning me to apprentice with a master craftsmen, I

am sent to work with a skilled carpenter. The carpenter is kind of like a woodworker. They engage in more basic forms of a similar kind of work, but it was not the training I had signed up for. This is obviously a simplification, and the relationship between university-based teacher educators and cooperating teachers is even more complex, as many teacher educators are committed to advocating for and supporting schoolteachers. This is in part because they used to be schoolteachers and in part because the broader neoliberal reform climate has taken aim at schoolteachers as the root of most of education's problems (Kumashiro, 2012; Ravitch, 2010; Rhee, 2012). So teacher educators are simultaneously interested in supporting schoolteachers amidst a broader climate that has been attacking them **and** promoting sweeping changes in instruction and school organization.

The historical master-apprentice model of learning alongside a master practitioner by replicating their practices was reciprocally maintained in both of these teacher education programs by this complex combination of factors: student teaching practicum, PK-12 demands, compressed time, marginalization of coursework, CCTC requirements, the structural positioning of teacher educators, and the need to please cooperating teachers. This made it particularly difficult for programs to meet their goals of preparing transformational educators instead of schoolteachers who would conform to external school demands.

One of the distinctive features of teacher education programs is that they combine a formal and informal model of learning throughout the entire program. Drawing from Kvale (1997), Lave (2011) critiqued the dichotomy between formal



(school-based) and informal (apprenticeship) learning. Instead she argued that the divide, developed by psychologists and anthropologists conducting cross-cultural research, is mutually constituted through differential relations of power that categorize formal learning as superior to informal learning. Teacher education attempts to do both. There is formal education that happens in an accredited institution chiefly through traditional structures, like college classes. The practicum more closely matches informal education, through observing and practicing the act of teaching. Lave (2011) describes the differences between the two this way:

Differences between informal and formal education included teaching by demonstration versus explicit, abstract explanation of principles, and the learning of bounded bodies of beliefs and values versus acquiring a general understanding of knowledge and symbol systems. (p. 20)

In order to break down the dichotomy between formal and informal education, Lave (2011) argues that all learning is apprenticeship, and throughout life, "we are all apprentices, engaged in learning to do what we are already doing" (p. 156). When applied to teachers, this fits nicely. Literature on teacher learning has long argued that teacher education does not end with the conclusion of pre-service preparation, but that teachers continue to learn once they enter the classroom and throughout their careers (Darling-Hammond, 2006; Feiman-Nemser, 2012; Grossman, 2005). It is even called a teaching *practice*. However, this combination of formal and informal education settings breaks down because the "beliefs and values" between the two worlds are not aligned. Pre-service teachers are learning, being socialized, and, thus, becoming schoolteachers during their student teaching practicum. And social justice oriented teacher education programs, like Coastal and Midlands, get caught in a bind.

Their social justice commitments demand (and empirical research indicates) that pre-service teachers need time working in classrooms that serve culturally and linguistically non-dominant students. They also need practice constructing and implementing an asset-based pedagogy, ideally in collaboration with the students. This supports their development of asset-based dispositions and is required to help them develop effective practices to work with historically marginalized communities. These programs also understood that teachers need authentic, *in situ* practice outside of formal education settings. However, the routines in schools are organized around a competing set of cultural practices - not merely contextually-specific instead of abstract, but actually guided by different understandings of teacher capacity, processes of learning, and purposes of schooling. The disconnect between “beliefs and values” across the two worlds maintain the theory/practice divide as a dichotomy and render the formal and informal learning processes used in teacher education incompatible.

This chapter posits that both programs’ failure to adequately address the complicated nature of educational apprenticeships made it incredibly difficult to meet their goals of training new teachers to become change agents in the schools they joined. This was in part, because, neither program directly addressed the reality that the kinds of teachers they want to train did not match the kinds of teachers they placed their novices with. And since the faults within this apprenticing model were not directly addressed with all of the program participants (including teacher educators and pre-service teachers), the default assumptions that undergird the

historical master-apprentice model have a significant influence over the practice and experience of teacher education.

## **Chapter 5: Learning to Teach as Performance**

One of the effects revealed in the data of the prominence of the historical master-apprentice model in teacher education was that the visible aspects of teaching were prioritized during the student teaching practicum. This encouraged pre-service teachers to attend to the visible aspects of their practice teaching at the expense of the less visible aspects. Pre-service teachers experienced learning to teach as a performance of observable skills that they were then critiqued or praised for, which reinforced the visible dimension of teaching as primary. In this way, the institution of apprenticeship emphasized the performance aspects of teaching as the primary tool for assessing pre-service teacher capacity.

Organizational psychologists study individual performance using two different frameworks (Sonnentag & Frese, 2002). Some investigations of performance study the actions or behavioral features of performance, examining the things that individuals do in a work environment. Applied to teachers, this could include managing behavior, planning lessons, or leading a guided reading discussion. The second framework examines the outcome of an individual's performance as a way of measuring the quality of one's behavior. An outcome-oriented measure of teacher performance could include student evaluations, such as in college courses, or examining the academic performance of their students, through methods like value-added measurement. These two facets of performance are related, presumably the action leads to particular outcomes, but they are not synonymous.

For example, imagine a teacher who delivers a perfect reading lesson (behavioral aspect of performance), but one or two of his pupils nevertheless

do not improve their reading skills because of their intellectual deficits (outcome aspect of performance). (Sonnetang & Frese, 2002, p. 5)<sup>32</sup>

Both facets of performance are prominent parts of teacher education reform. The Competency Based Teacher Education (CBTE) movement of the 1970s focused on the action conceptualization of performance (as did process-product conceptualizations of teacher knowledge) (Cochran-Smith & Fries, 2005b). The accountability demands of the 2000s (and today) emphasize the outcome aspect of performance - eschewing how things are taught for what they produce (but as research has demonstrated the outcomes often retroactively determine actions - accountability demands led to the use of narrow, scripted curricula, (Achinstein & Ogawa, 2006; Cuban, 2007)). Larry Cuban (2012) makes a similar distinction between good teaching (behavior aspect of performance) and good learning (outcome aspect of performance). He argues that the two are not transposable. Good teaching does not necessarily lead to good learning, because the relationship between the two is complex and non-linear.

If these two facets of performance are applied to a traditional

---

<sup>32</sup> Sonnetang & Frese are organizational psychologists who used this example to illustrate a point. They are not educational researchers and do not study classroom teaching and learning. They are primarily interested in work performance. I say this only to point out some of the commonly held assumptions about both of those things can be seen in their example, which is a carrier of cultural-cognitive institutions in education. One of the primary ways that institutions are maintained is through taken for granted assumptions, and in public education, many of these assumptions are held by people outside of the field. This can serve to maintain the conceptual fragmentation of teacher preparation, since PK-12 schools are guided by policies often made by policy makers who are not educators, and therefore operate on similar assumptions. One is that there can be a “perfect reading lesson” based solely on the behavior of the teacher, the other is characterizing students as having “intellectual deficits”, framing them as personally deficient in some way

craft apprenticeship like tailors, the relationship between the two forms of performance and apprenticing to a master is rather straightforward. Apprentice tailors learn to perform particular tasks related to making and altering clothing. In Jean Lave's (2011) study of Vai and Gola tailors, she described how they are first taught to sew hems and are later taught to cut fabric, because a mistake in sewing a hem is far less significant than one cutting fabric. The actions that the apprentice tailors perform are visible to their master tailors, and the outcome is immediately apparent - a straight hem, a poorly cut pattern. However, the relationship between the two facets of performance becomes more complicated when they are applied to an apprenticeship in teacher education because neither the actions nor the outcomes are agreed upon by all of the members engaged in teaching. Theories of learning, appropriate pedagogies, how to measure learning, and even the purposes of schooling are debated. When neither the actions nor the outcomes are determined a priori, it is very difficult to apprentice into the practice. Additionally, these three things are deeply interconnected; understanding schooling as a place to prepare workers for the current economy has very different implications than understanding schools as liberatory institutions that can create a more socially just society by examining how power operates in society. When performance is understood as separate from these debates around the purpose of schooling and theories of learning, implicit norms and understandings about learning as transmission, about school as a place for socialization, and about capacity as measurable using decontextualized, calculable means are accepted without discussion and debate. This is how institutions are

maintained, by resting (without deliberation) on commonly held assumptions about teaching and schooling. This is nested within two interrelated histories of modern schooling. The first has framed teaching as easy entry, low-status, women's work (Tyack, 1974). And the second is the factory model of schooling that was designed with Frederick Taylor's concept of "remov[ing] the brainwork from the shop floor" (Verkerk, 2004, p. 76). These taken for granted assumptions that privilege performance reinforce a technical-instrumentalist model of teaching.

Debates about how to assess the performance of teachers has been hotly contested over the last decade as some educational reformers, supported in many cases by policy makers, have pushed for outcome based tools. This intensified interest in teacher performance can be understood as an additional manifestation of a neoliberal paradigm applying market-based policies to public goods like education (Apple, 2004; Ball, 2015; Sleeter, 2013). *No Child Left Behind's* national accountability requirements used student learning outcomes based on standardized tests to measure the performance of schools (and by proxy teachers), and *Race to the Top* encouraged states to embrace individual teacher outcomes measurements, like value-added measures of assessment. Concerns about how to assess good teaching are also manifesting in teacher education policy (Cochran-Smith & Fries, 2005b). As mentioned in the Introduction, while they have now been repealed, last year Congress passed new guidelines as part of the Higher Education Act that would have required states to track the success of teacher education performance-based on the learning outcomes of their graduates PK-12 students. Some charter graduate schools of

education require their teacher candidates to demonstrate student learning in order to receive a credential (Sawchuck, 2013). And the edTPA (an updated and scaled version of PACT) hopes to become a national teacher licensing assessment of pre-service teacher capacity. While edTPA and PACT measure the behavioral or action aspects of teacher performance, value-added assessments measure performance using an outcome framework.

Another tension inherent in evaluating teacher performance is that, as Cuban (2012) mentioned above, the relationship between the two facets of performance (actions and outcomes) is not linear. Teachers can engage in similar actions and have very different results. Assuming that particular teacher actions will lead to particular student outcomes relies on an understanding of teaching and learning as a complicated linear construction, which has been an implicit assumption of much 20th century research in teaching and learning. Instead, some scholars investigating teaching and teacher education argue that education should be conceptualized as a complex rather than complicated system in order to better account for the ways that multiple complex systems are interacting in education. These complex systems include the teacher education program, the pre-service teacher, the cooperating teacher, the PK-12 students, and the placement school (Cochran-Smith, Ell, Ludlow, Grudnoff, & Aiken, 2014; Cuban, 2012).



## **Privileging Overt Behavior**

Performance, or the privileging of overt behavior, has been conceptualized in different ways and in a variety of disciplines, including psychology, linguistics, feminist theory, and postmodern philosophy. Early psychologists were interested in developing a science of the mind based on external, observable outcomes. These behaviorists, like B.F. Skinner, Edward Thorndike, and John Watson, used the tools of natural scientists (observation, experimentation, and variable manipulation) to examine learning. Behaviorism was predicated on the notion that knowledge is a relationship between a stimulus and response. The accumulation of associations one makes between stimuli and correct responses is what one can be said to know (Greeno, Collins, & Resnick, 1996). Therefore, the role of the teacher is to reinforce the correct associations between stimulus and response. In this capacity, teachers should give and withhold certain stimuli in order to elicit certain responses. By only concerning themselves with learning exhibited through external behavior (or responses to stimuli), this conception of learning relies on that learning being demonstrated through visible performances. Behaviorism's lack of a theory of mind and mental processes caused it to fall out of favor in psychological study, but it has had lasting impact on PK-12 school practices and is part of a broader ecology around learning that utilizes external indicators as evidence of internal capacity.

Performance has also been a feature of sociolinguistic study. Speech act theory understands utterances as performative (Schiffrin, 1994). Utterances have the capacity to "do" something, not simply describe or represent action. For

example, saying “I do” at a wedding is imbued with the power to legally bind two people in marriage. In this way utterances can have a performative force within either institutions or situations that provide what J. L. Austin called “felicitous” circumstances.

Sociologist Erving Goffman (1959) used the metaphor of a stage with actors to conceptualize how we use language to present a particular version of ourselves through a process he called impression management. "In their capacity as performers, individuals will be concerned with maintaining the impression that they are living up to the many standards by which their products are judged (p. 22)." Much like the circumstances that imbue performative utterances with the capacity to have a material impact on the world, Goffman's performer responds to the situation around her, constructing an externally recognizable and credible self. "The self does not derive from its possessor, but from the whole scene of his action, being generated by that attribute of local events which renders them interpretable by witnesses (p. 23)."

Like Goffman, Judith Butler's (2004) work examines the role that performance plays in the construction of self. Her ideas of gender as a performance arose from an examination of drag queens as gender performers and revealed how subverting cultural norms, or accepted truths can reveal their social construction and the role they play in maintaining traditional hierarchies of power. She argued that "through the practice of gender performativity, we not only see how the norms that govern reality are cited but grasp one of the mechanisms by which reality is reproduced and altered in the course of that reproduction." (p. 218)

Postmodernist and poststructural theorists have also examined the ways that institutions privilege overt behavior. In *The Postmodern Condition*, Lyotard (1984) argued that people have begun to reject meta-narratives that offer an explanation of reality, and they now find truth within their social groups. Instead of a broad, culturally shared truth, diverse truths are maintained within social groups by engaging in language-games. Individuals have to perform the language-game appropriately in their localized context in order to maintain the social bond.

*A self* does not amount to much, but no self is an island; each exists in a fabric of relations that is now more complex and mobile than ever. Young or old, man or woman, rich or poor, a person is always located at "nodal points" of specific communication circuits, however tiny these may be. (p. 15)

By privileging the linguistic performances one engages in to construct a self, Lyotard's concept of performance is similar to Goffman's presentation of self through impression management and Butler's concept of gender performance. Lyotard extends his concept of performativity to the production of research and knowledge within universities that exist in a capitalist economy. He argues that modern institutions of higher learning are no longer interested in producing knowledge for "emancipation" but are rather evaluated against a criterion of performativity - how many skilled workers they produce for the economy, how many papers are published, and how many technological advancements are made through research (particularly the kind that can be capitalized on). Similarly, Foucault (1977) illustrates how institutions transform individuals into cases to be evaluated. He uses examples from schools, hospitals, and prisons to illustrate how surveillance culture is internalized by individuals through a process of subjectification, who then objectify themselves so

they can be analyzed by external evaluators. In this way the performance becomes a version of truth, and since those in power have the authority to deem what behavior is correct (and what counts as knowledge) this episteme of performativity becomes institutionalized - a common sense, taken for granted assumption of how to operate in the world. Stephen Ball (2000, 2003, 2012, 2015) draws from both Lyotard (1984) and Foucault (1977) to examine the ways that a culture of performativity has shaped PK-12 schools (2015), teaching (2012), and higher education (2000). He has argued that neoliberalism and the application of market principles to education have reshaped the work of PK-12 teachers and higher education faculty by determining their value based on calculable performance through things like PK-12 student scores on standardized achievement tests or the amount extramural grant funding received.

My conception of performativity is derived from this interrelated lineage of investigating performance. While this analysis is not focused on micro-linguistic properties of performative utterances, it does understand performativity as a set of discursive forces that shape the institutions in teacher education and the interactions that occur within them. For example, some contemporary approaches to teacher education, like the 44 techniques Doug Lemov (2010) outlines in his book *Teach Like a Champion*, have similarities to the process-product research of the 1970s, which was rooted in behaviorism. His text has become popular tool in some education reform circles, some charter school networks, and several charter graduate schools of education (Gatti, 2014; Sawchuck, 2013). The episteme of performance encourages a technical-instrumentalist approach to teaching that frames teaching as set of

decontextualized skills that teachers need to master, which are linked to observable performances and/or calculable student outcomes. It may also make it more difficult for pre-service teachers to develop a cohesive philosophy about teaching, learning, and the purpose of schooling against which to evaluate the external demands placed on them in PK-12 schools. This emphasis on performance is communicated to teachers through a variety of institutional carriers that operate at multiple ecological levels.

The historical master-apprentice model combined with the climate of accountability create an episteme that privileges visible performance. A consequence of this (not necessarily an intentional one) is that pre-service teachers are transformed (and transform themselves) into observable cases; they develop a consciousness, an identity, as a case that they present to others to be evaluated. This happens through a variety of institutional carries that operate at multiple ecological levels, like solo days, the PACT, and observation debrief sessions. The carriers communicate to pre-service teachers that the visible and measurable aspects of teaching are most important. This reifies the episteme (or institutionalizes it), as the beliefs and values about observable performance aspects are objectified and become taken for granted, common-sense assumptions about teacher knowledge. This also serves to maintain the low status of teaching. Since observable actions are privileged, teachers fail to develop the skills to articulate their complex intellectual work. The power of surveillance that transforms teachers into cases foregrounds behaviors and backgrounds thinking as teachers learn to attend to seeing and being seen by inducing "a state of conscious and permanent

visibility that assures the automatic functioning of power” (Foucault, 1977, p. 201). This chapter will describe how teachers in this program experience these performative technologies, how these carriers are related to one another, and how they shape the learning-to-teach experiences.

### **Performative Technologies in Teacher Education**

Multiple methods for evaluating performance in teacher education operated at various ecological levels through technologies of power that emphasize performance, or what I will call performative technologies (Ball, 2012, 2015; Jeffrey & Troman, 2011; Rabinow, 1984). Performative technologies are a technology of power. The concept of technologies of power comes from Foucault’s (1991) theory of governmentality, a poststructural understanding of how normative forces assert themselves into our everyday lives and therefore our self understandings (Olssen, 2013), they can also be understood as institutional carriers, implicitly communicating the primacy of performance within a neoliberal paradigm guiding contemporary educational reform. Performative technologies not only privilege visible aspects of teaching, make teaching calculable and comparable, but can also be subjectivized (or internalized) by pre-service teachers, integrating this primacy of performance into teachers’ professional identities (Ball, 2015; Jeffrey & Troman, 2011; Margolis, 2006; Moore & Clarke, 2016). While institutional theory and Foucault’s notions of episteme and governmentality operate within different epistemologies (structural-functionalist positivism vs. poststructuralism), they actually offer similar conceptions

for the stability of social structures. Institutional carriers and technologies of power/technologies of self both maintain social structure by communicating “truth” to people in a variety of overt and covert ways, and, therefore, construct reality for participants. This process reifies the institution, making it even more stable. The postmodern and poststructural perspectives are helpful because they intentionally centralize an analysis of how power operates in society, drawing attention to not only how the structures are maintained, but also to who those systems advantage and marginalize.

There were multiple program components that operated as performative technologies. These technologies not only evaluated pre-service teacher capacity, but also served to reinforce the idea that teaching was primarily an act of performance. This communicated a particular vision of the profession to teachers that emphasized the visible aspects of teaching as primary and the non-visible aspects as secondary.

### **Macro Level Performative Technologies: Discourse and Policies**

Performative technologies operated at multiple ecological levels. At the macro level are state policies (like PACT), and more diffuse discourses about performance, accountability, and teacher quality. Accountability discourses emphasized the outcome aspects of performance, while both state policies discussed below (TPEs and PACT/CAT assignments) emphasized the behavioral aspects of performance.

**Accountability discourses.** While the pre-service teachers in these programs were not held accountable for PK-12 student performance, the climate of

accountability has now permeated the world of PK-12 schooling and significantly shaped the work of pre-service teachers. During the year of data collection schools in California had transitioned to the Common Core State Standards and were piloting the newly developed Smarter Balanced assessments. Although, there were no direct accountability demands for that particular testing cycle, the accountability pressures that began to constrain teachers' work in the early 2000's had become institutionalized. These pressures had developed into a taken-for-granted assumption about how schools and teachers operate. Ami, a Coastal Academy resident put it this way:

I think [the biggest issue in education is] the focus on standardized testing. I think it's both stressful, not just to marginalized students, like students of color and students in poverty, but also to the teachers of the students. There's such a big focus on, "We need to be focusing on this because this will be on the test." Especially in the first years of teaching. That drains out a lot of teachers. Then it just goes in a big ole' cycle of, like, it drains teachers, so then teachers leave in their first few years. Then the students don't have, like, a consistent person in their lives. Then, we're basing everything, all their knowledge or anything they know, on these bubbled in sheets or a computer test.

Ami's perspective demonstrates how performance (by students and teachers) has come to dominate the educational discourse. She recognizes how an emphasis on calculable accountability limits our understandings of student capacity and puts a great deal of pressure on teachers to demonstrate their capacity through student performance. This climate of accountability shaped the experiences of pre-service teachers during their teacher education experience. The ethos generated by this climate encouraged pre-service teachers to understand teaching success as measured by external assessments. And as Ami's quote indicates, this occurs whether or not



that individual teacher holds much personal stock in the assessment, since his or her value is culturally determined by those assessments. An ethos of accountability also had material impacts on pre-service teachers, because it shaped the kinds of practices that they were able to engage in during their student teaching, as cooperating teachers adhered to mandated curriculum and made instructional choices guided by accountability demands. One cooperating teacher said, “When there's testing it's a very tight scope and sequence, everything has to move fast.” While the details of how this manifested during their student teaching practicums will be explored more fully below (in Meso Level performative technologies), the discourse of accountability operated as a diffuse set of ideas and policies concerning outcome aspects of teacher performance and quality, influenced the environment of PK-12 schools and the learning to teach opportunities available to pre-service teachers.

**Teacher performance expectations.** Another macro level performative technology that shaped pre-service teacher learning opportunities was the Teaching Performance Expectations (TPEs). The TPEs are the standards that guide pre-service preparation programs in California, and they operated as a performative technology by outlining the actions and behaviors expected of pre-service teachers. As indicated in the name, these standards outline performance guidelines (how teachers should act) and demonstrate the priority of what a teacher does (mostly in front of the classroom) as more important than any other aspect of teaching. All of the TPEs were worded in an active voice in order to frame them as actionable behaviors: things teachers can do. For example, TPE A3 was "Interrelates ideas and information within and across

subject matter areas." Even TPEs that were focused on knowledge (instead of skill) were still phrased to emphasize performance on the part of the pre-service teacher as in TPE A1: "Demonstrates knowledge and command of subject matter content."

Mastering these TPEs was a California Commission on Teacher Credentialing (CCTC) requirement, and in both programs this was operationalized in quarterly meetings between the pre-service teacher, teacher supervisor, and cooperating teacher. Prior to these sessions all three participants graded the teacher candidate's performance on each of the TPEs using a four-point scale. These quarterly evaluations were submitted to the program and kept on file for each pre-service teacher. Additionally, course syllabi outlined which TPE's they addressed and when. For example, the upper elementary reading methods course at Coastal Academy included the TPE addressed after each of the course objectives:

Theoretical foundations and current research in language and literacy development and application to instructional decision-making; this includes principles of strategic instructional design and delivery such as explanation, demonstration/modeling, and structured, guided and independent practice to ensure that all students meet or exceed the standards (CTC-7A, TPE-1A).

Teacher education that emphasizes skills and techniques that teachers should master, particularly as demonstrated in the performance aspects of teaching, orients new teachers toward a technician vision of teaching. This was not intentional on the part of the teacher education programs, but rather may have been encouraged by a combination of forces that push towards a technical-rational orientation to teaching (the policy climate, the credentialing requirements, and the historical master-apprentice model of apprenticeship). Since neither program directly addressed these

forces the in their design and partnerships, these commonly held assumptions about teaching asserted themselves into program experiences and had a significant impact on the learning-to-teach process of the teacher candidates.

**PACT/CAT.** As mentioned previously the PACT and CAT assessments were performance assessments required by the state credentialing commission. Much like the TPEs these were behavioral performance assessments. Once completed, pre-service teachers sent the four parts of their PACT, including a video of classroom instruction to an external assessor who scored the assessment using a series of rubrics. Pre-service teachers had to receive at least a three out of four on each task in order to pass the assessment and be eligible for a preliminary teaching credential. In this way behavioral assessments of performance are quantified so their performance value can be more easily compared (Miller & Powell, 2013).

The PACT required teacher candidates to submit a long form assessment describing in detail a set of lessons they planned, instructed, assessed, and then reflected on. Although it is argued to be a holistic assessment of teaching experience (Sato, 2014), the PACT contributed to the notion of teaching as performance. It also required that pre-service teachers record themselves and submit the recording along with the written document. The assessment did not ask teachers to describe a thoughtful philosophy of teaching, although they did need some citations to the academic literature, and they had to provide a rationale for most of their instructional decisions. The video portion of the assessment had to link with the lesson plans submitted, had to be continuous, could only be 15 minutes long, and had to feature

the teacher during the entire video. All of these requirements privileged the visual aspects of teaching. The version of performance implicit in the PACT is not merely that teachers can (and should) be visually observed and assessed, but also that quality teaching can be observed in a largely decontextualized document representing their performance absent firsthand experience in the localized context where the teaching (and presumably the learning) occur. Student teachers had to perform the act of teaching for others (who did not know them or their students) to dissect and assess. And for many of the teacher candidates, this was even more of a performance than their other student teaching activities. When I asked her if she felt the PACT was a useful activity, Ami, a Coastal Academy resident, responded this way,

No. No, no, no, no. I couldn't reflect on it, and I feel like that's maybe why I won't pass. A lot of the questions were just like, "Cite theoretical research that guided your teaching," and blah blah blah. A lot of the time was just spent on me going back to articles from my first semester of classes and spending time rereading them and BSing how I was thinking about Piaget or something when I was teaching. That actually wasn't happening. I was just thinking about my students, but I had to reflect on how I was actually thinking about Vygotsky and ZPD. I feel like I probably wrote the names Vygotsky, Piaget very many times and the Zone of Proximal Development like 500 times on those papers. I just knew it was so disconnected. I just had to write a minimum of four to seven pages for my reflections but I ran out of stuff to talk about, so a lot of time was spent just trying to figure out how to add fluff to it.

Ami's experience not only illustrates how the PACT operated as a performative technology, but also highlights some of the other challenges around bridging the divide between theory and practice. Ami entered teaching after working for several years as a City Year volunteer on the East Coast. As a Latina woman from a low-income background, Ami was interested in working with historically marginalized young people. Ami was overwhelmed by the amount of work she needed to complete

throughout the year as both a resident and a graduate student. She was quick to locate similarities between the trainings she had received as a City Year volunteer and the coursework she took at the partner university.

City Year had us go for a training in Boston the year before I started my second year. They had this whole workshop. Basically they were talking about the zone of comfort, learning, and then chaos...We thought that this was an idea that was brand new. Then I go and start my teaching program, I was like, "What the hell? This is all just the ZPD".

However, she didn't find her coursework, especially her coursework in learning theory particularly useful. Instead, she relied on her previous training as a City Year volunteer. This was in part because the PK-12 teachers she worked with did not model the practices that were demanded of her in the PACT and in her coursework assignments, like explicating the ways that her instructional choices were guided by learning theory. The cultural tools used to support teacher learning were not linked across the two worlds: PK-12 school demands did not align with program requirements (e.g. planning assignments). While Ami's perspective on PACT was the most negative of all the focal participants, it also more acutely reveals how teachers transform themselves into cases to be externally evaluated.

Ami's discussion of the PACT illustrates not only that it was not an authentic representation of the kind of work she normally engages in as a teacher; it is also a demonstration of how the theory-practice divide is maintained (rather than transcended) by performative technologies like PACT. Ami came to see the university as the place of theory and the school as the place of practice, because (for

reasons described in the last chapter) there were no bridges that guided her to link Piaget or Vygotsky to her instructional planning.

In the other [classes] I haven't heard anything that I haven't heard before in my volunteer trainings or that I haven't figured out on my own through experience with students. I feel like a lot of these classes are just a hoop I have to go through. Especially the theory based classes.

Ami engaged in an act of performance to complete the PACT, at least part of which was performing the teacher as intellectual, who draws from established learning theory and empirical research to guide her instruction. This demonstrates how PACT attempts to bridge the formal and informal education divide raised in Chapter 4, by requiring a performance from both worlds. However, instead of integrating theory and practice (or formal and informal experiences), Ami feigns the theoretical side, to complete what she sees as an institutional hoop instead of a valuable representation of her practice.

At Midlands, the teacher supervisors coached pre-service teachers through the completion of PACT, by having them submit drafts of each section and offering feedback on them in order to ensure that the students were successful. As described by one of the teacher supervisors, "Our student teachers are on task two of the PACT. They have something due every three weeks that I very carefully review and give them leading questions on so that they can hone that." The supervisors at Midlands felt like it was their personal responsibility to support the pre-service teachers closely through the process of completing the PACT and would have felt personally responsible if they did not pass. As the program director at Midlands put it,

That's what you do, get kids through PACT. I just think if we could lower the stakes there and make sure that we're providing the kinds of experiences that we believe in as a school... it constrains what you can do.

This quote demonstrates a tension between what the program director understands as good teacher education and how the episteme of performance structures contemporary teacher education. As a state policy requirement, the PACT could have a huge influence on the structure of the teacher education programs, this was dependent upon how well integrated it was into the other coursework. At Midlands, the CATs were integrated into courses as assignments and supervisors closely supported completion of the PACT throughout the year. At Coastal Academy, the PACT was still required, but pre-service teachers were broadly expected to complete it on their own; it was not explicitly integrated into supervision and coursework. This detailed attention that teacher educators at Midlands gave to the PACT made it a key feature of the pre-service teachers' learning experiences, and signaled to them that the particular performance it was asking them to complete was an important one. This had a considerable impact on the content and structure of teacher education at Midlands. While two of the teacher supervisors accepted it as a requirement, one of the teacher supervisors described how it links to the climate of accountability.

They're doing to teacher education what they did to schools. It's *NCLB*. They have to do the PACT. The PACT is this onerous thing that needs to be done for somebody else... I keep circling back to this [in meetings with other teacher educators]. I don't know that people are listening, want to hear it, or can deal with it. I keep asking, "What does this PACT do for the people who are actually taking it?" That bugs the hell out of me because it's at the point of which it's a chore to validate [our program].

And since PACT was embedded within the student teaching practicum, many pre-service teachers had limited control over the instructional decisions that they were supposed to make as they completed the PACT. Although the PACT assessment required detailed planning, recording an instructional component, assessing students' learning, and reflecting on the entire cycle, because of the historical master-apprentice model teacher candidates had to fit this assignment into their cooperating teacher's established plans. This reduced the decision-making requirements placed on pre-service teachers. And while pre-service teachers often appreciated the support from their cooperating teachers, this absolved them of some of the complex instructional decisions that teachers need to make when designing instruction like how to articulate objectives, sequence lessons, select materials, design assessments, and integrate participation structures. For example, when Scott discussed scheduling the PACT assessment lessons with his cooperating teacher, his cooperating teacher handed him a packet of his own lessons and directed Scott to use them for his PACT.

He's like, "Hey, here's your PACT, but I've got to move on, so how about you do part of it and I'll just do the rest because I've got to move on." It's like whoa. It makes me think that a lot of my classmates are given a lot of, they're completely coming up with they're own thing. They're given a lot of leeway. Their teacher's like, "They're given all this space and creativity room to do it." ... My CT is, I'm barely able to just do what he's already begun to do. It seems like there's not even enough time or room for me to do that, which kind of takes the pressure off of me. I just did my PACT, planned it essentially how he planned it, because he's so under the pressure to fit it in the schedule.

While Scott closely reviewed and slightly adjusted the plans, he was required to use those lessons so his cooperating teacher could stay on track with his scope and sequence of the year. As his cooperating teacher put it, "It's a very tight scope and



sequence, everything has to move fast, and when you have a student teacher teach and everything's slower it slows everything down, things can get muddled and confused.” Scott’s experience with the PACT demonstrates three interrelated things. Firstly, Scott’s cooperating teacher had internalized the accountability demands, which have become an objectified institution – a taken for granted assumption about the purpose of schooling and a guide for teacher practice. This shaped (and limited) Scott’s opportunities to practice during his student teaching.<sup>33</sup> It also conflicted with one of the major goals of the PACT, which was to serve as a final assessment of their readiness to be educators, as a professional gatekeeper.

The PACT not only operates as a carrier of a regulative institution, but also as a microcosm of several of the major challenges in teacher education. The first is that it attempts to bridge the divide between formal and informal education, but fails to account for the ways that beliefs and values differ between these two worlds. The second is that it seeks to serve as a professional gatekeeper, much like licensing exams in other high-status professions, but also hopes to contextualize the performance within authentic classroom practice. Within its attempt to serve both of these purposes, PACT both reinforces a schoolteacher identity because of its integration into the apprenticeship structure and renders the work of pre-service teachers calculable and comparable.

The Macro level performative technologies assess both facets of performance. While the outcome aspect of performance (through accountability demands linked to

---

<sup>33</sup> Scott’s experience will be detailed more fully in Chapter 6.

state standardized exams) weighed heavily on the minds and actions of cooperating teachers, there was no formal programmatic emphasis on student learning outcomes for the pre-service teachers in either of these programs. And although the PACT assessment required the pre-service teachers to reflect on student assessment, it did not require that PK-12 students demonstrate mastery, only that the pre-service teachers thoughtfully reflect on those assessments and how it would inform their teaching moving forward. This relationship between the common forms of performance assessment (actions vs. outcomes) becomes even more complicated when reforms like edTPA (and PACT) are situated within the broader performative context. edTPA was developed, in part, as a tool to resist accountability demands that originated outside of teaching and teacher education, like value-added measures, because of concerns with the accuracy of the statistical modeling and the empirical evidence that similar measures have narrowed the scope of teachers' instruction to simply what is tested (Cochran-Smith et al., 2016; Darling-Hammond & Hyler, 2013; Floden, 2012). From this lens, PACT/edTPA can be seen as the lesser of two evils. However, both forms of performative technology can be understood within a larger framework of neoliberal accountability. The macro-level factors shaped exo-level policies and meso-level structures in both overt and covert ways. The PACT and TPE's had direct regulatory influences on program structures, and the climate of accountability has created a culture in PK-12 education where schoolteacher's are regularly concerned about test performance. Both have a profound influence on pre-service teachers' learning-to-teach experiences.

### **Meso Level Performative Technologies<sup>34</sup>**

The meso level performative technologies discussed below will seem familiar, because they are also instantiations of the master-apprentice model within teacher education programs described in the last chapter. The analysis here furthers their examination to demonstrate how the apprenticeship structure privileges performance.

**Planning assignments.** Similar to the PACT assessment, planning assignments reinforced the notion that teaching was primarily performance. As described in the last chapter, at Coastal Academy, the university partner required pre-service teachers to complete a curricular unit for each of their methods courses. These units were not expected to be taught in their student teaching classrooms, and none of them were. Ami found that planning instructional units outside of the context of a classroom contradicted the other things she had been taught about designing instruction that is responsive to the backgrounds and needs of the particular students in your classroom. I asked Ami if she found these assignments helpful:

I don't know. I don't know if it's really reflective of what I'll be ... I guess they want to see how good we can plan, but I feel that when I'm teaching for real and what I've seen from my cooperating teacher and other teachers, that you don't plan in that much detail. That doesn't mean that they're not great teachers. They can modify whatever's in the lesson plan at the time. Yeah, they do plan, but they don't stick to that plan a lot of the time. It's because they're good at modifying their lesson to meet the needs of their kids. I feel like that's more important to me than making this very meticulous lesson plan. They want the lesson plan a certain way and you have to include all these different things in your lesson plan...I'm just like, "This is annoying and frustrating." Am I ever going to use this? I don't like doing stuff just for the sake of doing it. I want to do something that I know I'm going to use.

---

<sup>34</sup> Exo level performative technologies were operationalized through the meso and micro level forces

Ami's quote demonstrates her frustration with the process of performing the planning component of teaching when she would never apply that work to her student teaching placement. Her quote illustrates the disconnect between the cultural practices of practicing teachers and the demands of her university coursework. She did not see her cooperating teacher engaging in this kind of meticulous planning and therefore had no sense of whether or not this would support her when she began teaching "for real", or out on her own. She understood these assignments as a decontextualized performance required by formal schooling. However, meticulous lesson plans can serve several other purposes. Since much teacher knowledge is tacit (Loughran, 2006) (which Ami referred to when she says that practicing teachers "don't plan in that much detail"), meticulous lesson plans require a level of detail that experienced teachers simply do not need to explicate. They can also serve as an opportunity for pre-service teachers to explicate their thinking about equity and learning so that it can inform their instructional choices, instead of allowing their instructional choices to be guided by external forces (like accountability demands and adopted curricula). While the planning assignments served as a decontextualized behavioral measure of performance (within the formal education setting of the university), they were inauthentic for several reasons. The first was that Ami and her peers never implemented them, they couldn't because of the tight schedules their cooperating teachers needed to adhere to. The second reason they seemed inauthentic was that they did not match the cultural practices of schoolteachers that Ami was working with. And since Ami experienced her student teaching as a traditional apprenticeship,

where her practices should match those of her cooperating teacher these planning assignments felt like a waste of time. The external demands (scope and sequence, adopted curricula, and the climate of accountability) combined with the implicit assumptions of a traditional apprenticeship, privileged the technical aspects of teachers' work as "real" teaching.

While students at Coastal had multiple curricular units they had to submit, they had very few case study assignments, the kind that would align with Dewey's (1904) vision of laboratory teacher preparation, where teacher candidates closely investigate the learning processes of individual students. Grant pointed out that the only case study they had to complete was one of the most instructive coursework experiences: "One teacher, and that was our bilingual education teacher, she was the one who said, 'Pick a focus student.' Our project was to analyze that child's growth over time. That was probably the best assignment I had." Case study assignments, like the one Grant describes, privilege a particular kind of teacher thinking that is rarely visible when observing teaching-in-action. It requires close study over time of one student and understanding them as a holistic individual, instead of thinking about the class as a whole. This kind of assignment can encourage teachers to closely follow student thinking in order to examine their conceptions and misconceptions and then respond in ways that help the student construct new understandings. As Ami points out above, skilled teachers do this easily. They modify their plans in the moment, responding to student needs almost intuitively, because they have developed a kind of tacit, adaptive expertise (Berliner, 2001). Planning assignments, on the other hand, which were

much more common in both programs, are a much more discrete skill that is easier to assess, particularly through a behavioral performance.

This pattern of emphasizing planning over case study (or doing over thinking) was also true for pre-service teachers at Midlands, although slightly less pronounced. Pre-service teachers at Midlands did not have to develop an instructional unit for each of their methods courses, unlike the Coastal Academy residents. However, in an effort to integrate the coursework with state credentialing requirements, instructors included the Content Area Tasks (CATs) as a course assignments, which like the PACT emphasized performing the particular skills required by a teacher (frequently in decontextualized ways) rather than close investigation of the teaching and learning happening in their placement classrooms. In fact, one instructor even eliminated a case study assignment from her syllabus because students were complaining of overwork and she could not eliminate the CAT assignment, as it was required by the state.

**Solo days.** The practice of solo days reinforced the idea that learning is primarily an act of doing, not of observing. This is aligned with the logic that practice makes perfect, or that more practice would lead to a better performance. During the student teaching practicum itself pre-service teachers in both programs were expected to regularly participate in the classroom, by providing small group or 1:1 support. This additional labor is the appeal of a student teacher to many cooperating teachers (since they are not compensated, and working as a cooperating teacher is additional labor). As one cooperating teacher put it:

I feel it's mutually beneficial, I get a lot out of it too, and they get a lot out of it and it divides the ratio in two, you have half the student teacher ratio, that's one thing, so there's a lot more opportunity to help students. There's a lot more opportunity for me to get help from the student teacher and the variety of activities, whether it's assessing or running copies occasionally or all those things. Then they get a chance to see teaching being modeled and practice their skills, and I just see it as a symbiotic relationship, both people get something out of it. It's always been beneficial, I've had a student teacher, probably for twelve years, almost every semester.

Several cooperating teachers at Midlands even organized their classroom instruction around having a student teacher in their classroom as additional instructional support.

This meant that the pre-service teachers had very little time to observe, take notes, and deeply reflect on either the individual students and their learning processes or on the teacher's practices and how they might (or might not) connect with what they were learning in their coursework. Keeping the pre-service teachers busy taking care of tasks in the classroom communicated to them the work done in front of a classroom is the primary work of teaching, which is chiefly portrayed as maintaining order and getting through a lesson. Planning deeply to think about the selection of materials, the organization of the lesson, instructional supports for particular students, how meaning might be constructed, how this might vary between students, or how to engage the PK-12 students' background and cultural knowledges was less important. This demonstrates the distinction between student teaching as a location for training (in a master-apprenticeship structure) vs. a location for learning (through inquiry, investigation, and re-examination of past experiences) (Feiman-Nemser & Buchmann, 1985).

When asked how things went after a teaching solo, the pre-service teachers frequently commented on whether or not they *got through everything*. “I got through everything I needed to. I got the kids going. I got the kids writing. I got through all my lessons, all my sessions. Everything that I needed to do got done.” While there is value in managing time well, pre-service teachers used this as the primary marker in whether or not their teaching time was successful - and it largely had to do with how well they managed classroom behaviors. This communicated to pre-service teachers that planning was not an integral part of the teaching process and instruction planned by anyone need only be executed by a skillful classroom manager. This is aligned with a technicist orientation to teaching, where teachers need only be skilled technicians, not thoughtful designers. And as mentioned above, it also further relegated assignments where they had to complete detailed planning as inauthentic, because they did not match the practices they engaged when they took over the role of teacher of record. This is another manifestation of the tension between beliefs and values of the formal (university) and informal (practicum) sites of teacher learning.

During solo days when pre-service teachers did have to engage in detailed planning assignments (like the PACT), they were often constrained by what was already happening in their cooperating teacher’s classrooms. This limited their ability to engage in instructional approaches and/or explore content that they were committed to and/or that was promoted by the teacher education program. This was specifically the case for integrated instructional approaches (that integrate instruction across content areas) and for social justice approaches to instruction. This occurred



not only with the PACT, but also with a thematic unit that pre-service teachers at Midlands were required to develop and teach as part of their two week solo. The thematic unit asked the pre-service teachers to connect at least three different content areas and to plan three to four individual lessons that were part of this unit. For example, Yaotl completed her thematic unit on the regions of the United States because it was part of her cooperating teachers' scope and sequence, instead of having the freedom to design her own set of integrated lessons. The thematic unit assignment was developed by the teacher supervisors, and served as one of the primary assignments of the last quarter of instruction in the program. At this time, the only class that pre-service teachers at Midlands were taking was their teaching supervision course. The teacher supervisors introduced this assignment as a way to encourage pre-service teachers to engage in the kind of instruction that they [the teacher supervisors] thought was ideal for elementary instruction. However, pre-service teachers had minimal previous exposure to integrated instruction, because of the organization of methods courses, the requirements of the PACT, and the typical instructional practices in their cooperating teachers' classrooms. Supervisors mentioned that they would have liked this assignment to be a more significant part of the learning experience for pre-service teachers, but had to adapt it to meet the other structural demands in the program, most notably the time committed to completing the PACT.

Not only was this an adjustment made by teacher supervisors, in an effort to help pre-service teachers develop a pedagogical commitment to integrated instruction (and

corresponding skills), but much like their experiences with the PACT, pre-service teachers were frequently required to address specific content that their cooperating teacher already had in their plans, and in some cases were not able to complete their entire integrated unit. Scott described his experience this way:

During my solo, it was almost a little easier to just stay the course we were already on rather than add in all my other stuff that the kids are like, "Wait, what's this whole unit?" It's taught totally different than ... I did about a third of it. It's like, A) you're already alone, so the students already may be thrown by that. Then if you're trying to mix in all this new interdisciplinary, brand new subject matter, and your style and everything. They're thrown off. They weren't, but I could just see that happening. That's why I was like, "Okay, it's not so bad that I didn't [complete it]." I wasn't under all this pressure to get this done.

Scott prioritizes simply getting through his student teaching requirements, sacrificing the thematic unit he planned in order to meet the external demands of his cooperating teachers' classroom. There is an important distinction here as well, signifying the importance of PACT. Scott was not particularly concerned that he could not complete his thematic unit, as it was simply a course assignment designed by the teacher supervisors. Conversely, he had been incredibly concerned about meeting the specific demands of the PACT, because it was a credentialing gatekeeper. Although the thematic unit was more closely aligned with the commitments of Midlands' teacher supervisors, the regulatory force of PACT made it a much more significant component of Scott's teacher education experience. PACT required that pre-service teachers transform themselves into observable cases to be evaluated and, as a regulatory institutional carrier, communicated an authoritative discourse that influenced Scott's developing professional identity (Britzman, 1991).

As a performative technology, the solo days reinforced the message that the primary act of teaching is what happens in front of a classroom, because they were an opportunity to perform the actions/behaviors of a teacher. The constraints placed on them by the placement schools and cooperating teachers made it difficult for pre-service teachers to develop a cohesive, equity-oriented professional identity (which includes not only commitments/dispositions, but also the ability to develop and enact a curriculum aligned with this commitment). When their primary assignments were so directed by what was happening in their cooperating teachers' classrooms, pre-service teachers struggled to develop the skills to challenge the status quo in education, particularly as it is related to mandated curriculum, district scope and sequences, and reinterpretation of state standards.

Taken together planning assignments and solo days demonstrate the distinction between formal and informal education sites. The decontextualized planning assignments were meant to provide teachers with general, transferable skills, but pre-service teachers recognized that they did not match the practices that their cooperating teachers engaged in, and therefore did not match the practices they used during their solo teaching days within the informal environment. As performative technologies, both planning assignments and solo teaching days required pre-service teachers to present a version of professional selves up for evaluation. Understood through Goffman's (1959) concept of the presentation of self in everyday life, performative technologies serve as sites that bring together the external forces that mandate performance and pre-service teacher professional identity development. As

pre-service teachers engage in the performance of being a teacher by trying their best to present themselves as teachers, they internalize, or subjectivize, these external forces that emphasize the performance aspects of teaching by using them as the primary method for evaluating teacher capacity. This reinforces the status quo in education by privileging a technical-rational model of teaching.

### **Micro Level Performative Technologies:**

Micro level performative technologies operated at the interactional level between pre-service teachers and their teacher educators. These interactions served as institutional carriers by engaging in common scripts, communicating teaching routines, and privileging particular practices. These micro-level interactions reflected the macro, exo, and meso-level structures that they operated within. The fragmented structural positioning of teacher educators across the two institutions that was described in the last chapter not only meant that teacher educators were relatively disconnected from each other, but it also manifested in the way that they interacted with pre-service teachers.

**1:1 feedback.** While both cooperating teachers and teacher supervisors had regular one-on-one meetings (which ranged in level of formality) with teacher candidates, their interactional patterns were quite different. These different approaches demonstrate different modes of apprenticeship and illustrate how the use of apprenticeship within teacher education programs varied across institutions as well

as how the supervisors and cooperating teachers have different visions of learning to teach.

Feedback conversations with teacher supervisors typically began with a question, such as “What worked for you? What felt good during the lesson?” Teacher supervisors then allowed pre-service teachers to direct the conversation, focusing on areas that they had concerns about or wanted support on. If the supervisor disagreed with the pre-service teacher’s self-assessment, he/she articulated it. But the conversation was driven by the pre-service teacher’s reflection, not necessarily by the supervisor’s priority. While there was some variance to this pattern (depending on the program, experience-level, or content focus of the lesson), the conversational patterns of supervisor, student-teacher feedback sessions (usually called observation-debrief sessions) encouraged self-reflection and personal inquiry on the part of the student teacher. Conversely, conversations between pre-service teachers and cooperating teachers were characterized by less questioning (on the part of the cooperating teacher) and more critique, description, and explanation. In one-on-one conversations, cooperating teachers typically assumed a traditional master practitioner role, offering their specific perspectives on a lesson to the pre-service teacher, focusing primarily on what could be improved<sup>35</sup>.

There are likely several interrelated reasons for this discrepancy. The first is training; cooperating teachers received very little (to no) professional training for their role. At Coastal Academy, teacher educators attended three professional

---

<sup>35</sup> Brief examples of each are provided in Appendix E.

development sessions over the course of the year. These focused on co-teaching and mentoring. And while the cooperating teachers found them helpful, it was, at best, a limited intervention. At Midlands, the cooperating teachers received no training or compensation for their work as cooperating teachers. The second is what Feiman-Nemser and Buchman (1985) described as the cross-purposes pitfall. One of the major challenges of teacher education is that the PK-12 schools and teacher education programs have different goals, so the primary purposes of teacher supervisors and cooperating teachers are different. Teacher supervisors' primary role is to support pre-service teachers as they develop their practice. Cooperating teachers' primary role is to ensure that the PK-12 students in their classroom learn. Therefore, cooperating teachers' approach to the feedback and support of pre-service teachers is in service of their primary responsibility - the development of elementary school students. The third reason is an orientation to how best to support new teacher learning. Supervisors are trying to support pre-service teachers develop the capacity to reflect on their own instruction, so that they can continue to apply those skills to other lessons and contexts, particularly once they assume classrooms as the teacher of record. Cooperating teachers are trying to help them master the specific skills or content so that they can be successful in their classroom for the rest of the year (likely with an assumption that those skills will transfer to future classrooms). The fourth reason, which further complicates some of the previous reasons, is that there is a relatively tenuous relationship between cooperating teachers and the teacher education program. It is based on the ability to recruit cooperating teachers and in some cases maintain

relationships with principals, which makes it difficult for teacher supervisors or pre-service teachers to critique their practice. The different interactional patterns of teacher supervisors and cooperating teachers highlight how the disconnection between formal and informal sites for teacher learning privileges a technical-rational model of teaching. Cooperating teachers focused on skills, what pre-service teachers needed to do, in that moment, while teacher supervisors emphasized reflection, encouraging pre-service teachers to develop particular habits of mind and force them to explicate some of their instructional decision making.

Despite the difference in interactional patterns described above, there was a similarity across both approaches (dispensing advice or eliciting reflection). They both focused on micro aspects of teaching (a particular lesson) instead of taking a more holistic approach to examining pedagogy and instruction. This excerpt below is from an observation debrief conversation with a teacher supervisor. They were discussing a lesson he had taught on building geometric shapes using smaller geometric shapes. The lesson was intended to develop students' conceptual understanding of determining area using multiplication.

Supervisor: You moved the blocks in ways that you moved 4 at a time. I noticed also that the students had an easier time identifying the triangles. They had an easier time with the triangles than with the squares.

Manu: It was also less and then it was also I think after.

Supervisor: Exactly. The squares started out with how many?

Manu: Nine.

Supervisor: The triangles started out with 4. What would you do to start out with?

Manu: I thought about even with the squares, just starting out with a single square. How many do we have? Then bringing in 3 more and making the 2 by 2. How many do we have?

Supervisor: Starting with building blocks then.

Manu: I thought about doing that too. I followed the book instead.

Supervisor: I'm going to put that down. They don't always though.

Manu: Yeah.

Supervisor: Sometimes you just have to follow your instincts. It's okay. I'm not sure that the people who write those books have actually been in the classroom. You just wonder sometimes. Where have these people been? Use your instinct. Go with one square, add 3 more. Do that a few times.

Manu: My instinct would probably be to choose a few questions and go from there.

During this excerpt the supervisor hones in on detailed specific choices that the pre-service teacher made during the lesson. She does not branch out into how his decisions (about whether or not to use the text book, about how to structure the activity) connect to his understandings of PK-12 student learning or connect with particular content from his math methods course. This level of focus, called targeted assistance (Burns, Jacobs, & Yendol-Hoppey, 2016) helped pre-service teachers, like Manu, develop adaptive expertise, or the ability to make in-the-moment instructional decisions (Darling-Hammond, 2006; McDiarmid & Clevenger-Bright, 2008; Zeichner, 2014), but at the expense of developing a more cohesive philosophy. After noticing this pattern arising, I asked one of the teacher supervisors, whose personal philosophy differed significantly from many of the current practices in the schools where she was supporting teachers, about the emphasis on targeted assistance over



more holistic support, and her response was that she hoped they were getting it in their coursework, but she did not really know what was happening in coursework.

[Our observation debrief conversations] didn't focus. Maybe technically they should have, but I'm not sure. I guess partly, in terms of philosophy, I would be thinking that they would be getting some of that at school. Although it's very different, getting it at school and putting it into practice. There seems to be this big hole in Coastal Academy, and maybe in the world, between theory and practice. Not hole, chasm.

The observation-debrief sessions were the primary form of support and assessment for teaching that pre-service teachers received from the program - and it came through their teacher supervisors. As part of the observation debrief cycle, supervisors came in and observed a lesson, took notes on the lesson, and then met with the teacher candidate afterwards, typically directly following the lesson (unless it was during one of their solo days). During the observation debrief the supervisor let the pre-service teacher guide the conversation about how the lesson went. Typically this discussion focused on the performance aspects of teaching - what worked well or did not work during the lesson, and rarely circled back to the lesson plan that the teacher candidate developed in preparation for the lesson. This focus reinforced the practice of teaching as an act of performance, something done at the front of the classroom (or at least in front of a small group of students, while simultaneously managing the rest of the classroom). When teacher supervisors provided support, it was usually narrowly connected to that particular lesson and what kinds of decisions the pre-service teacher could have made differently in the moment (redirecting behavior, a different kind of material or resource), and did not provide much support

for thinking about their pedagogical approaches broadly or developing a cohesive philosophy.

The different interaction patterns illustrate how different teacher educators approach their role and enact different models of apprenticeship. Not only did the programmatic structures privilege a traditional master-apprenticeship relationship that prioritized the work that pre-service teachers do in their placements. Cooperating teachers occupied this role in their one-on-one work with pre-service teachers. By focusing on individual lessons and targeting assistance to specific behaviors the feedback that pre-service teachers received privileged the “correct” behaviors that teachers should engage in and served as a performative technology.

**Performance in teacher educators’ visions.** The divide between theory and practice is related to the way that teacher educators were dispersed across the two worlds. Interviews with teacher educators serving in all three roles were coded for their perspectives on quality teaching according to multiple dimensions of teacher capacity: pedagogical orientations, knowledge, skills, and dispositions<sup>36</sup>. While there was some difference among types of teacher educators, which will be explored in a moment, the category of teacher capacity mentioned most frequently was skills - things teachers should be able to do. One of the cooperating teachers described the skill of adapting materials.

Sometimes you can use something directly from your previous teacher. But being able to take things and adapt them because that's kind of what we do as

---

<sup>36</sup> In interviews with teacher educators, I asked each of them directly what their vision for quality teaching was. I also coded other comments that addressed this vision. Whether or not it was in response to this particular question.

teachers. Very rarely do we just take something and use it. We usually take it and make it our own. So learn how to make things your own by adaptation.

And while there was representation across all three kinds of teacher educators, most of the responses in the skills category were from cooperating teachers. This emphasis of teacher capacity primarily as a set of skills aligns with a behavioral performance orientation to teaching. In the category of pedagogical orientations, which was a code used to illustrate how teachers should approach their instruction and encompassed aspects of all three other kinds of teacher capacity<sup>37</sup>, there was only one cooperating teacher who described a pedagogical orientation in her discussion of a vision for quality teaching that she tried to impart on pre-service teachers. This is important because it illustrates how cooperating teachers, who have to manage a myriad of external demands (state standards, accountability demands, required curricula, school-site requirements, scheduling demands) may not be utilizing a holistic philosophy that guides their decisions, and may instead be focused on employing a set of strategies or skills that allow them to meet those demands. This is not to say that they don't have an undergirding philosophy, they might. But it's tacit nature makes it difficult to communicate to pre-service teachers and makes it more malleable to external demands. And since the program structures centralize a traditional apprenticeship model where cooperating teachers are meant to be emulated, the cooperating teachers' approach has a significant effect on pre-service teacher development. It is worth noting that several cooperating teachers expressed a desire to

---

<sup>37</sup> While not a traditionally included in the literature on teacher capacity, this code was used to understand the teaching philosophies promoted by the teacher educators.

be more constructivist in their instruction, meaning they communicated an explicit vision that was not aligned with their current practices. They described how they were unable to enact those visions because of the demands placed on them at their school site.

Cooperating Teacher: There's a lot of obstacles at the school to be able to put in practice your theory. For example, you might have this theory of, "Okay, I believe that the kids should have constructivism." Let's say you believe they should construct their knowledge, then there's this time constraint, test constraint, all these constraints that impede you from practicing what you really think the kids would benefit from. The restraints are there, then we adjust to those constraints: Testing, philosophy of the administration, your colleagues might think really differently than you and you have to give. You want things done, so you have to be practical about things, too.

Rebecca: You gave me a hypothetical, this constructivism one. Is that one that actually applies to you or is there a different example of something that's hard to put into practice?

Cooperating Teacher: I would like to do it more, but no, I don't practice it.

This cooperating teacher describes how the demands of her school site, testing requirements, philosophy of the administration, and perspectives of colleagues constrain her pedagogical practice. Although she would like to implement a more constructivist curriculum, which is aligned to Coastal's philosophy, the climate of accountability has influenced her school's culture in such a way that she doesn't feel this is feasible.

Similarly, another cooperating teacher, who entered teaching after a decade of work in community organizing, had intended to build her curriculum around social justice-oriented projects that would get her students engaged in the local community,

but lamented having done very little of that, because of the curricular demands she had to address at her school site.

I felt like when I became a teacher, I thought I was going to do what I did when I was an organizer. I thought that I can do community service learning projects and I thought that it would be cool to have my kids engaged and having voice and help them understand that they can participate in our decision-making structures within our city. I haven't done anything... I feel like this job is just so overwhelming in the everyday things that you have to do, that you don't have time to do it and you really do need support from outside agencies because we don't have the time to research and to understand what's going on. Even when you do, it's really hard to implement. Then I think it's also very challenging to implement any idea of advocacy for your families or your children when you have administrators that are scared to break the rules or scared that your name, or your school, or your students [will be in the media] and their privacy and all these legalities come into place.

The perspectives of these two cooperating teachers demonstrate how some cooperating teachers may be more aligned with the teacher education programs' commitments to constructivism and social justice than their classroom instruction (and their mentoring of pre-service teachers) demonstrate. It also provides an ideal opportunity for building stronger connections between the program and the schools and developing learning opportunities for pre-service teachers that allow them to more clearly see theory/practice connections and encourage greater conceptual unity among the pre-service teachers' learning-to-teach experiences. Finally, by explicating the constraints that cooperating teachers are facing, and using those constraints as a pedagogical object, teacher education programs could support pre-service teachers and cooperating teachers in navigating the external demands while maintaining their social justice and constructivist commitments.

## Conclusion

This chapter describes a variety of performative technologies that are operating at multiple ecological levels. These technologies are both a product of the apprenticeship influence on teacher education and a set of practices that operate to maintain its necessity. And by emphasizing the visible and behavioral aspects of teaching, teacher education, especially the student teaching practicum, more closely resembles traditional craft apprenticeships. In these craft apprenticeships the work was done in front of the novice with narration and explanation of the decisions, reasons, and processes. Conversely, when pre-service teachers observe their cooperating teacher, there is a great deal involved in teaching that is not on the stage. While pre-service teachers are able to observe the instructional aspects of teaching - how their cooperating teacher explains something, how they prompt students, how they respond to students' questions, and how they manage conflicts/disruptions in the classroom, they do not get a sense of how and why their cooperating teacher made all of those decisions. If they planned together regularly (and that varied among the focal participants) they may have gotten a sense of how their cooperating teacher made instructional choices, but they did not get a sense of how they made all of the other in-the-moment decisions, or what Donald Schön (1987) called reflection-in-action. The cooperating teachers cannot describe their decisions as they teach, because they are teaching. Pre-service teachers do not receive a meta-level narration of professional processes and choices during their observation time (and as was discussed earlier they got very little time to simply observe). So they often feel like

they have watched something they do not really understand the steps to and are then asked to go and do it on their own (in a relatively high stakes environment with students, where a variety of complex processes have to be managed simultaneously). If the decisions their cooperating teachers were making were aligned with all of the things they have learned in coursework (in incredibly explicit ways) perhaps this process could work, but because the beliefs, values, and practices are not consistent across the two worlds, it does not. And in the case of more traditional craft apprenticeships (or even many professional ones), novices are often asked to recreate whatever process they just saw exactly. Tailors are asked to stitch seams; new doctors are asked to put in an IV. Pre-service teachers (at least most elementary ones) are rarely asked to teach the content that their cooperating teacher taught. That lesson has finished, and they are onto the next one, with related but different material. They instead need to take the processes and practices they witnessed (but may not fully understand the reasoning behind) and apply it to different content, which may make it more difficult to comprehend why and how particular teacher actions worked and others did not.

Through this process that privileges visible performance, the complex, less visible aspects of teaching are deemed less important. This has several potential consequences. The first is that pre-service teachers may not understand the depths of the decisions made through reflection-in-action and lack necessary preparation to do it on their own. The second is that those visible skills then become more important because of the function of the performative technologies as institutional carriers,

particularly since cooperating teachers may not have the opportunity or ability to make the tacit, in the moment decisions explicit. As performative, skills based aspects of teaching are highlighted (primarily as a way to determine teacher capacity), the technical aspects of teaching are privileged, encouraging pre-service teachers to develop a technical-rational professional identity.

It is possible that mastering the performance aspects of teaching is necessary for classroom teachers. Performance may be a stage in the learning to teach process. Teaching is a complex set of activities, where the teacher makes an enormous number of instructional and relational decisions each hour as they manage the classroom, lead a lesson, work with small groups of students, provide one-on-one feedback, assess student understanding, refer back to their lesson plan, etc. (Darling-Hammond, Wise, & Klein, 1995). It may be that teacher education programs need to reexamine the order in which pre-service teachers are expected to develop these complex and related capacities. Both of the programs in this study emphasized the whole class activities at the end of student teaching and thinking about learning theory and issues of inequity at the beginning. If pre-service teachers need to feel comfortable with the performance aspects of teaching before they can focus on the complicated and thorny questions of how to teach for social justice within historically oppressive institutions or how to enact a constructivist pedagogy within the accountability demands of PK-12 that implicitly favor a transmission model of instruction, then they may need more practice with the performance aspects of teacher education earlier.



Teaching, however, is more than enacting a set of strategies. It is a relational, emotional, and deeply personal endeavor (Hargreaves, 1998; Labaree, 2004).

Performative technologies often operate as an opportunity for evaluation and judgment. Given the emotional and personal features of teaching, it may not be surprising that new teachers are interested in perfecting the performance (or saving face) so that they appear competent (Goffman, 1959). The feedback they receive on these performances influences their self-esteem and professional self worth. Teacher supervisors talked often about how it was their job to instill confidence in the pre-service teachers they worked with. This underscores the importance of explicitly connecting the performance aspects of teaching to the purposes of schooling and theories of learning that undergird these programs' goals. If performance aspects of teaching are practiced in a decontextualized fashion, absent a critical analysis of how power operates in schools to maintain traditional hierarchies, pre-service teachers are likely to (without realization) internalize the traditional norms on which that performance rests.



## Chapter 6: Bricolage and Teacher Identity

As pre-service teachers entered the program and experienced the forces operating within the ecological levels surrounding their teacher education experience, their incoming identities interacted with these forces as their professional identities developed. This chapter will describe that identity development process for two of the focal pre-service teachers, one at each of the case study programs. It explores how both of these pre-service teachers engaged in an act of bricolage, by piecing together their teacher identity - the pedagogical orientation, knowledge, skills, and dispositions they were developing. Despite the common refrain that new teachers think everything they learn in their university program is useless and student teaching is the only useful part of teacher preparation, for the most part, the focal pre-service teachers were looking for ways to make connections between their fragmented experiences. The teachers engaged in an act of bricolage, piecing together the different components of the program in order to develop a “professional self”. The concept of bricolage was introduced by Levi-Strauss (1962) as a way to conceptualize localized theorizing and problem solving. A bricoleur, or a tinkerer, used the tools around him to address the problems he faced. Elisabeth Hatton (1989) described the process this way:

Bricoleurs have a distinctive approach to their bricolage. First, they do not consider a project and then ask what tools, materials, etc. are required for its completion. Rather, they review the tools, materials, etc. they have to hand and consider how they might be used to complete, or approximately complete, the project. The idea is that there is a fixed pool of tools, materials, etc. Understanding the nature of the project does not motivate the bricoleur to acquire new materials. It is the possible uses of materials presently to hand which determines the degree to which the project is completed. (p. 338)

The concept of bricolage has been applied to teacher's work and teacher knowledge, because of the piecemeal and haphazard way that teachers solve problems and acquire knowledge for teaching (Hatton 1988, 1989; Huberman, 1993). As an art form bricolage is a process of mixed media collage making- where the disparate pieces fit together to create something unique, new, and holistic. However, that process takes an enormous amount of time for an artist to do - either to create a vision beforehand and use the materials to construct it (this might be a teacher who has a firm self-concept and can artfully utilize the pieces she is given in the program to enact that vision, but must spend time before coming into a teacher education program to develop this vision), or to inductively let the materials speak to form the creation. The latter process requires a great deal of muddling around, because some constructions will pan out and others will not; it would require time for deep reflection on the how the disparate components are coming together and in order to determine whether or not it is cohesive. Johnson (2012) posits that this process may not be intentional at all, but that the process itself is a generative force working through the bricoleur as he or she makes sense of their materials: "Similarly, it could be argued that it is *bricolage* which thinks, or operates, through the *bricoleur*, rather than the reverse — as we shall see, (s)he is never entirely in command of his or her means of production (p. 360)."

This process of bricolage took different forms for each of the pre-service teachers. It varied based on their own prior personal and professional experiences and relationships they had with their various teacher educators. The two cases below

illustrate how pre-service teachers in contemporary teacher education programs piece together their learning-to-teach opportunities (that are primarily structured through an apprenticeship and emphasize performance) and integrate them with their own goals, ideological commitments, and prior experiences (both personal and professional). These profiles provide holistic examples of the findings described in the last two chapters, and at times draw from some of the previous evidence, situating it to demonstrate how the complex set of interactions operate in one pre-service teacher's experience. Both of the cases presented below are white males from a middle-class or upper-middle class background. As white teachers from middle class backgrounds, they match the racial and class backgrounds of most teachers. However, as male elementary school teachers, they are unusual. Their profiles were selected because they most clearly exemplify some of the conflicts new teachers face as they attempt to piece together their fragmented and disconnected teacher education experiences. As teachers from a dominant cultural background working with culturally and linguistically non-dominant students, their processes making sense of and attempting to practice social justice pedagogies may be particularly informative for teacher education programs. Each profile begins with a discussion of the pre-service teacher's incoming identity. The profiles then go on to explore how both the teacher education coursework and practicum experiences shaped their identity development by examining how the apprenticeship structure and the episteme of performance manifested in their learning-to-teach experiences.

## Grant

### Incoming Identity

Grant was a white male in his early thirties when he enrolled in Coastal Academy's one-year teacher residency program. Grant grew up in an upper middle class family and spoke highly of his early educational experiences.

I went to very elite schools. My high school in Virginia was a public school, but you wouldn't know that by looking at the cars in the parking lot. I had a very privileged school experience...I did like school. I was a teachers' pet. I spent my recesses and lunches in the library... I wasn't very successful socially or athletically, so academics was kind of my thing.

He had previously worked for about a decade in both formal and informal educational settings: as an extended day (after school) instructor, as a teacher in an international school in Mongolia, and as a curriculum developer for a science and art summer camp. He had also received a Masters degree in educational anthropology studying how teachers use and make sense of curriculum. Grant enrolled in this particular program because it aligned with his philosophical commitments, was located in the city he already lived in, and provided support in locating a job upon program completion. He decided to earn a teaching credential after unsuccessfully applying to doctoral programs in education, and he hoped that classroom teaching would provide him with useful experience for reapplying to graduate school at some point in the future (this was actually recommended to him by one of the programs that did not accept him). Because of his background in scholarly work, Grant was very interested in social theory, and his understandings of the world and his students drew heavily from his study of anthropology. In the following quote, he makes sense of

teacher decision making that he witnessed in his practicum by applying one of the tropes of tribal culture he learned about as an anthropology student.

In anthropology, we talk a lot about kind of the magical formula, like, *Oh, we sacrifice someone to make the sun rise*. Then it's like, *Oh, we sacrificed someone, but there's an eclipse out there*. *Oh, we didn't put a pretty flower headdress on her*. Next time, *we kill the girl and we put a pretty headdress on her, and then the sun will rise*. I think that you can run into that in education, where there's this thing like, "It didn't work this one time." "Oh, it's because you didn't have a morning message up. If you had a morning message up, then it would have worked, or something like that." That's where I get results and research-based kind of come into this idea of, there needs to be some empiricism that you are using to guide your practice.

Grant frequently drew from his prior work with social theory to make sense of his experiences as a pre-service teacher. In the quote above he is critiquing the practicing teachers he works with for using locally produced knowledge for teaching instead of empirically, research-based pedagogies. While it might seem that drawing from social theory would help Grant effectively make sense of his learning-to-teach opportunities, as will be shown below, it frequently revealed the disconnections between the worlds of program, scholarship, and classroom teaching, complicating his learning-to-teach experience.

### **Coursework Influences**

Grant's teacher education program, Coastal Academy, was a residency program that operated as a partnership between a university, where he took courses, and a school district, where he completed his placement and committed to teach afterwards. The program had a specific social justice mission and placed their pre-service teachers in schools and classrooms that served students from non-dominant

backgrounds. Coastal Academy held a weekly student-teaching class, with all of the program's pre-service teachers. The class focused on issues of equity and the demands of the particular school district partner. Grant appreciated these sessions, and found that they aligned with and deepened his understanding of social and racial inequity. He contrasted Coastal Academy's approach with an after school program where he had previously worked.

[In the afterschool program] I taught for three hours every day at a middle school, like academic-level stuff, standards-based mathematics, and then some project-based learning, but with a very strict standard-based [model]. It wasn't just having fun with kids. It was rigorous. It taught me a lot. It was also a neoliberal hellhole. It was all like, "Tell the kids that if they do well in college they'll get a great job, and economics will be their liberation." If anyone raised comments about race or class, it was quickly stifled. It tried to keep itself politically neutral, which is a great fallacy. Politically neutral is a political stance. It was two very, very hard, lonely, upsetting years.

This quote again demonstrates Grant's grasp of social theory, and his keen awareness of how equity based discourses operate in education. He appreciated the explicit attention to race that Coastal Academy provided, and he felt like his perspectives and experiences were valued by the program directors that ran the weekly practicum sessions. Grant enrolled in Coastal Academy's program because he was committed to working with low-income students of color. As a white man from an upper middle class background, he wanted to give back to students that had fewer opportunities than he had growing up. He had previously worked with upper middle class students at a science summer camp, and he compared this work to his Coastal Academy placement experience in order to illustrate why working with low-income students was more meaningful to him.



When I was working at the summer camp, which the clientele is a very privileged set. If a kid did something amazing in my summer camp class, do I feel like I can take any pride in that? No. I'm getting like a perfect kid. All I can do is just kind of sit back and let him do his thing. I feel like as a teacher for the privileged set, all you can do is get out of their way. With these kids, this is actually something I feel like there is more of a purpose. Someone has to be here for these kids. For me it seems silly to work with any other group of students. That's why I like working with this population and that's why after working at the summer camp, I went back to working in these other kind demographics that I just think are more interesting.

As this quote demonstrates, Grant was interested in serving low-income students, but it also illustrates one of major challenges that white teachers face when developing their understandings of and commitments to social justice. As a white male from an upper middle class background, Grant's desire to "be here for these kids" who did not have the same kinds of opportunities that he had growing up automatically renders students from non-dominant backgrounds as lacking. It is also wrapped up in his own personal goals of "having a purpose" and "taking pride" in his work. He positions teachers who work with affluent students, as essentially, doing nothing; all they have to do is "sit back" and let the students do "their thing." While the demands placed on teachers working in schools that serve low-income students are more significant, by seeking out reasons to be prideful about his own work, Grant frames himself in comparative ways that both devalues the work of other teachers and frames non-dominant students as having academic and cultural deficits.

In addition to Coastal Academy's weekly supervisory session, Grant took coursework at the partner university. While Grant enjoyed the foundational courses he took at the partner university, which were focused on social foundations and learning theory, he found the methods coursework useless. Each of his methods

classes required a curricular unit at the grade level where he was student teaching, and overloaded with placement demands; Grant did not fully engage in these assignments. During one of reading methods course sessions that I observed, Grant was working with a partner on a series of writer's workshop essays that they were completing as an ongoing class project that took pre-service teachers through the iterative process of revising a personal narrative based on peer feedback. The goal was for them to have them to have an insider's view of the experiences they would design for their elementary students. While Grant understood the goal of the project, and his partner's dedication to it had produced significant changes in her own writing, he had not fully engaged, because, he said, he simply did not have time.

### **Practicum Tensions**

When Grant entered his yearlong practicum, a first grade classroom that served low-income students of color, he had hoped to work collaboratively with his cooperating teacher. He felt that, based on his prior experience in education, he brought a lot of skill and expertise to his practicum experience and expected to be treated as a colleague. However, Grant struggled from the beginning in his student teaching placement.

It is difficult because, the last several years I have been doing a lot of co-teaching. And so I am very used to planning lessons together. Marie, you know is, is a first grade teacher. And she is very invested in the participating with Coastal Academy. But we have run into this issue she is trying to figure out what it means for her to be a teacher of adults, and it is really tricky. I just want to plan a lesson like I am planning with a colleague. But she will try and do this kind of Socratic method stuff, and I am very confused as to who I am supposed to be and what kind of deference I am supposed to show her. Am I

learning? Are we partners trying to plan a week? And it kind of changes moment to moment, because I think she still trying to decide what she is as a teacher of adults. It has been a really tricky situation.

He had a difficult time collaborating with his cooperating teacher, Marie. He had hoped to enter her classroom as a colleague, and Marie, a new cooperating teacher, was unclear on how to structure their relationship. In addition to the struggles with Marie, he had an even more difficult time managing the first grade students. His perspective on social justice, or what he called anti-racist teaching, was intertwined with his classroom management struggles. He paid close attention to his interactions with the students, and often felt like he was “teaching racistly” because he disciplined African American students more frequently than other students in the classroom. The struggles in his practicum were because of an interrelated combination of three things: his personal goals, conflicting feedback, and Marie’s capacity as a mentor.

The first factor was entirely personal. Grant felt uninspired by the grade level where he was placed. He was actually interested in teaching middle school humanities, and had hoped for an upper elementary placement, but Coastal Academy was designed to recruit teachers for high needs areas (which did not include middle school humanities). So although he was unhappy in first grade, he did not feel like he could contest his placement with the program director. This meant that Grant spent the year with a self-imposed sense that the practicum would not be applicable to his future position.

One of the things is, Marie seems to think that I’m disrespecting her by saying that I’m bored in first grade, but I feel like my emotion is real and valid, and we can work this out. I certainly don’t disrespect her for first grade. Also, it’s this weird position of having to maintain at least the fiction of what’s going on

here, that she's the right cooperating teacher for me. That can be frustrating at times.

As his quote demonstrates, his dislike of the grade level further complicated his relationship with Marie. She took his critique of first grade content as a personal insult. Her understanding of his comments fit within a broader context which sees elementary school teachers, particularly lower elementary as having less status than high school teachers (Ingersoll & Perda, 2008). This also means that Grant did not expect his practicum site to be particularly useful to his future teaching, which likely influenced the way he approached his work: as necessary for completing the program, but not sufficient for preparing him to teach the content and age level he was actually interested in.

The second factor was a mismatch between the pedagogies promoted by his program and his cooperating teacher's practices. He received conflicting feedback from his supervisor and cooperating teacher, particularly around behavior management. Grant's teacher supervisor, Nick, encouraged him to use behavior management strategies aligned with Coastal Academy's vision of equity, which emphasized relationship building and eschewed external reward systems. Marie used a behavior tracking system where students' individual clothespins moved up and down a yardstick based on their in-class behaviors. Grant was ideologically aligned with his supervisor's suggestions, but he had little success when he attempted to implement them, because the students' were accustomed to Marie's approach.

The biggest challenge is how many stakeholders you feel beholden to and how you don't know who you are anymore. I felt very fractured in my identity. I don't know who I'm responding to, I don't know who to take [up]. With my

supervisor and my cooperating teacher, I was really invested in my supervisor's feedback, but it always conflicted with my cooperating teacher's. I saw my cooperating teacher more often, and I didn't have enough time to work with my supervisor.

Grant's personal vision aligned more closely to his supervisor, but when he struggled in his placement, the feedback he received from his cooperating teacher conflicted with the feedback he received from his teacher supervisor. This occurred frequently around behavior management, because Grant struggled throughout the year to manage the classroom in a way that would allow him to teach an entire lesson. He felt that his cooperating teacher was not only providing him with more practical tools that he could apply, but also because this was her classroom, she was invested in him managing it in a particular way.

Grant's experience demonstrates the challenge of having two many masters. As pointed out by one of the teacher supervisors participating in the study, teacher education programs would ideally operate as a Community of Practice (Wenger, 1998), where student teachers have the opportunity to learn from a variety of experts, where each have their own domains of expertise. Course instructors support them in developing particular pedagogical knowledges through formal schooling methods of reading scholarly work and writing academic papers, cooperating teachers coach them through the practical application of the course knowledge, and supervisors operate as a thoughtful bridge connecting the two worlds. However, because of the structural fragmentation, even within the program, teacher education rarely operates this smoothly in practice. While most pre-service teachers valued the knowledge they received from the multiple program components, they saw their cooperating teachers

as the primary authority figure. This occurred for two reasons. First, they spend the greatest amount of time with this person. Second, the cooperating teacher modeled the activities that pre-service teachers hoped to master more frequently than any of the other teacher educators. While both course instructors and teacher supervisors described and, at times, modeled the practices they would like pre-service teachers to use in the classrooms, these instances occurred within university courses or supervisory sessions with the pre-service teachers, and therefore lacked the authenticity of occurring in real classrooms with PK-12 students.

The third factor that contributed to Grant's challenging practicum experience was Marie's mentoring. While Grant saw that Marie had success with students, he was never really able to figure out how and why. And for her part, Marie was unable to make her tacit knowledge about teaching explicit to Grant; therefore, he struggled to develop a set of skills that would allow him to execute an entire lesson. Grant would regularly ask her how and why she did things, and Marie often did not have a logically derived response. This made her feel uncomfortable and resulted in a tenuous working relationship.

That is why Marie and I fight, because I ask her questions about how she knows what she knows, and she begins to realize she does not necessarily know what she knows. And she is in a place of mentoring me, and that is a very uncomfortable place.

John Loughran (2006) identifies the ability of teacher educators to make their tacit knowledge about teaching explicit as one of the key features of teacher educator capacity that differs from PK-12 teacher capacity. Grant's ability to recognize Marie's inability to explicate her tacit knowledge may have been because he was

particularly interested in learning theory and teacher decision making, so he would ask for specific kinds of evidence (like empirical research) that undergirded her approaches when other pre-service teachers might have been happy with a simpler, “because it works”. Grant was socialized during his student teaching practicum not to ask Marie, or other teachers at the school, about the evidence that supported their approaches. As he put it:

Well I find that is a very dangerous question to speak, I have found that I should not ask that question. It comes off as rude, and also I think I can already get a sense of who is thinking the way I am thinking. I think it comes across as above my pay grade.

One of the reasons that Grant struggled to make sense of his own experiences in a way that was cohesive, was that the primary tools he had for constructing cohesion (empiricism, peer-reviewed research, scholarship) were not the tools that the PK-12 teachers he worked with used. And when he attempted to invoke them, he was quickly socialized to understand that this was not a common cultural practice.

Here is something that is really interesting too, Marie got really frustrated with me because I always try to use author names, and for me going through the higher education system, you consider it, it is academically honest to use an author’s name. Marie, and I think this happens with a lot of teachers, says “do not say names, say concepts”.

Grant was interested in the intellectual roots of pedagogical practices, their evidentiary warrant, and the different ways that teachers may be using them (his Masters thesis research investigated how teachers and curriculum developers think differently about math curriculum). He saw concepts as negotiated and knowledge as constructed, but the school culture was to treat particular instructional practices as concrete, true, and non-negotiable. Grant felt particularly conflicted because he

enjoyed his placement schools' professional development sessions, but still felt like they lacked a rigorous discussion of their intellectual roots and evidentiary warrant. Grant's intensive interest in research and theory makes him a bit of an outlier among the focal participants (and likely among teachers more broadly), but it demonstrates an important tension in teacher education. Scholars are promoting conceptual and empirical work that they would like to have an impact on PK-12 schools and teachers. But Grant's experience illustrates how difficult this is to do, because he **learned not** to invoke research and theory in his school site, because these were not the cultural tools that teachers used to construct knowledge.

This ability of teacher educators to make the tacit knowledge explicit is related to (but not synonymous with) what Feiman-Nemser & Buchmann (1985) call the cross-purposes pitfall. One of the pitfalls of learning from experience, the cross-purposes pitfall, highlights how teacher education programs and cooperating teachers are at cross-purposes. Teacher education programs seek to prepare new teachers; cooperating teachers are interested in ensuring that their PK-12 students are learning. Marie was able to produce the latter without having the skills to support the former. Coastal Academy selected Marie as a cooperating teacher because she was a successful teacher of non-dominant students, but her inability to make her tacit knowledge explicit exacerbated the issue of cross purposes and made the teacher education program's goal difficult to achieve.

While there were bright moments during the year, at the end of his residency, Grant was still struggling with managing student behavior. In his final session with



his teacher supervisor, Nick coached him through reflecting on the management struggle, the same conversation they had been having all year. Grant was disappointed, because he felt like had not progressed.

What's really upsetting is that it doesn't feel like a conclusionary discussion. It's like, you know that thing we've been trying to work on? It's still not there. That's what makes this discussion very hard for me, that we're not having any kind of, "Let's sew up some of these loose ends. Let's talk about where we are and what we've seen." We're still at square one, that's what makes this a really difficult last time we debrief.

Despite completing a lengthy, practice-centered teaching apprenticeship, Grant was still struggling to effectively link his commitments to social justice, anti-racist behavior management, and classroom instruction. Coastal Academy's programmatic focus on issues of social justice caused Grant to reflect on his own role as a white, upper-middle class male working in a classroom with low-income students of color. While he had developed nuanced and complex understandings of how institutionalized racism can manifest in schools and classrooms, he struggled to know what to do about it as a teacher. He was concerned that he was publicly penalizing black students for classroom disruptions too frequently, which he knew could result in further alienating them from school. But he had a hard time developing practices where he could manage the class and simultaneously teach a lesson. While he discussed this issue regularly with his teacher supervisor, he felt like he received contradictory messages (push through the lesson vs. respond to the behavior). And he did not know when to take what action. His cooperating teacher's responses did not make sense to him, and she was not able to articulate a strategy that would help him develop his own. These challenges were exacerbated during his first year of teaching.

## **Post Program**

Grant completed his residency year and was hired to teach middle school humanities in the school district that Coastal partnered with. As a first year teacher, Grant continued to experience the same struggle. He experienced difficulty connecting his disposition towards social justice teaching to actual classroom practices that would allow him to engage in anti-racist teaching. This is not a unique experience; it is also a structural failure of his teacher education coursework. Grossman et al. (2008) discuss how foundations coursework, where students explore issues of historical marginalization is frequently disconnected from methods coursework where pre-service teachers learn content-specific instructional strategies and develop curriculum design skills, which was the case with Coastal Academy's curriculum. The residents took a social justice foundations class the summer before their residency year, and methods courses during the academic year. The degree to which those courses took up social justice curricular approaches varied widely. For example, Grant described how one course instructor told them not to work in an urban school, because it would burn them out. But Grant's main tension was the relationship between anti-racist teaching and classroom management, and he continued to face this same challenge during his first year of teaching.

I'm trying my best. There are some issues that came up with my first-grade class of structural racist issues. Biases that I have, you know, calling out louder students more often than quieter students, and the louder students tend to be African-American students while the quieter students are Filipinos, too.

Grant, guided by his teacher supervisor, had recognized these tendencies in himself during his residency year. He understood them as an instantiation of racism in society

operating through the institution of schooling, and through him, as a white, male classroom teacher. This problem was exacerbated by his struggles with lesson planning and classroom management. He was never able to develop a set of practices that would allow him to hold all three (managing student behavior, anti-racist teaching, and finishing a lesson) in balance.

Rebecca: So other than not trying to call out the African-American students more than others in the class, what do you need to do?

Grant: That's a million-dollar question. That's where we're starting. Pushing forward. Giving them something to do right away that's interesting. Those are like the two things, it's so funny, those are the two things I worked with, with my supervisor, [last year]. And I'm repeating all the same mistakes, and so that's like very heart-wrenching, that it doesn't feel like it's necessarily gotten any better.

While Grant felt that he had a strong foundation regarding issues of oppression, and how teachers are frequently complicit in maintaining them, he really struggled to balance classroom management, lesson delivery, and anti-racist teaching practices. Grant's first job was at a small middle school, with a six-person teaching staff. He was the only humanities teacher at his grade level, so he did not have access to support from peers who were teaching the same content. Instead, he sought out support from his principal. She was happy to work with him and had an anti-racist commitment to teaching, but he found that most of her support focused on foundational understandings: explaining institutionalized racism and how it affects students of color, but not what practices he could employ in the classroom.

My principal doesn't assume that I'm willing to have a conversation [about race], and that I know some of this basic kind of background stuff, and I'm like, "Oh, no, no, I know all that. I'm totally cool with that. You're preaching to the choir." She preaches to the choir a lot with me. Thinking that this is

going to be very new and very hard for me to digest, which working with Coastal Academy staff, I'm like nope, I get it. I get it. I am racist because of my society, and it does not matter that I have racist biases, it matters only to work on them, and I want to work on them, so let's do it.

Since Grant's issues with lesson planning, instruction, behavior management, and social justice were intertwined, the difficulty he had planning lessons with Marie during his residency year reverberated into his first year of teaching as well. One of Coastal Academy's requirements was for residents to spend one hour per week meeting and planning with their cooperating teachers. This was difficult for Grant and Marie to accomplish, because of their graduate school schedules (Marie was also working on a Masters degree). However, the most significant issue was that Marie did not regularly write her own lesson plans, so it was difficult for Grant to learn from her.

Marie is a very hands off planner. She really knows what things look like, and so she doesn't do much planning herself. It is different for me because this is the first - a lot of the times first-graders kind of surprise me. And I do need to have a really good plan so I know what everything is going to look like.

This meant that during the residency year, Grant did not see the linkages between high quality planning, behavior management, and classroom instruction modeled. And since he struggled with all three during his residency year, he had very little successful practice. During his first year in the classroom, Grant continued to struggle with planning. This difficulty was influenced by a confluence of factors. The school did not have a curriculum for either of the subjects he was teaching (English Language Arts and Social Studies), and he lacked grade level colleagues teaching the same subject as him that could provide planning support.

I honestly, I do go in every school everyday and feel like a complete impostor and feel like I have no idea what I'm doing...Personally when I'm sitting there in front of the kids I'm just like oh, help me God. They don't realize that I'm completely winging this and I have no idea what's happening. Or if this is the right way to do things.

These issues with planning and classroom management reinforced each other and resulted in a problematic cycle that made Grant's first year of teaching demanding and difficult. It was hard to keep students engaged with lessons that were not well planned, but he lacked the skill, resources, and support to plan well. When he tried to plan more engaging lessons, it felt like wasted effort, because getting through them was difficult because of the classroom management struggles he was facing.

Grant's experience demonstrates how teacher identity is an interrelated amalgamation of influences and effects that are constantly in motion (Olsen, 2016). As a process teacher identity illuminates how personal relationships, program demands, and external forces shaped Grant's struggle to link instructional planning, classroom management, and anti-racist teaching. Grant's prior educational experience before entering his program interacted with his coursework and practicum experiences to shape his dynamic, developing teacher identity. It was complicated by the tensions between the practices promoted by his program and those used by his cooperating teacher. The practices he had previously used to judge the value of particular approaches were not applicable in the school setting, reaffirming an institutional disconnect between theory and practice, between the university and PK-12 schools. In order to make sense of these disparate experiences, Grant engaged in bricolage, piecing together a teacher identity using things that resonated, made sense

to him, or just worked. He actually began constructing teacher knowledge like other classroom teachers (despite his earlier concerns) in an ad hoc fashion (Hatton, 1989; Guberman, 1993), because that was the culture he was socialized into. By examining his teacher identity as a product, it becomes clear that the disconnects and conflicts he experienced during his residency year have resulted in a fragmented professional self that lacked a cohesive set of principles and practices to guide his instruction. The next chapter will discuss how this serves to maintain the theory-practice divide in teacher education.

## **Scott**

### **Incoming Identity**

Scott was a white male in his late 20's from a middle class background when he entered Midlands University's teacher education program. Scott grew up in a family of educators, but decided that he did not want to do "what the family did, because they did it." Instead, he pursued a business degree in college and later worked in a variety of managerial positions in the service sector. He found his work in the private sector unfulfilling, and so he began taking some long-term substitute positions: they offered flexibility, and he wanted to travel. After substitute teaching for a bit, Scott decided to become a teacher:

There was something missing [in my prior work]. There's this warm feeling at a school with the staff and the kids, that like everybody has it. I just wanted to be a teacher and be a part of that, give what I have.

Since both Scott's mother and sister were schoolteachers, he felt like he had an insider's perspective on what the job entailed. He also wanted to make a difference with his work, and was interested in work that felt more meaningful.

### **Coursework Influences**

Scott enjoyed his program coursework. He was an engaged student and felt like he took the experience more seriously than some of his peers. During one course observation, Scott even moved from the back table with two talkative students (who proudly proclaimed they were the "bad kids" to me when I sat down with them) to the front of the classroom, so he would not be distracted.

Midlands' coursework was Scott's first introduction to ideas of social justice and inequity in schools. And he found them illuminating. Despite growing up in liberal community, he had never really considered how gender, race, class, and other forms of difference result in systemic inequality.

I thought I knew about [equity before my program], but I wasn't really thinking about it. Now I totally get it, and it's permeating into my normal life too. I'll see areas like gender inequality. I wouldn't have even thought about that if it weren't for my program. I see social problems, homelessness, things like that, and I immediately relate it back to school and home life. I'm thinking about it a million times more now than I was. I'm a lot more informed of my thinking now than I was. I thought I knew a lot, and I really didn't.

His social foundations coursework caused him to reexamine some of his own prior experiences. The year before entering the program, Scott had worked as a long-term substitute in a school that served low-income, Latino students. He became aware of his own sociocultural location as a middle class, white man, who had previously

ignored the backgrounds and lived experiences of his students. He realized that his entire approach had been flawed.

This whole thing, what I've learned is that I was totally wrong, and I couldn't have gone about it any more wrong, which is okay. It's a learning experience. First of all, I was like, "I'm going to be totally color blind here. We're all the same people. You're the same." That's so anti what they teach us. You're not the same, and you have to acknowledge that and use it, or leverage it to enhance the teaching. Otherwise, you're reducing whatever it is these students bring to class, whatever they know about and care about. If you're acting like it's just not there and they're just these homogeneous thing, it's not good.

Despite developing new dispositions, Scott still did not plan to teach in a school that served low-income students, which was one of the goals of his teacher education program. He was concerned that schools serving low-income students paid less, and he felt that given his prior work experience that he was worth more.

I won't just take any job, probably because it's a principle thing. I've had other jobs, like I was manager at Target, which is really highly paid. I want my first gig teaching to at least be somewhere up there and not way, way, below. I bring a lot of experience and I'm not twenty-one, fresh out of college.

However, in the particular school districts where he wanted to work, this was not the case. The pay was comparable between the rural school district where he substitute taught before his teacher education program and the school district where he was completing his practicum and would have liked to work. Scott had started to build an awareness of inequity and develop some dispositions toward inclusive education. He had done enough reflection on his own identity to realize that the differences between his experiences and those of non-dominant students were significant and had learned that schools can serve as oppressive institutions, but perhaps he was not sure yet how to navigate that. This discontinuity within teacher identity has been conceptualized by



Akkerman and Meijer (2011); they describe how teachers develop narratives to help them account for discontinuity. Scott constructed a narrative about himself as a worldly, experienced person who deserved to be paid more in order to create coherence between the program's goals, his developing ideas around equity, and his desire to work in a more affluent school district.

In addition to his newfound commitments to social justice, Scott's coursework also caused him to reexamine what he had previously understood about quality instruction. As a long-term substitute he employed the same instructional practices he had experienced as a student, what he called "stand and deliver," which included direct instruction and passing out worksheets. He described how he attempted to take on the role of the teacher by reexamining his own schooling experiences.

Scott: [When I was a substitute], I tried my best to kind of just think of, "Okay, what do teachers do?" Which now I'm realizing I was so far off the mark. I tried my best with them. I feel like I made some progress, but what I know now, I'm looking back, would have been the perfect test room to just test a lot of my new knowledge out.

Rebecca: What would you do differently if you went back now?

Scott: Gosh, I just stuck to the book, stuck to the textbook, worksheets, "Stop talking", blah, blah, blah. I tried to make it fun with some art projects, stuff I knew they would never do otherwise ... Videos. We read the book "The Outsiders" and watched the movie. They weren't going to get any of that... But I was teaching them about Ancient Greece. I could have made the whole time I was there this big unit with deep questions. Guiding questions that could really help them learn because I don't think they learned much from what I was doing. That was kind of discouraging. I was just standing and delivering....All that experience, it was good, but a lot of it was for naught because you get to the program and learn some stuff and you realize how difficult and intricate teaching is if you want to be good at it. I've seen teachers just kind of do what I described to you, like stand and deliver, pass out ditto. It's not a good way to be.

As he engaged in coursework that encouraged him to reexamine his own understandings of learning, he moved away from common-sense notions of teaching as transmission, which are inherent in a “stand and deliver” model. Instead he started to think of learning as a constructive process best guided by what he called “deep questions.”

My supervisor, he really teaches us that everything needs to be built around simple but deep [ideas]. That everything you're doing, everything a kid does throughout that day, there's some connection to that big question that helps them answer it a little better. There's more thinking for yourself, there's more critical thinking, working with your partners. Tons of different ways for them to come to the knowledge that we want them to know instead of factual knowledge. They said something like, "We don't want fact-based knowledge. We want their knowledge to be focused on how they came to that knowledge." You can tell some students can explain something right back to you verbatim on what's a molecule and they can tell you and you can write that down, "Okay, you got that right on the test. He knows the molecules," but that doesn't show anything about what they've learned, how they've thought about it. Is it helping them answer some bigger question? That's kind of what I want my teaching to be around, these guiding questions that permeate everything they do. That's how my supervisor runs his class, gives us these big questions.

Scott’s understandings of student learning and quality teaching shifted during his coursework. He was significantly influenced by the ideas of constructivism and the framework that his supervisors provided for lesson planning, which was an adaptation of the Understanding by Design model (Wiggins & McTighe, 2005) that asked teachers to organize instruction around big ideas and enduring questions. His teacher supervisor was particularly interested in student thinking, especially as it related to math instruction (which is frequently more factually-oriented in elementary school classrooms (Wu, 2011)). And, as will be described more fully below, this

shaped the way that Scott approached his practice teaching during his student teaching placement.

Scott's coursework had a profound impact on his developing teacher identity. And while Grant's process for developing teacher knowledge was locating empirical evidence and understanding the its conceptual underpinning, Scott's process was largely reexamining his prior experiences using the lenses provided during his coursework. This is consistent with an identity framework for teacher learning, which highlights the interplay between the personal and the professional (Olsen, 2008). And during coursework he began developing both a set of dispositions around social justice and equity in schools and a body of knowledge around learning theory and instruction.<sup>38</sup> However, during his student teaching practicum, he has the opportunity to practice one of these, but not the other.

### **Practicum Tensions**

Unlike Coastal Academy, Midlands required that Scott complete two student teaching practicums: one during the fall quarter and one during the winter and spring quarters. During his first practicum, Scott was placed in a second grade classroom with a cooperating teacher who had never worked with a student teacher before. He felt unsupported and never really became a part of the classroom community: "I think

---

<sup>38</sup> This actually simplifies things a little, by treating equity as if it is simply a disposition and conceptions of learning as if they are simply a piece of knowledge. Scott's ideas and emotions surrounding equity were informed by facts about disparity in educational spending, resources, and outcomes. And his perspective on learning theory demanded a disposition - a belief that constructivism was both how students learned best and a more democratic form of instruction.

she didn't really know how to handle my presence in the classroom." Scott felt that her expectations were ambiguous, and he did not know how to participate as a member of her classroom. This discomfort was multifaceted. He never felt welcomed at the school, and he physically felt like he did not fit into the classroom.

And physically, in the classroom, the space, there was really no place for me, and in the second grade classroom, the desks are small. The chairs are small. I need a place to put my things and set up, but I never really felt like there was a space.

His discomfort might have been, in part, because teachers set up a variety of routines, and as a first time cooperating teacher, she had not yet adjusted her instructional routines to include another adult. Student teachers do not automatically fit into the practical routines in most elementary school classrooms. This kind of arrangement must be negotiated, which neither Scott nor his first cooperating teacher was equipped to do. Scott disliked confrontations, so he never discussed his discomfort with his cooperating teacher, and decided instead to just try and get through the program requirement with as little tension between them as possible. At the end of the fall quarter, during his quarterly meeting, where he, his teacher supervisor, and his cooperating teacher discussed his progress on the state's teaching performance expectations, these tensions came to an unexpected head. This made him question whether to continue in the program:

My first cooperating teacher, she kind of threw me under the bus during our meeting at the end. Everything was fine... Then the conversation steered in the direction where she was like, "I don't think you were engaged, and a lot of times I feel like you just didn't care."... Then I got defensive. I was like, "Whoa, what? Excuse me?" That all just blew up at me, and I almost felt like quitting the program. I was like, "You know I'm trying so freakin hard here." I

had a nice talk with my supervisor [afterwards], and he really took it to heart that I needed somebody who would be straightforward and just guide me.

For the second half of the program, Scott was placed with Sean, a 5<sup>th</sup> grade teacher with whom he had much in common. Like Scott, Sean was male, Caucasian, had a no-nonsense style in the classroom, and liked to surf. For Scott, who had previously struggled to picture himself in an elementary classroom, Sean provided a holistic vision of the kind of teacher he could be. "I feel like I really lucked out with this guy Sean, because he's kind of like me. Dresses like me, talks like me, communicates the way I do." This was a conscious choice on the part of Scott's teacher supervisor, who recognized the challenges Scott had in his previous placement and understood that he needed to be able to picture himself in an elementary school classroom. "I think my supervisor, did that purposefully, because he knew how weird my last placement was, how I didn't feel comfortable, and how the expectations were ambiguous." He wanted a cooperating teacher who would "just guide" him, indicating that Scott also understood his student teaching practicum as an apprenticeship. Scott gained from Sean a model of a classroom that was orderly, organized, and directed. However, Sean did not incorporate diversity or social justice into his instruction. While Sean's classroom served mostly middle class students, Scott still felt like this was a missed opportunity to teach students about diversity and incorporate their cultural backgrounds into the classroom.

There's a lot of diversity in our class and it's not really celebrated. You saw those posters in the back, like "What family means to me". Sean's like, "Yep, that's the only art project I do." It seems like every day, or week, or something, you could be celebrating something.

This is particularly important in Scott's case, since he was first introduced to the ideas of social justice education in the program's coursework. These were not issues he had been contemplating for years, and therefore, were not firmly integrated into his teacher identity. Additionally, research on shifting teacher dispositions in teacher education indicates that it is not consistently successful (Anderson & Stillman, 2012; Hollins & Guzman, 2005; Wideen, Mayer-Smith, & Moon, 1998). While Scott had begun to shift his ideas around the importance of diversity and multicultural education, he did not receive models of what they might look like in a classroom.

I don't want to criticize because I think Sean is great, there's this whole aspect of social justice that we're learning. I feel like to be that kind of teacher, and to embody everything the teacher education program stands for, requires a little more emotion, however that might come through. Not that he's not passionate, but there's this part missing. Sometimes I think, *is that a place where we could insert something to make them think a little more*, but I don't say that. Or, say there's a writing prompt that's just lame, and I think, *well that could be a chance for us to explore...* but I don't really mention that.

Scott was interested in trying out the inclusive classroom practices he was learning about at Midlands that would celebrate the diversity that was present in the classroom. However, this was not part of his cooperating teacher's practice, and as will be explored more fully below, meant that Scott had no opportunities to engage these kinds of practices in his student teaching. This disconnect is a manifestation of the debates surrounding teacher capacity, particularly whether or not multicultural education is central or peripheral to classroom instruction and the purposes of schooling (Grant & Agosto, 2008; Gollnick, 2008; Howard & Aleman, 2008; Sato, 2014). It is also an important location of teacher identity development as "(student) teachers have to make sense of varying and sometimes competing perspectives,

expectations, and roles that they have to confront and adapt to” (Beijaard, Meijer, & Verloop, 2004, p.115). Scott understood the practicum as a place to observe and assimilate as opposed to a place to challenge and negotiate. And this understanding was silently encouraged by both social norms and program structures. When entering someone else’s workspace and taking on the role of novice, the cultural practices encourage the novice to defer to the more experienced and knowledgeable other. Similarly, the programs’ need to maintain positive relationships with cooperating teachers, so that they could continue to have a sufficient number of classroom placements, may have meant that they did not encourage pre-service teachers to challenge their cooperating teachers practices.

Scott’s cooperating teacher also felt immense pressure to adhere to an established curriculum and ensure that all the standards were covered before the annual state assessments. This meant that Scott had very little freedom when planning his solo lessons. When he met with Sean to discuss completing the PACT, Sean handed Scott three lessons he had already planned.

He's like, "Hey, here's your lessons, but I've got to move on, so how about you do part of it and I'll just do the rest because I've got to move on." A lot of my classmates are given a lot of, they're completely coming up with they're own think. They're given all this space and creativity room to do it. I'm barely able to just do what Sean’s already begun to do. It seems like there's not even enough time or room for me to do that, which kind of takes the pressure off of me. I just planned it essentially how he planned it, because he's so under the pressure to fit it in the schedule.

Scott lamented this lack of freedom to create, explore, and challenge himself, but he also recognized the comfort of just “staying the course” (as he put it, repeatedly). In both of the quotes above it is clear that he welcomes the security that just going along

with what Sean has already developed provides. Since Scott had such a terrible relationship with his first cooperating teacher, he also worked to ensure a smoother relationship, which may have been another facet of why he chose not to challenge Sean on any of his instructional decisions or advocate for more space as a student teacher.

There were three contextual factors within the teaching practicum that constrained Scott's opportunities to try out inclusive pedagogies. The first was that because he was in a fifth grade classroom, Sean was very concerned about covering all the standards to both ensure that his PK-12 students were prepared for the standardized exam and ready to enter middle school. As Sean put it,

When there's testing it's a very tight scope and sequence, everything has to move fast, and when you have a student teacher teach, it slows everything down; things can get muddled and confused.

While standardized testing and accountability policies were developed (at least in part) to close the achievement gap between white students and students of color, they were rooted in deficit understandings of students from non-dominant backgrounds (Valencia, Valenzuela, Sloane, & Foley, 2001). The way that accountability demands get operationalized significantly constrains the work of classroom teachers (Achinstein & Ogawa, 2006) and in this case inhibited Scott's ability to develop practices aligned with his and his programs' social justice commitments, which may serve to maintain inequity. The second factor is an interaction of accountability demands with Sean's personality. Sean was hesitant to relinquish control of his classrooms. He had a strict scope and sequence they wanted to adhere to, felt



pressured by the workload, and constrained by school district requirements. Thirdly, unlike Scott's first cooperating teacher, Sean chose to work with a student teacher because of the extra support he or she provided in the classroom. He organized his instruction around having a student teacher as additional support, purposefully integrating Scott into his tightly scheduled scope and sequence. This resulted in limited opportunities for Scott to explore, investigate, and take risks. It also made it difficult for Scott to develop a cohesive, equity-oriented professional identity, which includes not only equity-oriented dispositions, but also the ability to develop and enact a curriculum aligned with his commitments.

During the practicum, Scott's developing identity interacted with Sean's teacher identity. Like the pre-service teachers in their classrooms, cooperating teachers are dynamic and complex individuals negotiating the external forces that influence their work with their own personal and professional goals. These epistemes of performance and institutional carriers that maintained it (e.g. state standards, state required performance assessment), not only provided cultural tools that teachers are expected to take up but also offered particular identity positions by communicating to teachers' that their professional worth was linked to performance. Scott could see how this affected Sean:

He's so under the gun. He seems pretty mellow, but sometimes I can sense, "The reason we have to move fast is because of standards, and test scores. The scores come out in the papers. People see it." ... You can see what's on his mind a lot.

The performative technologies described in the last chapter can be seen shaping Sean's perspective of himself as a teacher. And as a significant influence on Scott's

developing teacher identity, Sean's internalization of these external demands affected not only what kinds of practices Scott is able to try out during his practicum, but also shaped Scott's construction of who a teacher is and what they care about.

While Scott lacked opportunities to develop a social justice-oriented pedagogy, he did have opportunities to enact his new understandings about student learning. His interest in providing students opportunities to construct their own understandings of mathematical concepts aligned with the way that Sean already taught math in his classroom, and Scott had multiple opportunities to try out these kinds of lessons and get feedback from his teacher supervisor, who happened to specialize in math pedagogy.

In the context of math instruction, for both Scott and Sean, this meant providing students with a set of problems, and then working collectively (sometimes in small groups and sometimes as a whole class) to determine a process for solving the problems. This is in contrast to a more traditional approach of providing students with the mathematical algorithm at the beginning of the lesson, demonstrating how to complete it, and then asking students to practice using the algorithm. Scott's approach asked students to engage in "deep thinking" as they problem-solved for themselves. During one lesson I observed, Scott was teaching the students about percentages. Scott described the lesson's goal and how previous work they had done spiraled into this particular lesson.

They were supposed to see a relationship between the percentage and the product. We've actually done a lot of this stuff, but never have we done specifically percent of a number. They know that 50% is .5 is one half, one half times 100 is 50. They also know that half of 100 is 50. Through all that

knowledge and everything, they were supposed to come up with the fact that 0.5 times 100 is 50.

Scott demonstrated how he expected the students to use the resources they already had - knowledge that they built throughout the year, to solve the particular problem set he provided them by recognizing a pattern among a set of benchmark percentages (e.g. 25%, 50%, 75%). He worked mostly off of a lesson that Sean provided for him, stating that a lot of Sean's math lessons use this kind of approach, "they kind of give the students problems to help them come up with an algorithm."

Over the course of the lesson, Scott had students explain their reasoning. He would record their process on the board, or occasionally have them come to the board and demonstrate their reasoning and their process. While Scott never used the term constructivism to describe this particular lesson, or his approach in general, its influence was clear in his instruction and in his reasoning behind designing the lesson this way.

Scott: They're always like, "Never just tell information. Always let the students figure it out. Never just dispense it."

Rebecca: Who is they?

Scott: Just what they say and what I've heard. You never want to just be like, "The way to do this is this."

Scott had (mostly) internalized into his professional identity an understanding of the teacher as a guide, instead of as a dispenser of information. He did eventually provide students with the algorithm at the end of the lesson. They had not completely constructed the algorithm on their own, but they were clearly on their way - having successfully figured out how to use the pattern they saw with the benchmark

percentages and apply it to slightly more difficult percentages (15% and 20%). His reasoning for providing the algorithm to them was that “it was just time to move on. There was not really a test on it.” It is obvious here how Sean’s preoccupation with state assessments, and the way they guided his instruction influenced Scott’s decision making as a teacher. However, as Scott described his choice to have students audibly talk through their thinking, his commitment to constructivism became clear again.

[Talking through their reasoning] keeps them accountable. The more talking they do is better, the less I do is better. For them it's good because sometimes you can do math, but you can't talk through it, which means you might not understand it. Or sometimes they can talk through it, but not do the math. The kids are more engaged. The students are held accountable. [They know that] I might have you come up and talk us through it, so they need to be accountable. It [also] helps with the whole language piece. The words are coming out of their mouth, how they understand it. They won't come up and be like, "The dividend and the divisor and the product." They'll say, "I knew to divide this number into this number, so that I could figure out how many blank numbers." It's more in their parlance, instead of mine, which might be different. That's why I do that.

Scott developed a set of skills to guide students through constructing their own understandings of mathematical algorithms. This approach was aligned with what he learned in his program, was specifically encouraged by his teacher supervisor (who also taught his math methods course), and matched what his cooperating teacher already did in his classroom. The fifth grade students he worked with were able to be successful taking risks describing their reasoning out loud to the whole class, because it was a practice that they were accustomed to. Scott understood that if students made their thinking visible he would be able to see what misconceptions they had and then adapt his instruction based on the kind of support they would need next.

While Scott's program coursework encouraged him to both engage in social justice education and constructivist pedagogies, his student teaching practicum afforded an opportunity to practice one, but not the other. This had a significant effect on his developing professional identity and manifested in some of the choices he made as a teacher of record the following year.

### **Post Program**

Despite his earlier reservations about it, Scott took a job working with predominantly low-income students of color (because after a couple of unsuccessful attempts, this was the job he was offered). Since he was able to develop practices during his student teaching practicum aligned with his developing understandings of "deeper learning", it became a major part of his teacher identity, even amidst the external constraints placed on him in the PK-12 school where he worked. Scott was required to use a math curriculum that was aligned with the Common Core State Standards and explicitly prepared them for the state exams.

[The math curriculum] is taught in such a way that you can't really stretch out a lesson over days and do different things to make sure that point is taught. You got to do that lesson because these little specific Common Core problems are related to what they're going to be doing in that lesson. The kids just can't blow ahead in that book and finish the whole thing because there's a lot of language in there and certain things they're going to need to know [for the assessment].

While he had already begun to internalize (or subjectivize) the accountability demands (much like Sean, his cooperating teacher), he was still looking for ways to negotiate the pacing guide that was required by the school district and insert lessons

that would help the students develop conceptual understanding, and not simply the particular language or skill that they would need to successfully complete the state assessment. He described how he had adjusted the curriculum so that students could get some tactile experience connecting the concept of volume and the process for determining it.

Yesterday I had them on the ground filling little boxes with cubes to understand that you don't need to fill the whole thing. You just need to look at the length and width and the layers. But we're way behind in these lessons. I'm probably ten days worth of lessons behind which is why I'm cramming two in [today]. I'll probably give them time later to work on it because the district is all about being on pace.

Despite the external demands of a district pacing guide attached to the math curriculum and the concern about student performance on state assessments, Scott maintained his commitment to deeper learning by adapting the curriculum (often by combining lessons or skipping other content). This occurred because he had developed a set of practices that equipped him to treat the materials flexibly so that he could enact what he believed was better pedagogy.

However, the combined constraints of his cooperating teacher's style, the culture of accountability, and Scott's negative experience with his first cooperating teacher, meant that he never got an opportunity to develop practices aligned with his burgeoning understanding of social justice. As a first year teacher struggling to stay afloat, Scott repeatedly slipped into deficit frameworks to describe his students and their families.

We have good teachers here [at this school]. Everybody here wants to be here and does a great job. Why is it that our scores are just like garbage? I call parents home. I don't even get calls back. Hey, you're kids not bringing stuff

to school, and we need him prepared to learn. I need your support in doing that. ...It's just like what the heck? Some of those kids I feel I'm not going to fix it this year. I just have to work around it.

Unlike his commitment to constructivist learning and teaching, the awareness of Scott had developed around issues of inequity eroded during early in his first year of teaching, at least in part, because he did not have an opportunity to develop practices that allowed him to engage in social justice teaching during his student teaching practicum. Much like his commitment to deeper learning, his social justice understandings were challenged by the contextual realities of PK-12 schools. In order to make sense of the incongruities of his hard work, the good teachers at his school, and the poor performance on standardized exams, Scott relied on deficit frameworks of students and their families, instead of examining the institutional forces that contribute to inequity (which might require him to unpack the ways the he and his colleagues are implicated in them). His struggle trying to solve the cognitive dissonance between his social justice understandings and the reality that students in his classroom were far below grade level was clear in how he talked about adjusting the curriculum to meet their needs and simultaneously trying to hold high expectations. He described that process this way:

Just as long as they're producing work where it's rigorous, and they're thinking. I'm teaching them little skills along the way. I think that's the best I can do right now, because I can't get concerned with their grammar. There's certain things where I'm just not going to get to it, but I can help them write a complete sentence and a complete paragraph and hopefully a whole paper like what's on the wall here, which is a big deal. That's what I think my priorities are now. It's just applying the successes, however scaled back compared to what I thought they'd be. A lot of things I'm just cutting out because they won't get certain things.

He then went on to say that he was not going to lower expectations for them just because they were young or from low-income backgrounds, despite his scaling back and cutting out content, because he felt that students weren't ready for it.

Scott: Everybody's like, "Oh, they're just fifth graders. They're just nine or ten, and they come from horrible backgrounds and stuff." It's not like I'm going to let up and be like, "Okay, you don't have to do homework. I just expect less from you. Just come in and just read." I'm not going to do that.

Rebecca: It sounds like you are a little bit with this idea of scaling things back.

Scott: I have to because otherwise they would just be failures all day. My mom told me. She's like, "You have to build in successes, no matter how small they are, so that they're not failures all day. Then they're just going to be set up to fail and feel like they failed and fail again. You have to scale things back. Still make it rigorous, but then they feel like, "Okay, I did that little thing right. Cool." Instead of just being like, "You didn't use periods? Ooh." Just be like, "Okay, thanks for this hard work. It looks like you worked your hardest. You probably had nobody at your home. You still did it." Before I would send it back. "You didn't use any periods." I'd hold them to that. There are some areas that I can just shut up and get that this is the best they can do right now. Okay, I'm not going to get angry over it or feel bad that I didn't teach it well enough or something.

Scott attempted to maintain a commitment to high expectations for all of his students, because he understood that it was an important component of social justice education (Ladson-Billings, 1995; Nieto, 1994). But he could not keep this in balance with meeting the students where they were at and providing them with positive schooling experiences. However, this was all couched in a deficit framework, notice above how he suggests that students probably have nobody at their home, engaging deficit perspectives of families as uncaring and unsupportive. Using a deficit framework, Scott is able to legitimize himself and his own effort as good enough, because he would not be able to "fix" some of the students this year.



While Grant and Scott's particular challenges were different (i.e. Scott never had much a of problem with classroom management), their navigation of social justice education reveals similar struggles. Working within a historically oppressive institution (as extensions of state power) complicated their capacity to enact social justice pedagogies. Grant struggled to get through the curriculum without regularly reprimanding his African American students. Scott was unable to sustain an asset perspective of students once he accepted the institutionally-sanctioned performative markers of success (i.e. standardized assessments). Teachers like Scott and Grant get caught in a double bind trying to reconcile meeting the goals of schooling, which are measured by standardized assessments, their developing ideas of equity, and their personal hard work. Once teachers have committed themselves to student learning as measured by standardized testing, it can become difficult to reconcile the other three factors: their individual effort, developing ideas of equity, and the students' poor performance. This demonstrates the complexity and contradiction of teacher education, particularly because accountability policies are themselves a contradiction of equity and oppression (Achinstein & Ogawa, 2011).

### **Conclusion**

Both Scott and Grant were (unintentional) bricoleurs, piecing together a professional identity out of a myriad of past and present personal and professional experiences. These two profiles demonstrate how different the process can be for teachers, who (on the surface) seem similar. Both were white men from middle class

backgrounds earning an elementary teaching credential in social justice oriented programs. Their incoming identities were influenced by an interrelationship of prior life experiences, coursework requirements, and their student teaching practicums. While their instructional challenges differed, they contextual features of their practicum experience had profound influences on their teacher identity development. Grant received mixed messages from his teacher supervisor and cooperating teacher, and his cooperating teacher's inability to make her tacit knowledge explicit (and the professional rift that created in their relationship) resulted in very few successful practice teaching opportunities for Grant. Scott, on the other hand, had a very positive relationship with his cooperating teacher, and repeatedly compared himself to Sean even once he became a teacher of record. Scott's desire to emulate Sean combined with the dearth of opportunities he had to practice inclusive social justice pedagogies made his equity commitments less resilient to the external forces of schooling that commonly frame historically marginalized students and their families as deficient. Some research on cooperating teachers indicates that it may matter less what pedagogical approaches the cooperating teachers uses, and matter more whether or not they are willing to serve as a thought partner and coach to a pre-service teacher who may be developing a very different approach (Smith & Avetsian, 2011). However, this is not the default position in the master-apprentice relationship, and therefore, is not the role that cooperating teachers automatically take up. Institutional forces encourage them to treat pre-service teachers the way they were treated, and, therefore, model good teaching. This is also complicated by the fact that a great deal

of practicing teacher knowledge is tacit (Loughran, 2006), which may make it more difficult for cooperating teachers to serve as coaches.

There is not an inherent issue with the process of bricolage in teacher preparation. In fact, given the complex and disconnected contexts within which new teachers find themselves, it may be the ideal metaphor for understanding knowledge building as an educator. However, pre-service teachers were not oriented to the endeavor as bricoleurs, they were instead oriented towards a more linear mastery of techniques process. They expected the experience to be progressive; they expected to struggle at first and then get better at enacting teaching as they go along. They were also (frequently) unaware of how conceptually distant the two worlds are. And once they entered the classroom as teachers-of-record the external demands made it even more difficult for them to see those fault lines.

## Chapter 7: Teacher Thinking

This chapter will illustrate how a traditional master-apprentice model, an emphasis on the performance aspects of teaching, and learning to teach as bricolage influenced teacher thinking both during the student teaching practicum and once they became teachers of record. The traditional master-apprentice model encouraged pre-service teachers to think of their cooperating teachers as models to emulate, the privileging of the performance-aspects of teaching encouraged pre-service teachers to think of their own work as a case that is presented for evaluation, and the process of learning to teach as bricolage required them to piece together a set of personal and professional experiences as they made sense of their learning-to-teach experiences.

As novice teachers make sense of their learning-to-teach experiences, they attempt to piece together coursework, their own commitments, and practical demands as they link theory with practice. Ertsas and Irgens (2017) offer a useful reconceptualization of the theory-practice dichotomy as a continuum, or graded theory. They argue that instead of seeing them as a divide, we can understand it as a gradation. T1 is the, often unarticulated, theory in practice, that guides teacher decision making, T2 is a teacher's articulated theory, which is not always easily accessible as it is often tacit in nature, and T3 is a generalized theoretician's theory. They argue that professional theorizing should move teachers through this process from T1 to T3 and back again, but many schoolteachers only operate with T1, and pre-service teachers are not provided with the tools to move through this process of professional theorizing. Instead they are apprenticed into the schoolteachers' primary

mode of T1, which is often driven by strategies that are immediately effective and shaped by the external forces that maintain the status quo in education. The following sections illustrate how novice teachers utilized these different levels of theory, demonstrating how the apprenticeship structure, privileging of performance, and process of bricolage complicated the process of professional theorizing.

### **Student Teacher Thinking**

While most of the focal participants had complex ideas about teaching and learning in the abstract, these frequently did not translate into their teaching practice. One of the ways this became apparent was in their discussion of student thinking, particularly when students were struggling with a concept. When asked about what they thought students were having a hard time with, participants would frequently say that they just thought the PK-12 students needed more practice. One particular instance with Manu, a pre-service teacher from Midlands, demonstrates this finding. As part of the pre-study survey, when asked how he thought students learned best, Manu wrote:

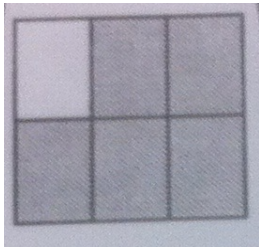
I believe students learn best through authentic engagement with content and peers in situations that provide students the opportunity to independently construct ideas, and listen to others' and share thoughts with others (Pre-study survey, January 2015).

His ideas resonate with his program's commitment to social constructivism. He felt that students learned best in collaboration with others as they engage with authentic content and construct their understandings about new ideas. This demonstrates professional theorizing at level T2, an espoused theory, and it appears to be aligned

with (and likely influenced by) Midland's pedagogical orientation. Manu was also incredibly interested in language development. He spoke four languages and before entering the program, he had worked as a language teacher. He decided to pursue a teaching credential and a Masters degree, in part, because he was interested in potentially running a language school abroad. He also felt that U.S. schools were doing a disservice to their students by failing to introduce most language instruction until high school, which was one of the reasons he chose to pursue a bilingual credential.

However, his complex ideas about learning as a constructive process did not always translate into his teaching. The example below occurred during an observation in his placement classroom on a solo day in March of 2015 when Manu was teaching a math lesson on fractions. To be more specific, he was leading students through a worksheet on fractions. Half of the class was on the carpet with Manu while the other half were working at their desks playing math games or completing a math packet. Manu did not have a formal lesson planned for the day, which was not uncommon for solo days. He had also been absent from the classroom for the two previous days, so his cooperating teacher (who was in and out of the room during the entire day) would quickly describe the lessons to him before he would lead them. This meant that he had likely not seen how fractions had been introduced to the students.

Over the course of the lesson, I witnessed Jose, a third grader in the class, struggle with the concept. The lesson was on identifying fractions using shaded boxes on a worksheet, like the one below.



**Figure 2: Fraction Image from Worksheet**

Manu described how students should complete the worksheet by giving simple process-oriented instructions. He did not model his thinking or get students to elaborate on theirs. While his linguistic commitment came through in his brief instruction, his constructivist ideas did not. Manu was particular about the kinds of language students used; he expected them to say *dos quintos*<sup>39</sup> (two fifths) instead of *dos de cinco* (or two over five). The students were expected to write the accurate fraction below the image, in this case  $5/6$ . As an entire group, the students seemed to quickly grasp the process necessary to correctly complete the worksheet without necessarily understanding the concept of fractions. They simply used the visual cue to write the fraction, and they understood the process - to put the number of shaded blocks over the total number of blocks. However, many of the students would get mixed up, getting one question correct and then making a mistake on the next one. This was not only because they were trying to finish quickly, but also because they lacked conceptual understanding about what a fraction is. When students were finished with the worksheet, they would show it to Manu, who would quickly review

---

<sup>39</sup> The lesson was in Spanish.

it, directing them to correct any answers that were wrong, and then he released them to return to their desks. As the other students were working and Manu was reviewing completed worksheets, I watched Jose count the parts of a  $\frac{1}{4}$  shaded circle four times. Another student stopped to help him.

“Un cuarto”, the other student said.

Jose asked him about another “Es este uno de uno?”

Manu then noticed Jose struggling and responded “Es que parte entero, es un entero, si.”

Manu watched Jose and he seemed to get it, if slowly. There was a multi-part exchange between the two of them over a box with 10 parts, 7 of which were shaded, Jose wrote  $\frac{10}{7}$ .

Manu asked “Que es?”

Jose responded “Diez y siete.”

Manu then asked “Diez sobre siete?”, so Jose, still confused wrote  $\frac{3}{7}$ , but Manu did not notice.

Jose went on to write,  $\frac{1}{3}$  as  $\frac{1}{2}$ . Manu saw this issue and tried to explain. “Si, uno y dos, pero parte es uno de tres. Es un parte de tres partes.”

He then saw the earlier issues with  $\frac{3}{7}$ , and Manu said to Jose, “La fraccion es cuantos partes estan sombreado de las parts totales. Tenemos en total?”

Jose responded, “Siete”, even though there were ten boxes.

Manu said to him, “Tres partes de siete?” with a tone of voice that indicated to Jose that he was incorrect.

Jose wrote,  $\frac{7}{3}$ , then  $\frac{10}{7}$ , and Manu responded incredulously to each one, which signaled to Jose that he was incorrect again. But Jose was still clearly confused. Manu eventually explained the exact answer and process to Jose, who then did a few correct on his own before he got mixed up again.



While Manu attempted to talk Jose through the process of writing down the correct fraction, he did not refer to the anchor chart (that was behind him on an easel, he did not even refer to the chart during his instructions at the beginning of the activity) or try to use manipulative or some other concrete tool to help Jose develop an understanding of the concepts of fractions. Jose left the activity without Manu reviewing his completed worksheet, and it was obvious that he neither understood the concept of fractions nor the process for turning a visual image of a whole broken into parts into its numerical representation. During a follow up interview the next day I talked with Manu about Jose's confusion, and his approach to it.

Rebecca: Yesterday when the students were working on their fractions thing on the carpet and Jose was having trouble with it, talk to me about what you were thinking then and how you went about trying to support him.

Manu: I try to push them so they can figure it out themselves. Did you see the mistake he was making?

Rebecca: Yeah.

Manu: Okay. I was like, seven over three, does that make sense? What does the bottom mean? What does the number on the bottom mean? Is that how many are blank or is that how many parts we have in total, in all? He was getting some of them correct and then he kept messing up on the bigger ones, the larger numbers. He started figuring it out. I tried to explain what the number on the top means and what the number on the bottom means and then I think he was able to get it. He was still getting so fed up, seven, three. It's three on the bottom. And then I was like, "Oh, are you counting the white ones or are you counting the black ones?"

Manu's assessment of the students' struggles was limited in scope. Exhibited by both his actions during the lesson and later when he reflecting on it during our interview the following day, Manu failed to see that most of the students, even the successful ones, had mastered the process of the worksheet without necessarily having to

demonstrate conceptual understanding of fractions themselves. And Jose, specifically, was struggling to master the process - revealing acutely his lack of conceptual understanding. Jose had no concept of what a fraction was, and simply understood that for the purpose of this lesson, writing fractions involved counting the boxes (shaded and unshaded) and ordering those two numbers in some way that was never clear to him. Both the support Manu provided to Jose, and his description of it later prioritized correctly completing the worksheet rather than constructing an understanding of the concept. Manu struggled to follow student thinking in a way that allowed him to examine Jose's current understanding of the material, so that he could provide the necessary support. He was unable to adapt to the moment and follow student thinking, the task that Dewey (1904) felt was of primary importance for teachers. Despite his abstract conceptions about learning, his lesson did not involve "authentic engagement" or provide properly scaffolded opportunities for students to "construct ideas". His espoused theory (T2) did not match his tacit, unspoken, in practice theories (T1) that actually guided his actions. While he was able to develop an espoused theory (T2) informed by general, abstract theories he had learned about in his coursework, these didn't translate into his in-the-moment decision making. This illustrates a breakdown in transfer between the formal and informal sites for teacher learning within the teacher education programs. Manu had developed an abstract understanding of learning that did not translate into his pedagogical choices either during the lesson or afterwards. Manu's example also underscores the need of child study assignments that help pre-service teachers build the muscle of attending to

student thinking and examining their current understanding, so that they may more effectively address misconceptions. Manu privileged getting through the activity and making the performance look right (and, indeed, students were well-behaved and attempted to follow his instructions) instead of supporting students' knowledge construction. During our conversation, Manu pointed out that he attempted to give Jose, and the other students, "a language" for talking about fractions. And his hope was that using academic language would help the students develop understanding. In this way, his commitment to bilingualism and language development came through in his teaching, but they were not helping students construct an internal mental model of what fractions are.

This example of Manu's teacher thinking weaves together the three findings previously discussed. This occurred during his solo days (an instantiation of the apprenticeship structure), where he had not carefully prepared for the day, and instead treated it as an opportunity to take over the front of the classroom work and move students through a set of activities (privileging the performance aspects of teaching). One of the effects of a focus on performance, particularly during practice teaching, was that while pre-service teachers, like Manu, developed the skills necessary for it to appear like they are teaching well - managing behavior, directing activity, and engaging their students, rather than following student thinking so that they can accurately detect misunderstandings and support students in developing conceptual understanding. This example also demonstrates the process of bricolage in teacher development. All lessons require teachers to bring together a multifaceted set of

demands: their personal goals, the requirements of state standards, their understanding of learning theory, the lesson's material(s), student behavior, the range of academic skill among students, the teacher's content knowledge, and the goals of the cooperating teacher. With limited prior preparation, Manu was attempting to bring together his goals around language development, his cooperating teachers' plan to work on fractions that day, the worksheet he was expected to lead them through, his developing understandings of cognition and constructivism, managing student behavior, and orchestrating a successful lesson. During this lesson some of these demands were emphasized while others were not. His commitment to language learning (which was reinforced by his program's emphasis on academic language) and the particular materials for that lesson (the fraction worksheet) were prioritized. While his decisions during the lesson may reveal how the structure of apprenticeship and emphasis on performance shaped this lesson, what is particularly important is his sense-making after the fact. While Manu recognized that being away from his placement classroom for several days was not ideal, he did not think it was a major hindrance to the day, and for the most part, felt like his solo teaching day was successful. Notice how he emphasizes his ability to orchestrate a classroom.

Considering that I haven't been there [the last two days] and I haven't had communication with my cooperating teacher since then, it was okay... I feel very comfortable that I can lead a class.

Lessons are not always successful, even for teachers with years of experiences, but Manu's inability to follow Jose's thinking both during the lesson and afterwards demonstrates how his emphasis on making teaching look right might be at the

expense of effectively facilitating the students' concept construction. This has implications for pre-service teachers' development and decision-making (i.e. professional identities) once they become teachers of record. As novice teachers engage in a complex act of bricolage, piecing together their prior commitments and experiences, their teacher education coursework, and the PK-12 school demands, they may only be able to attend to a limited range of ideas and commitments at any one time. Manu maintained his commitment to language development (to the point of overextending its utility) and privileged the visible aspects of leading students through the activity, but he failed to attend to his espoused theories of learning that would have likely directed his attention to Jose's struggle to develop a conceptual understanding of fractions. In order for pre-service teachers to be attuned to these inconsistencies, and teacher education needs to specifically attend to supporting students as they move through the process of professional theorizing, moving from through the cycle of linking T1 to T2 to T3, which would be an ideal role for teacher supervisors to play. As demonstrated in the previous chapters, this was not the primary function of supervisory support. Instead they also focused closely on the particulars of the lesson, rather than relating those specifics back to the abstract theories pre-service teachers were learning about in coursework (T3) or the espoused theories (T2) of each pre-service teacher. This would require teacher supervisors to be better connected with program coursework and course instructors, a clearer articulation of common program commitments and what those might look like in practice, and purposeful pedagogical attention to the learning to teach as bricolage.

## **Decision Making as the Teacher of Record**

The long-term effects of this process of learning to teach as a performance were that the pre-service teachers did not develop a cohesive philosophy that they could then use to evaluate the demands placed on them by their future school sites. Repeatedly as teachers-of-record the focal participants started to take up the demands of their placement school even when they did not align with the program's vision or what they previously thought was good teaching. This section will describe what how this manifested for three of the focal participants. These three examples demonstrate the mechanisms through which the external demands operating within the world of PK-12 schools can shape novice teacher thinking.

### **Jamie**

Jamie, a Midlands pre-service teacher completed her student teaching at a school that had a very unique curriculum. The teachers in fourth and fifth grade carried out what they called a social justice curriculum, where over the course of the year, their integrated reading and social studies content addressed issues such as slavery, the oppression of Native Americans, and women's rights. Jamie enjoyed her time there and her work with Marjorie, her cooperating teacher. While Marjorie used a variety of interactional patterns in her classroom, two were regular components of most lessons. The first was a form of directed note taking, where Marjorie gave a mini-lecture and modeled notes on an overhead projector that she expected students to take in their notebooks. This was a teacher-centered style of instruction that

implicitly relied on a transmission model of teaching and learning. The second was a packet of worksheets that corresponded to the curricular unit that students completed as classwork and homework, which typically engaged students in individual, highly structured, and often rote practice of the material. One of Jamie's few critiques of Marjorie was her use of those packets.

When it came down to it, work was produced [in the packets]. That is just not my style... She's very, for lack of a better term, controlling about what gets presented and how it gets presented... Same literature packets for everything and I feel like, I don't think I want to do it [that way]. They've already done this like five times for different books. I think I want to try to like mix it up a little bit and have more instead of just filling out the same packet for different book every time.

Aside from Jamie's critique of the packets as a repetitive form of practice, there are a couple of other important linguistic moves that reaffirm both the traditional master-apprentice model during the practicum and the performance-based episteme. The first sentences "when it came down to it, work was produced" demonstrates how visible, external, accountability was applied to PK-12 students. This is an outcome form of performance evaluation, by requiring students to "produce" something concrete for evaluation of their learning (or at least their effort). This fits within the current episteme emphasizing accountability and performance for teachers (and students) through visible, concrete means. The second is how she describes her cooperating teacher as "controlling about what gets presented and how". This demonstrates how Jamie, like the other focal participants had limited agency during their practice teaching to make professional decisions about content and participation structures.

And although Jamie's espoused theories here are vague, they indicate an interest in novel (or at least more engaging) forms of practice.

Marjorie had developed a series of packets for all of her curriculum; there were packets for math, social studies, and English-Language Arts. Marjorie used the same packets every year for every student. While they aligned with the content being taught in the class, they served primarily as opportunities for very directed and, at times, rote practice. While Jamie criticized the use of packets as a student teacher, when she became a teacher of record at the same grade level and school the next year, she used all of Marjorie's packets to guide her instruction. There were benefits to this. They aligned with the school's curriculum, they eliminated the need to create materials, and they had been unofficially sanctioned as good practice, because they were used by her cooperating teacher. During an observation in the fall of Jamie's first year as a teacher-of-record, students were taking notes in a composition book on how to do basic calculations with numbers with decimals. It was a teacher-centered, didactic lesson that was followed up by practice in students' packets. Students were not disruptive, but they did seem both bored and confused. During an interview, Jamie expressed shock that students had struggled to grasp the concept, because she had covered the material through the lecturing, note taking, and packet practice. This example demonstrates how due to the combination of the master-apprentice model and forces at the school site, Jamie jettisons her earlier critiques of the directed, rote process she inherited from Marjorie.



We all took these notes, step by step. Then we had a whole packet of decimals. [I tell them] take your binders with you, take your notes with you so when you're doing them you know how to do it and it'll be on the test.

The apprenticeship that Jamie began with Marjorie continued once she became a teacher of record. This socialization was likely heightened by the fact that she took a teaching position in the same school and at the same grade level as her student teaching placement. Her prior critique is not only absent, her reflection of student performance absolves her of responsibility and blames students for their poor performance on the math quiz. Like Manu, her analysis of their current understandings of decimals focused on procedural mistakes rather than conceptual understanding: "I think they're struggling with the concept that you can't just do the math, the decimal points have to be aligned with the adding and subtracting." Jamie's decision making as a teacher of record exemplifies how the apprenticeship in her student teaching placement, which required her to use the same practices as her cooperating teacher, and a teacher education experience that privileged performing these practices effectively rather than navigating the complexity of applying the theories of learning she had learned in coursework during her student teaching placement, meant that the socialization (or apprenticeship) in the PK-12 school where she worked washed out her earlier objections to Marjorie's methods. She had not been supported in the process of professional theorizing, because the apprenticeship that she completed with Marjorie did not guide her through the process of explicitly linking the T3 abstract theories she was learning about in her coursework and her T2 (espoused) and T1 theories guiding her practice.

## **Manu**

A similar situation happened with Manu, who also took a teaching position at the school where he completed his student teaching placement. During an observation in the fall as a teacher-of-record, Manu's students were using reading packets that were developed by someone else at his grade level. The packets were being used in leveled reading groups (reading different texts), and all students were expected to complete the same graphic organizer for a reading comprehension strategy. The graphic organizer they were working on that day was called Discussion Director, and the reading strategy was asking questions. The students were, ostensibly, supposed to come with questions they had about the text that they could have a discussion about, which would allow for inquiry into and deepen their understanding of the text (Pressley & Allington, 2014). There was time set aside for reading and time afterwards where they were supposed to discuss and complete their organizer. Manu walked around the room, briefly checking in with groups and providing general reminders to write down questions. Manu walked over and tried to direct the task for the group I was sitting with, who were reading *Tales of a Fourth Grade Nothing* by Judy Blume.

While looking over one of the student's shoulder at the book, Manu asked them, "What does measly mean?" When no one responded, he then said, "No one knows what measly means? What are we doing right now? We're writing questions." One of the students says, "ok", and they all write down, *What does measly mean?* on their graphic organizers, as Manu walked away to check in with another group. However,

they did not discuss the question, and instead just sat there as a few members of the group continued to read on their own. More importantly, this was not a discussion question; it was a basic factual question. No one in the group attempted to determine the meaning using context clues, a dictionary, or other resources. They did not even ask Manu what measly meant, because his directions were to write down questions, not to answer them. Manu came back a few minutes later and prompted them to write another question, and one of the boys responded, “I don’t have any questions.” Manu suggested, “Think about the main idea, what would be a question to ask about the main idea?” He walked away again and the students in the group dutifully came up with some additional questions to write down. They chatted about their questions as they wrote them, but they never actually discussed the *Tales of a Fourth Grade Nothing*. One student wrote, “how to spell juice?” Another responded, “Oh that’s a good one, I’m gonna’ write it.” They did eventually come up with some questions that were not simply factual and might generate some discussion, like “How did Fudge reach the flowers?” and “Why does Fudge like socks?”, but they never tried to answer any of their questions. Their work with the packets was focused on the act of visibly performing the reading strategy by recording their work on a graphic organizer that they were held accountable for, not on using the reading strategy to deepen their understanding of the book or even to have a discussion about the text with their peers. Within an era of accountability judged by external performance indicators, the productive use of reading strategies gets lost (Palincsar & Shutz, 2011).

When I asked Manu about the use of reading packets, he admitted that they were a new addition to his instruction and were developed by someone else at the grade level. He thought they were fine and felt the trouble students were having was because the packets were new. He failed to recognize that the activity of forcing them to make meaning of the text in a certain way undermined the intent of reading comprehension strategies. While reading strategies are meant to help students make sense of the text, the students in this group were not wondering anything about what they had read. Manu came over and tried to direct the task for the group, and they eventually developed some rather forced questions, like “how to spell juice,” to meet his objective. His directions focused on the process of completing the graphic organizer rather than on facilitating student discussions that could help them glean meaning from the text. Much like Jamie, Manu prioritized students completing a concrete task over supporting their thinking and meaning making as they read the text. While there are always multiple influences, including this being a new classroom practice with materials that he had not personally developed, it may be that Manu’s apprenticeship experience in a practicum that emphasized the performance aspects of teaching meant that he was less adept at following student thinking than “leading a classroom” (as he put it) and managing student behavior.

Although Manu’s espoused theories (T2), emphasized facilitating student discussion and supporting their comprehension during reading groups: “I’m trying to more facilitate, facilitate those discussions, facilitate that deeper comprehension. Asking them questions, reminding [them that] this is what we need to do”; he did not

recognize the lack of authentic discussion around meaningful questions during the reading groups, which could have revealed a lack of comprehension on the part of the students. But Manu was not pursuing student comprehension as he supported them during the lesson. Instead he was focused on treating the graphic organizer as a task to complete by “reminding [them that] this is what we need to do.” The privileging of the performance aspects of teaching encouraged Manu to think both of his own work and the work completed by his students as a visible performance to be evaluated. When reflecting on the use of the packets during reading instruction, he admitted that the packets themselves may not support reading comprehension: “We only want anything written as some kind of accountability... They shouldn’t be spending a lot of time writing.” However, Manu framed the accountability component of the graphic organizer as more important than students’ sense making of the text they were reading.

### **David**

A final example comes from David, a graduate of Coastal Academy illustrates how external forces shape school arrangements and teacher thinking within them. Like Manu and Jamie, David also took a job at the school where he completed his pre-service practicum. His grade level team had decided to level all of the fourth and fifth grade classes at his school to better support students and target instruction. David was responsible for teaching social studies and science content to all of the students.

He described his approach to social studies and science instruction as one that would support learning in the other content areas.

I feel like we get caught up in a lot with the academic levels in schools, and thinking about how they're not at level. They're not in English at level. They're not [at the desired] math level. They're not at any of the levels, but in social studies and science, they're not expected to be at a certain level. They're just expected to learn all this stuff, some way, some how. I thought, if I can make it fun and engaging for them, then that will transfer into their learning about these things, in math, and in English, and in writing. They'll want to write about the explorers, because they know all about the explorers. They'll want to learn about math, because they know how important it is in science. I feel like it's my job to make sure that they're having fun, and they're engaged, in my class, so that they can keep doing things that matter to them, in writing, and in math, and explore different things.

In addition to outlining his goal of making social studies and science content engaging, this quote demonstrates how the tested subjects take precedence over the non-tested ones, because of the performance episteme in education. This had started to shape David's pedagogical thinking and decision-making. During an observation, I noticed that one group (level) of students was at a different place in the social studies unit than an earlier group. I inquired about this and David said that he saw this group of students less frequently, because they had the lowest test scores in writing and math, and, therefore, received more writing and math instruction than the other groups. Meaning that the students who were at lower academic levels in writing and math had less access to other kinds of content. And David indicated that while this arrangement wasn't ideal, it was necessary.

That's just the way it worked out, because, in terms of where the kids are, that is our lowest academic group, for SpED reasons, and just academically, they're really low. That means that they're low all across the board, in math, and writing, and language arts. The need falls on math and writing, always, so they need five days of math. If they have five days of math, then they have to

have four days of writing. They can't do that unless they have less social studies and science time. It's just the way it works. It's the way it works out, and it's unfortunate. I'm getting the least amount of minutes with them, but they need math and writing. That's just kind of how it is.

The privileging of tested subjects (mainly math and English Language Arts) at the expense of untested subjects has been critiqued by social justice advocates, because it keeps many low-income students from accessing instruction in social studies and science (Diamond & Spillane, 2004; Elmore, 2003). Despite his social justice commitment, David rationalizes this choice made by his school level team because “they need math and writing” more than they need social studies and science instruction. David’s T2, or espoused theory, has been shaped by the external accountability demands that have institutionalized and become a part of school culture as practicing teachers privilege tested subjects at the expense of untested ones, even as the terrain around accountability has shifted during the passage of the ESSA and the shift to Common Core State Standards in California.

All three of the pre-service teachers profiled in this section took initial jobs at the schools where they had completed their student teaching practicum. Both David and Jamie even replaced their cooperating teachers. This, likely, encouraged them to adapt the practices in place at the school more quickly and with fewer questions than the other focal participants, who took positions at schools that were different from the ones where they completed their student teaching. While this pattern of privileging technical, instrumental was consistent across the participants, it was particularly pronounced for these three. This may complicate Goldhaber et al.’s (2017) finding that new teachers whose student teaching placements were similar to their first full

time teaching jobs were more effective (using standardized test score measures) than other new teachers. They may be better socialized to the schooling practices, which may make it even more difficult for them to link their espoused theories (T2) and practice-based theories (T1) with the abstract general theories from their teacher education coursework. This process of professional theorizing requires intentional linkages between the formal and informal settings in teacher education that excavate the competing beliefs and values that underlie common practices, including features of the performance episteme.

The apprenticeship structure in both teacher education programs privileged the practical components of the pre-service teachers experience over the conceptual and theoretical ones. This model led to the tension between the programs' goals of developing teachers when they are apprenticing to schoolteachers and privileged of the performance aspects of teaching. This is clearly captured by David as he described one of his early experiences sitting in on a planning meeting with the grade level team at his placement site.

The whole theory, I really appreciate the theory. What I find is that, after learning about theory in the classroom or wherever you take your courses are ...There really isn't that much more time to talk about it, when you're in the classroom. Once you enter the classroom, you're already expected to know a certain degree of things, and you're supposed to engage actively in certain things. While I personally knew a lot of the words. I knew ZPD. I knew multicultural education. I knew what those things were. But I had no idea what they meant in the general context of my classroom. I didn't know where they fit. Learning about theories, like constructivism and behaviorism, I could name a couple of names here and there but when I was with my grade-level team, I didn't know who the hell we were talking about. I can't just drop a name and be like, "Oh, are we talking about John Dewey when we're planning for reading and writing, or something?" No, because it's not about that anymore.



David's quote was particularly troubling. David was a thoughtful pre-service teacher who found the coursework on theory intellectually rigorous and challenging. And while he was looking for a way to make concrete connections between what he learned in his courses and the everyday work of practicing teachers, the community of practice available at the school did not use the same discourse. Therefore he assumed that the same ideas undergirded what teachers were doing, despite a lack of evidence. And he learned, quickly, that the theoretical ideas from his university coursework had no direct linkages in the PK-12 school. Furthermore, he learned that it was inappropriate to try to reference them or use them to explicitly guide his instruction. The apprenticeship that David began during his residency year and continued as a teacher of record the following year indicated to him (in mostly implicit ways) that the abstract ideas that interested him in his graduate coursework were not relevant to his classroom teaching work, because, as he put it, **it's not about that anymore.**

It may be that these two teacher education programs are not preparing teachers to follow student thinking, and are instead training them to perform the thing called teaching. Pre-service teachers learn early in their teaching solos that an adequate performance does not require much preparation, and they, therefore, do not always recognize the disconnect between what they purport to think about teaching and learning in the abstract and what they actually do in their practicum classrooms. This is not to say that there are not teacher educators trying to get pre-service teachers to follow student thinking. There are and have been for decades, but it can not overcome the other parts of their experience that encourage taking on the role of the teacher as

the primary component of learning to teach. This actually serves to further the divide between theory and practice, because novice teachers are not apprenticed into the skills that would allow them to inquire into the complex process of professional theorizing.

### **Social Justice Continuum**

Since both of these programs were preparing social justice change agents, I also examined pre-service teacher thinking related specifically to social justice. Social justice practices in teacher education can be understood along a continuum. At the far left end of the spectrum is an awareness about issues of social and educational inequity, as well as how schools can serve as institutions that maintain these relationships.



**Figure 3: Social Justice Continuum**

The literature on teacher education programs illustrates that much of the work on social justice and equity is focused on building awareness and developing a set of dispositions that counter hegemonic power (e.g. deficit perspectives of non-dominant communities) (Anderson & Stillman, 2012; Garcia & Guerra, 2004). However, dispositions are not enough, teachers need to develop a set of pedagogical practices aligned with those dispositions (Grossman, Hammerness, & McDonald, 2009; Sleeter, 2001). Moving right along the spectrum are inclusive pedagogical

approaches. Inclusive practices utilize content that represents diverse populations and affirms the identities of non-dominant students (Lee, 2005; Moll & Greenberg, 1990). The next stage on the continuum is critical social justice education, which extends beyond inclusive content to critically analyze how power operates in society and examine the way that social structures and practices privilege some groups of people over others (Hyland, 2005; Nieto, 2002; Souto-Manning, 2010). The far right end of the continuum is transformative practices, which not only critique institutional practices, but offers students opportunities to engage in design and action (Cadiero-Kaplan & Smith, 2002; Freire, 2001; Hull & Nelson, 2005; Souto-Manning, 2010; The New London Group, 1996). While the continuum is a useful framework for analyzing how these pre-service teachers were developing identities as social justice educators, it implies and renders linear a process that is complex and iterative (Hyland, 2005; Philip, 2011). These different positions on the continuum can demonstrate complexity and depth of social justice approaches to education, but teachers may not necessarily progress along the continuum in a linear fashion. Developing as a social justice educator also involves the iterative process of professional theorizing linking abstract general theories to personal and pragmatic ones.

Each focal participant's location along this continuum varied based on their prior experiences with and understandings of social justice. Their position also changed during the course of the year of study, based on the teacher education program experiences, both within the university and PK-12 schools. For example,

Scott, one of the participants profiled in the last chapter, was first exposed to issues of privilege and inequity during his teacher education program coursework. He developed a level of awareness about social and educational inequity and wanted to develop some inclusive classroom practices, but because of constraints during his student teaching placement, he was not able to. For several of the focal participants, particularly participants of color, inclusive social justice education was embodied in their perspectives of themselves as role models to their students. Both Vida and David, who were residents at Coastal Academy, reported that it was important for them to serve as role models for students that they felt were like them. They felt that as Latinos from low-income backgrounds, they could demonstrate to students that getting a college degree was achievable. Their work as bilingual teachers also fit into this model of inclusive social justice education. David put it this way:

I feel like that transitional phase in fifth grade is so crucial to their development that I feel that they need to have a strong role model. I feel that's where my challenge comes in of, I need to be that modeling, to be that change. To show them that they can be successful, but that they need to start it in fifth grade.

Similarly, Vida said

We come from this background, and we are here as role models for our kids. I think in that way, it is some kind of social justice approach. Just pushing them, and just showing them that, "You can do it. It doesn't matter." I don't think they're aware of what their culture really is, or anything like that, yet, but just giving them that confidence and saying, "Yeah, you can. You totally can."

Serving as a visible cultural role model who both spoke and taught in Spanish were the primary ways that they enacted their social justice commitments. Both of them had developed awareness about issues of equity from their undergraduate

coursework, which was one of the primary reasons they chose Coastal Academy. Their understandings of inequity were supported during their coursework experiences. There were two specific frameworks provided by the weekly Coastal Academy practicum course, which emphasized reexamining the common-sense narratives about low-income school districts (Adichie, 2009; Eubanks, Parish, & Smith, 1997). Their personal identities, high expectations for students, and instruction in Spanish were the primary ways that they enacted their social justice commitments. Both David and Vida occasionally engaged in other social justice approaches; Vida referenced a lesson in her placement classroom on Sonia Sotomayor, which is an example of inclusive curriculum, and David once had students write about social issues, like homelessness, which required them to think critically about how power operates in society. However, these approaches did not become integrated into their professional identities. This was in large part, because their cooperating teachers did not consistently incorporate an inclusive curriculum or utilize critical or transformational practices. The approaches used by their cooperating teachers were influenced by the broader educational culture that sees social justice education as supplemental to mastering “core” academic content that schools, teachers, and students are held accountable for.

While the specifics differed for each person, this trend was similar for most of the focal participants. Yaotl, a pre-service teacher at Midlands, entered her teacher education program with experience using an inclusive approach in the classroom, and a personal critical perspective. Her understanding of social justice education began as

a personal commitment to educating other adults about experiences of oppression, however she was not really able to talk about what that would look like instructionally with students. She was interested in developing pedagogical skills aligned with a critical perspective on social justice, but she had little opportunity in her practicum to try out these practices. Instead of developing an overt, critical, social justice pedagogy, she utilized an inclusive approach. For example, one unit she was required to teach focused on workers in the community and included published curricular materials, yet she removed the picture of a male doctor and covered it with a printout of a female doctor before using it in the classroom. While her commitment to equity and social justice motivated her to enter the profession and this particular program, and the coursework in her program reinforced her dispositions, she had few experiences in her practicum that allowed her to practice leading students through a critical analysis of how power operates in society. This was true for the other focal participants as well; none of the pre-service teachers left their programs with the capacity to enact critical or transformational practices. Where teachers were at on the continuum depended on their prior personal and educational experiences, and while most of the focal participants (all but Scott) had previous awareness of issues of inequity, participants of color were more likely to have had personal experience with it. However, inequity is an intersectional issue and focal participants' experiences also varied along the lines of class. Manu was a Latino male, but he was raised in a well-educated, middle-class family. Therefore he did not see himself as a role model to low-income Latino students in the same way that Vida and David did.

There were also important linkages between teachers' perspectives on learning and teaching and social justice education. For Grant, a Coastal Academy resident whose social justice commitments were intertwined with his classroom management struggles, the technical-rational approach that was implicitly encouraged by both the apprenticeship structure and the privileging of performance aspects of teaching became more appealing to him because it provided concrete, decontextualized strategies that he could easily apply. Over the course of the program, he actually moved towards a technician model of teaching, even though he entered the program with the most interest in and experience with T3 (abstract and general theories).

I mean, well you look at [Lisa] Delpit and [Beverly Daniel] Tatum and all these people, and they're awesome and they open your eyes, but they don't point you in a direction, in some way. That's my biggest problem with Delpit is it's like she gives advice, but it's not grounded in a way that I can easily imagine it happening in school.... Like I don't read the paragraph and be like, "Oh, I see how this would be in my classroom." Whereas if I read, *Teach Like a Champion*, by Doug Lemov, like you can see everything. Oh, I understand what that would mean in a classroom. Whereas [with] Delpit, you're like that's a wonderful, beautiful ideological statement, but literally, I don't know what to do today. With Doug Lemov, it feels like I know exactly what to do.

Grant's quote describes how the work of Lisa Delpit and Beverly Daniel Tatum have helped him develop and deepen his awareness of issues of inequity, particularly those faced by students of color. However, he was never sure how to apply their ideas in a classroom, because both authors provide a set of abstract, complex ideas that teachers have to grapple with, make sense of, inquire into, and (ideally) internalize into their professional identity through professional theorizing. Lemov (2010), on the other hand, describes high quality teaching as mastering his 44 techniques, most of which

are focused on managing classroom behavior. Lemov's text harkens back to the process-product vision of teacher knowledge, and its quest to identify specific, observable teaching behaviors. This simplified, control-oriented approach to teaching has gained prominence because it aligns with the deregulation agenda and promotes a technician model of teaching. These skills are easy to learn quickly; they do not require deep reflection and are not abstract. They also align with the need to control students in order to focus learning on basic skills that can be easily measured on standardized assessments, as opposed to letting students explore or encouraging them to interrogate, which require more flexibility and uncertainty in a classroom. Grant's experience demonstrates how teacher education can serve to sustain the theory practice divide, rather than close it. Much like David, he learned during his student teaching practicum that invoking empirical research and asking teachers about their the T2 (espoused theory) and T3 (abstract theory) that influence their decision making was not a common part of teacher collaboration, so he had few supports in engaging in the complex work of professional theorizing. So instead he turned to resources that require little theorizing, because they provide direct, detailed, and decontextualized techniques.

The combination of the traditional master-apprentice structure, the disconnect between goals of the teacher education programs and the practices of PK-12 schoolteachers, and the climate of accountability in PK-12 schools privileged the performance aspects of learning to teach during pre-service teacher preparation. This,



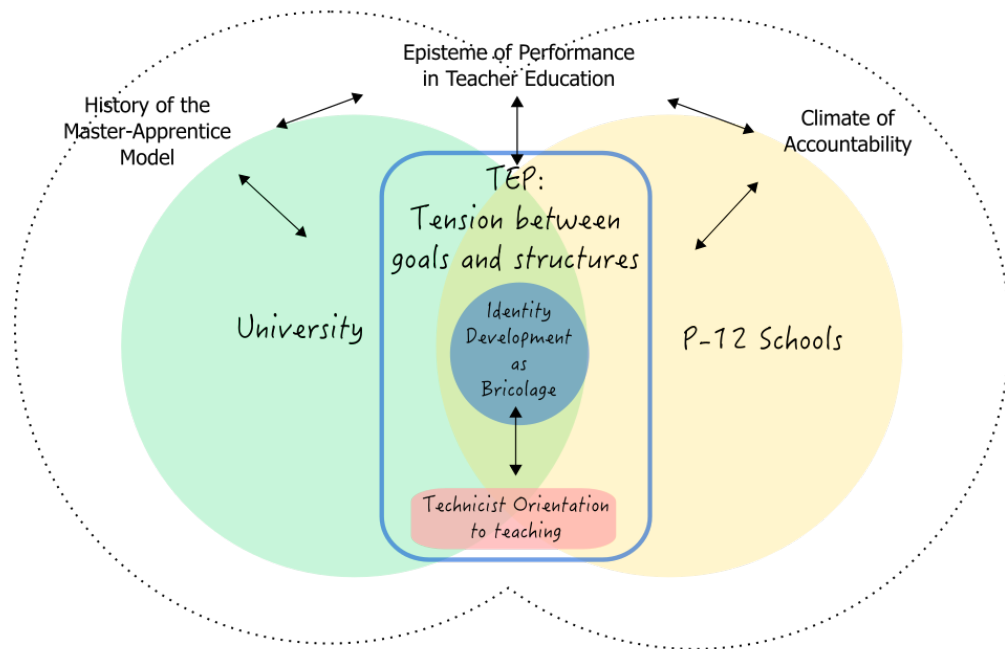
in turn, emphasized certain kinds of teacher thinking and actually served to reify the theory practice divide by privileging outcomes and a technician model of teaching.

## **Chapter 8: Conclusions and Implications**

This dissertation offers a re-examination of one of the perennial challenges in teacher education, the divide between theory and practice. Close analysis of the learning-to-teach experiences of eight pre-service teachers across two social-justice oriented teacher education programs revealed how the institution of apprenticeship (operating both as a structural feature and a discourse in teacher education) was the key organizing feature of these teachers' preparation experiences. The combination of the institution of apprenticeship and the current climate of accountability privileged the performance aspects of teaching and encouraged teachers to transform themselves into cases so that their performance could be externally evaluated. Both of these institutional forces made it particularly difficult for the teacher education programs to meet their goals of preparing change agents, because the structure of apprenticeship and the emphasis on performance implicitly encouraged (and at times explicitly required that) pre-service teachers emulate their cooperating teachers and/or adhere to the current practices in PK-12 schools, many of which continue to marginalize students from non-dominant backgrounds. These two forces (apprenticeship and performance) interacted with each pre-service teacher's personal and professional identity as he or she engaged in an act of bricolage, piecing together a teacher identity out of his/her fragmented learning-to-teach experiences. These identities were significantly shaped by their practicum experiences, chiefly whether or not they were able to apply pedagogies aligned with constructivist learning theory and social justice principles. These practicum experiences (which were shaped by the institution of

apprenticeship and reinforced the episteme of performance) presented to pre-service teachers a technical-rational version of the profession, and encouraged them to prioritize visible teaching skills (managing a classroom and getting through a lesson) over more complex and less visible tasks like following student thinking. This entire process is depicted in the figure below.

**Figure 4: Ecological Model of Teacher Development**



The result of this process may be that teacher education programs inadvertently prepare technicians for the field. There are a variety of important implications from these findings concerning program design and conceptions of teacher learning both in pre-service programs and beyond.

## **Changing the Core Technology of Teacher Education**

The first significant finding is that despite the different structures of these two programs, the institution of apprenticeship and culture of performance pervaded both. Russ Marion (1999), a complexity theorist, argues that organization change happens at three levels. The most superficial level is what he calls a paint job, a minor change to the exterior of an organization. The second level of change is structural, which involves change to the organizational parts: departments may be rearranged, flowcharts reorganized, and personnel may be shifted. The third level of change is change in the core technology; only when the change affects the core technology of an organization does it have a significant and lasting impact. Altering the core technology is incredibly difficult because of the stability of institutions. Institutional isomorphism, loose coupling, and logics of confidence push organizations toward stasis even when they attempt to make changes (Meyer & Rowan, 1977). In the case of these two programs, the changes at Coastal Academy were at the structural level and had little effect on the core technology of learning to teach. In fact, the divide between theory and practice (and between university and school) was actually greater for Coastal Academy residents than for pre-service teachers at Midlands University. Changing the core technology of teacher education demands understanding learning to teach as a set of interconnected complex systems, rather than a complicated (but linear) system (Cochran-Smith et al., 2014; Cuban, 2012). These interconnecting complex systems include the individual pre-service teacher and his/her incoming identity, the teacher education program and the ecologies it is nested within, and the

PK-12 schools where pre-service teachers complete student teaching and where they will work in the future. Change that affects the core technology (which in this case would be producing future change agents) may require a more complex articulation of how to account for the multitude of forces operating in each of these interconnected systems and providing pre-service teachers with the tools to identify and navigate these forces. The rest of the chapter explores how teacher education may better support pre-service teachers in this process.

### **Supporting Professional Theorizing**

The examination of teacher thinking revealed a consistent gap between teacher theorizing and teacher practice. This reframes the traditional notion of the gap between theory and practice, which understands theory as the lofty, abstract, and esoteric ideas of university professors and practice as the only thing that matters to classroom teachers. Instead, this analysis revealed how pre-service teachers with complex ideas failed to apply them in practice and often failed to recognize the gaps between their espoused theories and the tacit (or latent) theories operating within their practice. This is partly attributable to the different norms of the university and PK-12 school, and it also reflects that institutionalized ecologies of classroom, school, and the broader policy environment. It reveals that pre-service (and practicing) teachers need to be intentionally and explicitly supported through a process of professional theorizing across the two worlds, so that pre-service teachers are able to apprentice into a professional community where teachers examine the linkages between their

own experiences, their tacit understandings (by making them explicit), and the literature on learning, teaching, schooling, and social justice. This may increase the importance of the teacher supervisor and require that they become better integrated into all parts of the teacher education program in order to serve as a purposeful linkage between coursework and placement classrooms. This likely also requires that their support expand from the primary practice of targeted assistance to assisting teachers as they link T1, T2, and T3 level theories so that they can develop a cohesive teaching philosophy that guides their practice and allows them to better evaluate the myriad of educational reforms and initiatives (which may be institutional carriers) that come their way.

**Following student thinking.** One of the primary areas for professional theorizing should focus on following student thinking. Teacher education programs need to examine how best to prepare new teachers to follow student thinking, at least as well as they prepare them to orchestrate a classroom. This finding is at the heart of the gap between theorizing and practice. Since teaching was understood primarily as an act of performance, the less visible but more complex (and arguably more important) parts of teaching were de-emphasized. The analysis here outlines how performative technologies invited teachers to present themselves as cases for evaluation, and teacher education programs can examine how these technologies (from performance assessments, to planning assignments, to solo days) can be adjusted to better support teachers in examining and following student thinking both in the moment as well as after a lesson is complete.

**Social justice continuum.** Another priority for the process of professional theorizing may be considering how best to support pre-service as they move along on the social justice continuum. Both programs were successful in helping teachers develop (or at least deepen) a set of equity-oriented dispositions. But these dispositions sometimes faded (as was the case with Scott) or failed to result in aligned pedagogies. Greater attention to the social justice continuum would require conceptualizing pre-service teachers and teacher education programs as complex systems and understanding how each pre-service teacher's position on the social justice continuum will be different based on their incoming identity. While movement along the continuum is not necessarily linear (although the construction does imply that), it may be a useful heuristic for teacher educators and pre-service teachers, because it could illuminate which kinds of practices (inclusive, critical, transformative) they have or have not had an opportunity to engage with during their practice teaching.

### **Making the Divide a Pedagogical Object**

Given the contested nature of teaching and teacher education, pre-service teachers need tools to more effectively navigate the divide between university and PK-12 school. In both programs, this divide was not an object of study for pre-service teachers. Instead the programs minimized the divide, in order to make the transition between worlds as smooth as possible for the pre-service teachers. However, this simply encouraged pre-service teachers to look (and sometimes create) coherence.

This was one of the reasons they would discard their complex theoretical ideas about learning and teaching, because they weren't part of the discourse of practicing teachers at their placement sites. Instead the disconnects, contentions, and points of conflict between the two worlds should be used as a pedagogical tool. The disjuncture between university and PK-12 schools could provide a space for inquiry, exploration, and professional theorizing. Centralizing the conflict, instead of minimizing it, may actually support teacher education in better connecting the two worlds, particularly if they invite cooperating teachers into the practice. In this way inquiry may not only be pedagogically useful for teacher education, but also potentially transformative as pre-service teachers and cooperating teachers explore various methods for bridging, resisting, navigating, and/or adapting to the conflicting beliefs and values between the two worlds. This likely requires conceptual tools that support teachers in understanding why schools (and universities) are relatively stable institutions, as well as organizations that can be remade through agentive action (de Certeau, 2005; Giddens, 1984).

**Learning to teach as bricolage.** One of the ways to centralize the divide between university and PK-12 schools is by orienting pre-service teachers towards understanding the process of learning to teach as bricolage. Instead of expecting a coherence across the two worlds and a linear process where they master a set of techniques by applying them in the classroom, pre-service teachers could be oriented to thinking about learning to teach as constructing themselves out of a somewhat fragmented and often disconnected set of experiences. This would require a different



set of pedagogical and reflective tools. Instead of applying a strategy they learned in class and reflecting on whether or not it went well, pre-service teachers would need to be able to situate that strategy within a larger ecology of learning theory, educational policy, history of schooling practices, and the varied purposes of schooling. They would then reflect on said strategy in relation to that entire ecology and make intentional decisions about how, when, and to what end they might apply or adapt that particular strategy. More conceptual and empirical work is needed for fully understanding what an intentional approach to learning to teach as bricolage would look like, but it may support teacher education in better attending to the complex relationship between person, program, and PK-12 school. It may also support pre-service teachers as they intentionally develop a cohesive philosophy out of disparate tools and experiences.

**Reframing the role of cooperating teacher.** While research has repeatedly recommended better connecting teacher education programs with PK-12 schools (Darling-Hammond, 2010; Noel, 2013; Rust, 2010; Zeichner, 2010a), this analysis suggests that teacher education needs to explicitly reframe the role of the cooperating teachers and better integrate them into the program as a whole. Cooperating teachers are often interested in the learning theories promoted by the programs, but lack school site support in redesigning their pedagogy around them and navigating the external demands that shape their work. These external demands include diffuse manifestations of power like the climate of accountability, but also particular policies, like using a scripted curriculum for English Language Development (ELD) or

leveling all of the students across the grade level for reading instruction. One of the ways to address this challenge, is by better integrating cooperating teachers into the program through school partnerships, professional development, and work releases so that cooperating teachers don't simply experience this integration as additional demands on their time. This will likely require novel and localized problem solving in partnerships with school sites and cooperating teachers. Reframing the role of cooperating teachers should also involve explicitly rejecting the idea that cooperating teachers should serve as Master practitioners that should be emulated by the teacher candidates that work with them. Pre-service teachers should also be provided with the tools and support necessary to challenge their cooperating teacher, so that both the cooperating teacher and the student teacher see the relationship as one where they can learn and grow together with support from the teacher education program (Lane, Lacefield-Parachini, & Isken, 2003).

### **Closing**

This dissertation offers multi-leveled examination of learning to teach. Although the sample-size was small and these findings are not generalizable, it reveals and reframes how institutions inadvertently shape the professional identities of new teachers. While altering institutions is not a simple task, supporting professional theorizing and making the divide between university and school an object of inquiry may better support teacher education programs in altering their core

technology, so that they may develop change agents who can (over time) remake schools into transformative sites of liberation.

## Appendix A: Study Participant Survey

Name: \_\_\_\_\_

Email Address: \_\_\_\_\_ Phone Number: \_\_\_\_\_

Racial and/or Ethnic Identity:

(Please select what racial/ethnic categories you identify with. You may select more than one.)

- \_\_\_\_\_ Non-Hispanic White or Euro-American
- \_\_\_\_\_ Black, Afro-Caribbean, or African American
- \_\_\_\_\_ Latino or Hispanic American
- \_\_\_\_\_ East Asian or Asian American
- \_\_\_\_\_ South Asian or Indian American
- \_\_\_\_\_ Middle Eastern or Arab American
- \_\_\_\_\_ Native American or Alaskan Native
- \_\_\_\_\_ Other \_\_\_\_\_

Are you seeking a bilingual authorization with your credential? (Please select one.)

\_\_\_\_\_ Yes

\_\_\_\_\_ No

How would you describe your family's socio-economic status (SES) when you were 15? (Please select one.)

- \_\_\_\_\_ Low SES
- \_\_\_\_\_ Middle SES
- \_\_\_\_\_ High SES

## Appendix B: Complete Data Set

### Coastal Academy

#### **Program Level Data:**

- Interview with Teacher Education Program Director
- Observation of a Steering Committee Meeting
- Program Documentation on curriculum, mission, vision, and approach.
- Interview with Director of Clinical Education
- Interview with University Liaison
- Residency Interview Day
- Interview with a School Administrator
- Interviews with three course instructors
- Four course observations

#### **Embedded Unit Data (organized by focal participant):**

##### David

- 5 semi-structured interviews
- 4 student teaching observations
- 1 student teaching debrief session with his teacher supervisor
- Interview with his cooperating teacher
- Interview with his teacher supervisor
- 1 teaching observation as a teacher of record
- pre and post survey

##### Ami

- 5 semi-structured interviews
- 3 student teaching observations
- 1 student teaching debrief session with her teacher supervisor
- Interview with her cooperating teacher
- Interview with her teacher supervisor (same as David's)
- 1 teaching observation as a teacher of record
- pre and post survey

##### Vida

- 5 semi-structured interviews
- 3 student teaching observations
- 1 observation of a planning meeting with her cooperating teacher
- Interview with her cooperating teacher
- Interview with her teacher supervisor (same as David's)
- 1 teaching observation as a teacher of record
- 1 observation of a planning meeting with her grade level team as a teacher of record
- pre and post survey

##### Grant

- 5 semi-structured interviews
- 3 student teaching observations
- 1 student teaching debrief session with his teacher supervisor
- 1 observation of a debrief and planning meeting with his cooperating teacher
- 1 teaching observation as a teacher of record
- pre and post survey

## Midlands University

### **Program Level Data:**

- Interview with Teacher Education Program Director
- Observation of a Supervisory Meeting
- Program Documentation on curriculum, mission, vision, and approach.
- Supervisor Planning Meeting
- Meet the Districts Job Panel
- County Office Interview Panel
- Interview with a School Administrator
- Interviews with two course instructors
- Seven course observations

### **Embedded Unit Data (organized by focal participant):**

#### Scott

- 5 semi-structured interviews
- 4 student teaching observations
- 1 student teaching debrief session with his teacher supervisor
- 2 Quarterly debrief sessions with his teacher supervisor and cooperating teacher
- 2 observations of planning meetings with his cooperating teacher
- Interview with his cooperating teacher
- Interview with his teacher supervisor
- 1 teaching observation as a teacher of record
- pre and post survey

#### Yaotl

- 5 semi-structured interviews
- 3 student teaching observations
- 1 student teaching debrief session with her teacher supervisor
- 2 Quarterly debrief sessions with her teacher supervisor and cooperating teacher
- Interview with her cooperating teacher
- Interview with her teacher supervisor
- 1 teaching observation as a teacher of record
- pre and post survey

#### Manu

- 5 semi-structured interviews
- 3 student teaching observations
- 1 student teaching debrief session with his teacher supervisor
- 2 Quarterly debrief sessions with his teacher supervisor and cooperating teacher
- 1 observation of a planning meetings with his cooperating teacher
- Interview with his cooperating teacher
- Interview with his teacher supervisor
- 1 teaching observation as a teacher of record
- pre and post survey

#### Jamie

- 5 semi-structured interviews
- 3 student teaching observations
- 1 student teaching debrief session with her teacher supervisor

- 1 Quarterly debrief sessions with her teacher supervisor and cooperating teacher
- Interview with her cooperating teacher
- Interview with her teacher supervisor (same as Manu's)
- 2 teaching observations as a teacher of record
- pre and post survey

## **Appendix C: Data Collection Timeline**

December 2014

- Recruited Participants

January 2015

- Conducted a pre-survey of focal participants
- Conducted Initial Interviews with Each Focal Participant

February 2015-May 2015

- course observations
- student teaching observations
- collected program level data
- conducted second and third interviews with each focal participant

June and July 2015

- conducted fourth interview with each focal participant

August - November 2016

- Conducted teaching observations and final interview with each focal participant (now teachers of record)



### Appendix D: Coding Categories

<b>Ecological</b>	
<b>Macro-level institutional influences</b>	State policies
	CCTE requirements
	Reform discourses
	PACT
	Licensing exams
<b>Exo-level university and PK-12 School Characteristics</b>	District requirement
	School policy (e.g. curriculum, tracking, language model)
	Principal
	University demands
<b>Meso-level Teacher Education Program Features</b>	Teacher supervisor
	Practicum
	Cohort
	Course instructor
	Coursework
	Placement
	Cooperating Teacher
	Advisor
	MA Degree
	Solo
<b>Micro-level Pre-service Teacher and Teacher Educator Interactions</b>	TPE/Quarterly
	Observation Debrief
	Classroom Conversations
	Feedback
	Planning meetings

<b>Content Codes</b>	
<b>Personal Background</b>	Prior work
	Childhood home life
	Motivations for entering teaching
	PK-12 education
	College education
	Motivations for entering program
	Sense of self
	Goals
	Family
<b>Perspectives Held By Subjects</b>	Language learning
	Diversity/culture/race
	Social justice
	Teacher knowledge, skill, dispositions
	Program characteristics
	Literacy learning
	Practical experience
	Standards
	Teaching as a profession
	General pedagogy
	Purpose of Education
	Teacher's role
<b>Setting/Context codes</b>	Disconnect
	Connection
<b>Process codes</b>	Change/development (i.e. deepening of an idea)
	Challenges
<b>Activity codes</b>	Lesson planning
	Teacher Thinking

	Pedagogical approaches	Teacher centered
		Student centered
		Teacher directed
		Differentiation
		Culturally relevant instruction
		Textbook/worksheet
		Management
		Relationships
		Integrated curriculum
		Classroom space
		Curriculum
<b>Strategy codes</b>	Instructional approach: math talk, restorative justice, UbD, turn and talk, lines of communication, Lucy Calkins,	
	Gradual release (of CT)	
	Danger of a single story	
<b>Relationship codes</b>	Teacher supervisor influence	
	Course instructor influence	
	Course influence	
	Cooperating Teacher influence	
	Prior work experience influence	

### Appendix E: Teacher Supervisor- Pre-service teacher Debrief

Supervisor:	What worked for you? What felt good during the lesson?	Question
Manu:	Using the blocks are always fun. I think that definitely helped.	
Supervisor:	You demonstrated with manipulatives.	Restatement
Manu:	We don't always do the book and the lessons that I have done for math haven't always been with the book, so I'm practicing that now.	
Supervisor:	You're using lessons straight out of the book ... We'll put that on your challenges side.	Restatement
Manu:	I'm trying to follow the book. It's something that at this point I'm practicing things that I want to practice. That's something that I try to find the balance of how to use the book as a resource but not rely on the book and how to follow the book enough.	
Supervisor:	What did you feel good about? What was working for you? You said using the manipulatives. What else?	Question
Manu:	Following the opening structure. Their procedures. That went okay. Clearly the 2nd group was more ready, so it took them a little while to get settled from lunch, plus we had a little bit more time, so I could check in with them one on one. I knew we wouldn't get through all the problems, so I went through which ones I thought would be ...	
Supervisor:	You selected certain ones. Ones that you thought would be best.	Restatement
Manu:	I had gone through it a little bit before. It's hard to tell when it's something they'll pick up right away or when it's something that they're going to get caught up on. I wanted them to focus on the ones with the geometric shapes, since it's geometry and some of those questions were ... I shouldn't have picked the handshake one because that one took a little bit more. It's one of those things that immediately shows it's face afterwards.	
Supervisor:	When you go from geometric shapes to handshakes that's like ...	Restatement
Manu:	Did you take a look at the. Some of the other ones were talking about money and talking about some of these different things, like okay we're not going to go there. We can do the pizza one	
Supervisor:	You're picking and choosing the parts that hang together for them then.	Restatement

Manu:	Mm-hmm (affirmative).	
Supervisor:	On top of that I started working on the collaborative assessment log because I had time between. The students read the intro and then the problem chorally, so you're all reading it together. You demonstrate with manipulatives. You demo how to form the shapes. You demonstrate with different shapes. They have blocks themselves for you to make the shapes within the shapes. You repeated the demonstration a second time, then more as you needed it, as you were working with individuals.	Summary

Notice how the teacher supervisor opens with a question and talks far less than the pre-service teacher. While the supervisor does provide a bit more advice later in the conversation, the direction has been determined by Manu already. The supervisor's work here is to restate the pre-service teachers' ideas as she records them on a collaborative log that serves as record for each observation-debrief session.

### Appendix F: Cooperating Teacher and Pre-Service Teacher Debrief

Grant:	I have to say, I could really use some positives right now. It was a really rough day. Because actually do think there were some things I did that were pretty good.	
Marie:	Oh my God, that's so good.	Evaluation
Grant:	Condensing the reader's work ... I mean it wasn't ideal I had against the reader's mini-lesson, but on the fly adjustments, I think that worked fairly well.	
Marie:	I think everything up until morning recess was really good.	Evaluation
Grant:	Yeah?	
Marie:	Mm-hmm (affirmative). Morning meeting you were super smiley and positive. In the phonics you were doing a lot of follow through with the behavior stick. You decided to review the rules as soon as you noticed that they were getting off, which, I made a note. I do the rules every day because they need it every single day. At one point Marcel was kind of tuned out so you turned your body and included him in the circle, which helped him. So then I asked for a peace out and you were like, yeah, that's a really good idea. The actual lesson, once you had the beginning and middle and end sounds up on the board, I like that once they tried it, and then you showed them the right one and then you had them refer to each other, and that gave them a chance to revise right in the moment so it wasn't like being right or wrong. It was like, oh, I see why you thought that and then let's change it so that we can internalize the actually language pattern. Spelling pattern.	Summary and Evaluation
	Had you picked a book for read-a-loud?	Question (factual)
Grant:	No that was one of those things I was going to do this morning and ... Yeah.	
Marie:	Okay.	
Grant:	No, obviously the lack of preparation this week is ...	
Marie:	Makes a difference.	
Grant:	Yeah.	
Marie:	I know that for myself also, that's why I'm so obsessive about getting everything done Friday and I don't like things to go into the weekend because once you ... You have to hit the ground running when you get here Monday morning, and otherwise it's just way too much. If something isn't copied, it's just, like ... I mean it seems like a little deal bit it, yeah. It doesn't feel like a big deal when you're the lead	Advice

	teacher. I mean a little deal. And the anger chart had ...	
Grant:	Not been made.	
Marie:	Not been made. Okay.	

This is an opening to a debrief discussion between Grant and his cooperating teacher, Marie. Notice how much more Marie speaks than Grant. Instead of using questions to direct his reflection, she provides advice about how she would do it, which reaffirms the apprenticeship structure and situates student teaching as training.

## References

- Achinstein, B., & Ogawa, R. (2006). (In) fidelity: What the resistance of new teachers reveals about professional principles and prescriptive educational policies. *Harvard educational review*, 76(1), 30-63.
- Achinstein, B., & Ogawa, R. T. (2012). New teachers of color and culturally responsive teaching in an era of educational accountability: Caught in a double bind. *Journal of educational change*, 13(1), 1-39.
- Adichie, C. N. (2009). *The Danger of a Single Story* [video file]. Retrieved from [https://www.ted.com/talks/chimamanda\\_adichie\\_the\\_danger\\_of\\_a\\_single\\_story/transcript?language=en](https://www.ted.com/talks/chimamanda_adichie_the_danger_of_a_single_story/transcript?language=en)
- Akkerman, S. and Meijer, P. (2011). A dialogical approach to conceptualizing teacher identity. *Teaching and Teacher Education* 27(2):308-319
- Aldrich, R. (1999). The apprentice in history. In P. Ainley & H. Rainbird (Eds.), *Apprenticeship: Towards a new paradigm of learning* (pp. 14-24). New York, NY: Routledge.
- Anderson, L. M., & Stillman, J. A. (2012). Student teaching's contribution to preservice teacher development: A review of research focused on the preparation of teachers for urban and high-needs contexts. *Review of Educational Research*, 83(1), 3-69.
- Apple, M. W. (2004). Creating difference: Neo-liberalism, neo-conservatism and the politics of educational reform. *Educational policy*, 18(1), 12-44.
- Au, K. H. (1980). Participation structures in a reading lesson with Hawaiian children: Analysis of a culturally appropriate instructional event. *Anthropology and Education*, 11(2), 91-115.
- Ball, D. L., & Forzani, F. M. (2009). The work of teaching and the challenge for teacher education. *Journal of teacher education*, 60(5), 497-511.
- Ball, S. J. (2000). Performativities and fabrications in the education economy: Towards the performative society?. *The Australian Educational Researcher*, 27(2), 1-23.
- Ball, S. J. (2003). The teacher's soul and the terrors of performativity. *Journal of education policy*, 18(2), 215-228.



- Ball, S. J. (2003). The teacher's soul and the terrors of performativity. *Journal of education policy*, 18(2), 215-228.
- Ball, S. J. (2012). *Foucault, power, and education*. New York, NY: Routledge.
- Ball, S. J. (2015). Subjectivity as a site of struggle: refusing neoliberalism?. *British Journal of Sociology of Education*, 37(8), 1129-1146.
- Baxter, P. & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *The Qualitative Report*, 13(4), 544-559.
- Beach, K. (1999). Chapter 4: Consequential transitions: A sociocultural expedition beyond transfer in education. *Review of research in education*, 24(1), 101-139.
- Beijaard, D., Meijer, P. C., & Verloop, N. (2004). Reconsidering research on teachers' professional identity. *Teacher and Teacher Education*, 20, 107-128.
- Berger, P., & Luckmann, T. (1966). The social construction of knowledge: A treatise in the sociology of knowledge. *Open Road Media: Soho, NY, USA*.
- Berliner, D. C. (2001). Learning about and learning from expert teachers. *International journal of educational research*, 35(5), 463-482.
- Berliner, D. C., & Biddle, B. J. (1996). The manufactured crisis: Myths, fraud, and the attack on America's public schools. *NASSP Bulletin*, 80(576), 119-121.
- Berry, B., Montgomery, D., Snyder, J. (2008). Urban Teacher Residency Models and Institutes of Higher Education: Implications for Teacher Preparation. Carrboro, NC: Center for Teaching Quality
- Blumer, H. (1969). *Symbolic interactionism: Perspective and method*. Englewood Cliffs, NJ: Prentice Hall.
- Bogden, R. C & Biklen, S. K. (1998). *Qualitative research in education: An introduction to theory and methods* (2nd Ed.). Needham Heights, MA: Allyn and Bacon.
- Boyle-Baise, M. & McIntyre, J. (2008). What kind of experience? Preparing teachers in PDS or community settings. In M. Cochran-Smith, S. Feiman-Nemser, D. J. McIntyre, & K. E. Demers (Eds.), *Handbook of research on teacher education; Enduring question in changing contexts* (3rd ed., pp. 307-329). New York, NY: Routledge.

- Britzman, D. P. (1991). *Practice makes practice: A critical study of learning to teach*. Albany, NY: SUNY Press.
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge, MA: Harvard University Press.
- Buchanan, R. (2015). Teacher identity and agency in an era of accountability. *Teachers and Teaching: Theory and Practice*, 21(6), 700-719.
- Burns, R. W., Jacobs, J., & Yendol-Hoppey, D. (2016). The Changing Nature of the Role of the University Supervisor and Function of Preservice Teacher Supervision in an Era of Clinically-Rich Practice. *Action in Teacher Education*, 38(4), 410-425.
- Butler, J. (2004). *Undoing gender*. New York, NY: Routledge.
- Cadiero-Kaplan, K., & Smith, K. (2002). Literacy ideologies: Critically engaging the language arts curriculum. *Language Arts*, 79(5), 372.
- Carnegie Forum on Education and the Economy. (1986). *A nation prepared: Teachers for the 21st Century*. New York: Author.
- Cazden, C. B. (1988). *Classroom discourse: The language of teaching and learning*. Portsmouth, NH: Heinemann.
- Clarke, A., Triggs, V., & Nielsen, W. (2014). Cooperating teacher participation in teacher education: A review of the literature. *Review of Educational Research*, 84(2), 163-202.
- Clarke, L. (1999). The changing structure and significance of apprenticeship with special reference to construction. In P. Ainley & H. Rainbird (Eds.), *Apprenticeship: Towards a new paradigm of learning*, (pp. 25-40). London: Kolgan Page.
- Clifford, G. J. & Guthrie, J. W. (1988). *Ed schools: A brief for professional education*. Chicago, IL: University of Chicago Press.
- Cochran-Smith M., Stern R., Sánchez J. G., Miller A., Keefe E. S., Fernández M. B., . . .
- Baker M. (2016). *Holding teacher preparation accountable: A review of claims and evidence*. Boulder, CO: National Education Policy Center.

- Cochran-Smith, M. & Fries, K. (2005a). Researching teacher education in changing times: Politics and paradigms. In M. Cochran-Smith & K. Zeichner (Eds.), *Studying teacher education: The report of the AERA Panel on research and teacher education* (pp. 37-68). Mahwah, NJ: Lawrence Erlbaum.
- Cochran-Smith, M. & Fries, K. (2005b). The AERA panel on research and teacher education: Context and goals. In M. Cochran-Smith & K. Zeichner (Eds.), *Studying teacher education: The report of the AERA Panel on research and teacher education* (pp. 69-109). Mahwah, NJ: Lawrence Erlbaum.
- Cochran-Smith, M., & Villegas, A. M. (2015). Framing teacher preparation research: An overview of the field, part 1. *Journal of Teacher Education*, 66(1), 7-20.
- Cochran-Smith, M., Ell, F., Ludlow, L., Grudnoff, L., & Aitken, G. (2014). The Challenge and Promise of Complexity Theory for Teacher Education Research. *Teachers College Record*, 116(5), n5.
- Cochran-Smith, M., Ell, F., Ludlow, L., Grudnoff, L., & Aitken, G. (2014). The Challenge and Promise of Complexity Theory for Teacher Education Research. *Teachers College Record*, 116(5), n5.
- Cochran-Smith, M., Villegas, A. M., Abrams, L., Chavez-Moreno, L., Mills, T., & Stern, R. (2015). Critiquing teacher preparation research an overview of the field, part II. *Journal of Teacher Education*, 66(2), 109-121.
- Cole, M. (1996). *Cultural psychology: A once and future discipline*. Cambridge, MA: Harvard University Press.
- Cole, M. (1998). Can cultural psychology help us think about diversity?. *Mind, Culture, and Activity*, 5(4), 291-304.
- Collins, A., Brown, J.S., and Newman, S. (1989). Cognitive apprenticeship: Teaching the craft of reading, writing, and mathematics. In L. Resnick (Ed.), *Knowing, learning, and instruction: Essays in honor of Robert Glaser* (pp. 453-494). Hillsdale, NJ: Erlbaum.
- Cuban, L. (1993). *How teachers taught: Constancy and change in American classrooms 1890-1990*. New York, NY: Teachers College Press.
- Cuban, L. (2007). Hugging the middle: Teaching in an era of testing and accountability. *Education Policy Analysis Archives*, 15(1).
- Cuban, L. (2013). *Inside the black box of classroom practice*. Cambridge, MA: Harvard University Press.

- Darling-Hammond, L. (1994b). Who will speak for the children. *Phi Delta Kappan*, 76(1), 21.
- Darling-Hammond, L. (2010a). Teacher education and the American future. *Journal of teacher education*, 61(1-2), 35-47.
- Darling-Hammond, L. (2010b). Evaluating Teacher Effectiveness: How Teacher Performance Assessments Can Measure and Improve Teaching. Center for American Progress, (October).
- Darling-Hammond, L. (Ed.) (1994a). Professional development schools: Schools for developing a profession. New York, NY: Teachers College Press.
- Darling-Hammond, L. & Baratz-Snowden, J. (Eds.). (2005). *A good teacher in every classroom: Preparing the highly qualified teachers our children deserve*. San Francisco, CA: Jossey-Bass.
- Darling-Hammond, L., & Hyler, M. E. (2013). The role of performance assessment in developing teaching as a profession. *Rethinking Schools*, 27(4), 10-15.
- Darling-Hammond, L., Holtzman, D. J., Gatlin, S. J., & Heilig, J. V. (2005). Does teacher preparation matter? Evidence about teacher certification, Teach for America, and teacher effectiveness. *education policy analysis archives*, 13(42), n42.
- Darling-Hammond, L., Wise, A. E., & Klein, S. P. (1995). *A license to teach: Building a profession for 21st-century schools*. Boulder, CO: Westview Press.
- Darling-Hammond, L. (2006). *Powerful teacher education*. San Francisco: Jossey Bass.
- Day, C., Elliot, B., & Kington, A. (2005). Reform, standards and teacher identity: Challenges of sustaining commitment. *Teaching and teacher Education*, 21(5), 563-577.
- De Certeau, M. (2005). "Making do": uses and tactics. In G. M. Speigal (Ed.,) *Practicing History: New Directions in Historical Writing After the Linguistic Turn* (pp. 217-227). New York, NY: Routledge.
- Dennen, V. P. (2004). Cognitive Apprenticeship in Educational Practice: Research on Scaffolding, Modeling, Mentoring, and Coaching as Instructional Strategies. In D. H. Jonassen (Ed.) *Handbook of research on educational communications and technology* (2nd ed., pp. 813-828). Mahwah, NJ: Lawrence Erlbaum.

- Dewey, J. (1904). The relation of theory to practice in education. In J. Boydston (Ed.), *Essays on the New Empiricism 1903-1906: Vol. 3 The Middle Works of John Dewey 1899-1924* (pp. 249-272). Carbondale, IL: Southern Illinois University Press.
- Diamond, J. B., & Spillane, J. P. (2004). High-stakes accountability in urban elementary schools: Challenging or reproducing inequality?. *Teachers College Record*, 106(6), 1145-1176.
- Dornan, T. (2005). Osler, Flexner, apprenticeship and 'the new medical education'. *Journal of the Royal Society of Medicine*, 98(3), 91-95.
- edTPA. (2014). Fact Sheet: A performance-based approach to license teacher candidates and support program improvement. Washington, D.C.: Author.
- Edwards, A. (2014). Learning from experience in teaching: A cultural historical critique. In V. Ellis & J. Orchard (Eds.), *Learning teaching from experience: Multiple perspectives and international contexts* (pp. 47-62). New York: Bloomsbury.
- Ellis, V. & Orchard, J. (Eds.) (2014). *Learning teaching from experience: Multiple perspectives and international contexts*. New York, NY: Bloomsbury.
- Elmore, R. (2003). Accountability and capacity. *The new accountability: High schools and high-stakes testing*, 195-209.
- Engeström, Y. (1987). *Learning by expanding: An activity-theoretical approach to developmental research*. Helsinki: Orienta-Konsultit
- Epstein, S. R. (1998). Craft guilds, apprenticeship, and technological change in preindustrial Europe. *Journal of economic history*, 58, 684-713.
- Ertsas, T. I., & Irgens, E. J. (2017). Professional theorizing. *Teachers and Teaching*, 23(3), 332-351.
- Eubanks, E., Parish, R., & Smith, D. (1997). Changing the discourse in schools. *Race, ethnicity, and multiculturalism: Policy and practice*, 151-168.
- Feiman-Nemser, S. (2012). *Teachers as Learners*. Cambridge, MA: Harvard University Press.
- Feiman-Nemser, S., & Buchman, M. (1985). Pitfalls of Experience in Teacher Education. *Teachers College Record*, 87, 49-65.

- Feiman-Nemser, S., & Buchmann, M. (1987). When is student teaching teacher education?. *Teaching and teacher education*, 3(4), 255-273.
- Fives, H., Mills, T. M., & Dacey, C. M. (2016). Cooperating teacher compensation and benefits: comparing 1957-1958 and 2012-2013. *Journal of Teacher Education*, 67(2), 105-119.
- Floden, R. E. (2012). Teacher Value Added as a Measure of Program Quality Interpret With Caution. *Journal of Teacher Education*, 63(5), 356-360.
- Foucault, M. (1977). *Discipline and punish: The birth of the prison*. London: Allen Lane.
- Foucault, M. (1991). Governmentality, in G. Burchell, C. Gordon and P. Miller (Eds.), *The Foucault Effect: studies in governmentality (pp.87-104)*. Chicago, IL: The University of Chicago Press.
- Freire, P. (2001). The adult literacy process as cultural action for freedom and education and conscientizção. In E. Cushman, E.R. Kintgen, B. M. Kroll, & M. Rose (Eds.), *Literacy: A critical sourcebook (pp. 616-628)*. Boston, MA: Bedord/St. Martin's.
- Fullan, M. G. (1993). Why teachers must become change agents. *Educational leadership*, 50, 12-12.
- Fuller, F. F. & Bown, O.H. (1975). Becoming a teacher. In: K. Ryan (Ed.), *Teacher education (74th Yearbook of the National Society of Education, pp. 25-52)*. Chicago: University of Chicago Press
- Garcia, S. B., & Guerra, P. L. (2004). Deconstructing deficit thinking: Working with educators to create more equitable learning environments. *Education and urban society*, 36(2), 150-168.
- Gatti, L. (2012). *English, disciplined: Learning to teach in urban classrooms*. (Doctoral Dissertation). University of Wisconsin Madison.
- Gatti, L. (2014). Negotiating conflicting frames of experience: Learning to teach in an urban teacher residency. In V. Ellis & J. Orchard (Eds.), *Learning teaching from experience: Multiple perspectives and international contexts (pp. 207-222)*. New York, NY: Bloomsbury.
- Giddens, A. (1984). *The constitution of society: Outline of the theory of structuration*. Berkeley, CA: University of California Press.

- Glass, R. & Wong, P. L. (2013). Learning to produce knowledge: Reconstructing teacher preparation for urban schools. In J. Noel (Ed.), *Moving teacher education into urban schools and communities: Prioritizing community strengths* (pp. 20-36). New York, NY: Routledge.
- Goffman, E. (1959). *Presentation of self in everyday life*. Carden City, NY: Doubleday.
- Goldhaber, D., Krieg, J. M., & Theobald, R. (2017). Does the Match Matter? Exploring Whether Student Teaching Experiences Affect Teacher Effectiveness. *American Educational Research Journal*, 54(2), 325-359.
- Goldstein, D. (2014). *The teacher wars: A history of America's most embattled profession*. Anchor.
- Goldstein, M. (2012). Studying teacher moves: A practitioner's take on what is blocking the research teachers need. *Education Next*, 12(1), 1-7.
- Gollnick, D. M. (2008). Teacher capacity for diversity. In M. Cochran-Smith, S. Feiman-Nemser, D. J. McIntyre, & K. E. Demers (Eds.), *Handbook of research on teacher education; Enduring question in changing contexts* (3rd ed., pp. 249-257). New York, NY: Routledge.
- Goodlad, J. I. (1990). Connecting the past to the present. In J. I. Goodlad, R. Soder, and K. Sirotnik (Eds.) *Places where teachers are taught* (pp. 3-39). San Francisco, CA: Jossey Bass.
- Grant, C. A. & Agosto, V. (2008). Teacher capacity and social justice in teacher education. In M. Cochran-Smith, S. Feiman-Nemser, D. J. McIntyre, & K. E. Demers (Eds.), *Handbook of research on teacher education; Enduring question in changing contexts* (3rd ed., pp. 175-200). New York, NY: Routledge.
- Greenberg, J., McKee, A., & Walsh, K. (2013). *2013 Teacher Prep Review: A Review of the Nation's Teacher Preparation Programs*. Washington, D.C.: National Council on Teacher Quality.
- Greenberg, J., Walsh, K., & Mckee, A. (2014). *2014 Teacher Prep Review: A Review of the Nation's Teacher Preparation Programs*. Washington, D.C.: National Council on Teacher Quality.
- Greeno, J. G., Collins, A. M. & Resnick, L. B (1996). Cognition and learning. In D. C. Berliner & R. C. Calfee (Eds.), *Handbook of educational psychology* (pp. 15-46). New York: MacMillan

- Grossman, P. (2005). Research on methods courses and field experiences. In M. Cochran-Smith & K. Zeichner (Eds.), *Studying teacher education: The report of the AERA Panel on research and teacher education*. (pp. 309-424). Mahwah, NJ: Lawrence Erlbaum.
- Grossman, P. (2010). Policy brief: Learning to practice: The design of clinical experience in teacher preparation. The partnership for teacher quality. AACTE: Washington, D.C.
- Grossman, P., Hammerness, K. M., McDonald, M., & Ronfeldt, M. (2008). Constructing Coherence Structural Predictors of Perceptions of Coherence in NYC Teacher Education Programs. *Journal of Teacher Education*, 59(4), 273-287.
- Grossman, P., Hammerness, K., & McDonald, M. (2009). Redefining teaching, re-imagining teacher education. *Teachers and Teaching: Theory and Practice*, 15(2), 273–289.
- Guile, D. & Young, M. (1999). Beyond the institution of apprenticeship: towards a social theory of learning as the production of knowledge, in P. Ainley & H. Rainbird (Eds.), *Apprenticeship: towards a new paradigm of learning* (pp. 111–128). London: Kogan Page.
- Hargreaves, A. (1998). The emotional practice of teaching. *Teaching and teacher education*, 14(8), 835-854.
- Hatton, E. (1989). Lévi-Strauss's Bricolage and Theorizing Teachers' Work. *Anthropology & Education Quarterly*, 20(2), 74-96.
- Hatton, E. J. (1988). Teachers' work as bricolage: Implications for teacher education. *British Journal of Sociology of Education*, 9(3), 337-357.
- Heath, S. B. (2001). Protean shapes in literacy events. Ever-shifting oral and literate traditions. In E. Cushman, E.R. Kintgen, B. M. Kroll, & M. Rose (Eds.) *Literacy: A critical sourcebook* (pp. 443-466). Boston: Bedord/St. Martin's.
- Herbst, J. (1989). *And sadly teach: Teacher education and professionalization in American culture*. Madison, WI: Univ of Wisconsin Press.
- Hennessy, S. (1993). Situated Cognition and Cognitive Apprenticeship: Implications for Classroom Learning. *Studies in Science Education*, 22(1), 1-41.



- Holland, D., & Lave, J. (Eds.). (2001). *History in person: Enduring struggles, contentious practice, intimate identities*. Santa Fe, NM: School of American Research Press; Oxford, UK: James Currey.
- Holland, D., Lachicotte Jr., W., Skinner, D., & Cain, C. (1998). *Identity and agency in cultural worlds*. Cambridge, MA: Harvard University Press.
- Hollins, E. R., & Guzman, M. T. (2005). Research on preparing teachers for diverse populations. In M. Cochran-Smith & K. Zeichner (Eds.), *Studying teacher education: The report of the AERA Panel on research and teacher education* (pp. 477-548). Mahwah, NJ: Laurence Erlbaum.
- Holmes Partnership, The. (2007). *The Holmes Partnership trilogy: Tomorrow's Teachers, Tomorrow's Schools, Tomorrow's Schools of Education*. New York, NY: Peter Lang.
- Holquist, M. (1990). *Dialogism: Bakhtin and his world*. London, UK: Routledge.
- Howard, T. C. & Aleman, G. R. (2008). Teacher capacity for diverse learners: What do teachers need to know? In M. Cochran-Smith, S. Feiman-Nemser, D. J. McIntyre, & K. E. Demers (Eds.), *Handbook of research on teacher education; Enduring question in changing contexts* (3rd ed., pp. 157-174). New York, NY: Routledge.
- Huberman M. (1993). The model of the independent artisan in teachers' professional relations. In Little J.W., McLaughlin M.W. (Eds.), *Teachers' work: Individuals, colleagues, and contexts* (pp. 11–50). New York: Teachers College Press.
- Hull, G. A., & Nelson, M. E. (2005). Locating the semiotic power of multimodality. *Written Communication*, 22(2), 224-261.
- Hyland, N. E. (2005). Being a good teacher of black students? White teachers and unintentional racism. *Curriculum Inquiry*, 35(4), 429-459.
- Ingersoll, R. M., & Perda, D. (2008). The status of teaching as a profession. In J. H. Ballantine & J. Z. Spade (Eds.), *Schools and society: A sociological approach to education* (pp. 107-118). Thousand Oaks, CA: Sage.
- Izadinia, M. (2015). A closer look at the role of mentor teachers in shaping preservice teachers' professional identity. *Teaching and Teacher Education*, 52, 1-10.
- Jeffrey, B., & Troman, G. (2011). The construction of performative identities. *European Educational Research Journal*, 10(4), 484-501.

- Johnson, C. (2012). Bricoleur and bricolage: from metaphor to universal concept. *Paragraph*, 35(3), 355-372.
- Kagan, D. M. (1992). Professional growth among preservice and beginning teachers. *Review of educational research*, 62(2), 129-169.
- Klein, E., Taylor, M., Onore, C., Strom, K., & Abrams, L. (2013). Finding a third space in teacher education: creating an urban teacher residency. *Teaching Education*, 25(1), 27- 57.
- Kliebard, H. M. (2004). *The struggle for the American curriculum, 1893-1958*. New York, NY: RoutledgeFarmer.
- Kopp, W. (1994, June). Teach for America: Moving beyond the debate. *The Educational Forum*, 58(2), 187-192.
- Kozol, J. (2005). *The shame of the nation: The restoration of apartheid schooling in America*. New York, NY: Random House.
- Kumashiro, K. K. (2012). *Bad teacher!: How blaming teachers distorts the bigger picture*. New York, NY: Teachers College Press.
- Kvale, S. (1997). Research apprenticeship. *Nordisk pedagogik*, 17(3), 186-194.
- Labaree, D. (1992). Power, knowledge, and the rationalization of teaching: A genealogy of the movement to professionalize teaching. *Harvard Educational Review*, 62(2), 123–154.
- Labaree, D. (2004). *The trouble with ed schools*. New Haven, CT: Yale University Press.
- Labaree, D. (2010). Teach for America and teacher ed: Heads they win, tails we lose. *Journal of Teacher Education*, 61(1-2), 48-55.
- Labaree, D. F. (1997). Public goods, private goods: The American struggle over educational goals. *American educational research journal*, 34(1), 39-81.
- LaBoskey, V. K. & Richert, A. E. (2002) Identifying good student teaching placements: A programmatic perspective. *Teacher Education Quarterly*, 29(2), 7-34.
- Ladson-Billings, G. (1995). But That' s Just Good Teaching! The Case for Culturally Relevant Pedagogy. *Theory into Practice*, 34(3), 159–165.

- Lane, S., Lacefield-Parachini, N., & Isken, J. (2003). Developing Novice Teachers as Change Agents: Student Teacher Placements " Against the Grain". *Teacher Education Quarterly*, 30(2), 55-68.
- Lave, J. (1991). Situating learning in communities of practice. In L. Resnick, J. Levine, and S. Teasley (Eds.), *Perspectives on socially shared cognition* (pp. 63-82). Washington, DC: APA.
- Lave, J. (1996). Teaching, as learning, in practice. *Mind, Culture, and Activity*, 3(3), 149-164.
- Lave, J. (2011). *Apprenticeship in critical ethnographic practice*. Chicago, IL: University of Chicago Press.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. New York, NY: Cambridge University Press.
- Lee, C. (1995). A culturally based cognitive apprenticeship: teaching African American high school students' skills in literary interpretation. *Reading Research Quarterly*, 30(4), 608-630.
- Lemov, D. (2010). *Teach like a champion: 49 techniques that put students on the path to college*. San Francisco, CA: Jossey-Bass.
- Levi-Strauss, C. (1962). *The Savage Mind*. Chicago, IL: University of Chicago Press.
- Levine, A. (2010). Teacher education must respond to changes in America. *Phi delta kappan*, 92(2), 19-24.
- Loughran, J. J. (2006). *Developing a pedagogy of teacher education: Understanding teaching and learning about teaching*. New York, NY: Taylor & Francis.
- Lyotard, J. F. (1984). *The postmodern condition: A report on knowledge*. Minneapolis, MN: University of Minnesota Press.
- Margolis, J. (2006). New teachers, high-stakes diversity, and the performance-based conundrum. *The Urban Review*, 38(1), 27-44.
- Marion, R. (1999). *The edge of organization: Chaos and complexity theories of formal social systems*. Thousand Oaks, CA: Sage.

- McCall, M. M. & Becker, H. S. (1990). Introduction in H. Becker and M. McCall (Eds.), *Symbolic interactionism and cultural studies*, (pp. 1-15). Chicago, IL: University of Chicago Press.
- McDiarmid, G. W. & Clevenger-Bright, M. (2008). Rethinking teacher capacity. In M. Cochran-Smith, S. Feiman-Nemser, D. J. McIntyre, & K. E. Demers (Eds.), *Handbook of research on teacher education; Enduring question in changing contexts* (3rd ed., pp. 134-156). New York, NY: Routledge.
- Mead, G. H. (1934). *Mind, self and society*. Chicago, IL: University of Chicago Press.
- Meyer, J. W., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. *American journal of sociology*, 83(2), 340-363.
- Miller, P., & Power, M. (2013). Accounting, organizing, and economizing: Connecting accounting research and organization theory. *Academy of Management Annals*, 7(1), 557-605.
- Moll, L. & Greenberg, J. (1990). Creating zones of possibilities: combining social contexts for instruction. In L. Moll (Ed.) *Vygotsky and education: Instructional implications and applications of sociohistorical psychology* (pp.319-348). New York: Cambridge University Press.
- Moll, L., Amanti, C., Neff, D., & Gonzalez, N. (1992). Funds of knowledge for teaching: A qualitative approach to developing strategic connections between homes and classrooms. *Theory Into Practice*, 31(2), 132–141.
- Moore, A., & Clarke, M. (2016). ‘Cruel optimism’: teacher attachment to professionalism in an era of performativity. *Journal of Education Policy*, 31(5), 666-677.
- NCATE. (2001). *Professional standards for the Accreditation of Teacher Preparation Institutions*. Washington, D.C.: Author.
- Nieto, S. (1994). Lessons from students on creating a chance to dream. *Harvard educational review*, 64(4), 392-427.
- Nieto, S. (2002). *Language, culture, and teaching: critical perspectives*. Mahweh: NJ: Lawrence Erlbaum.
- Nieto, S. (2010). Racism, discrimination, and expectations of students’ achievement. In A. S. Canestrari and B. A. Marlowe (Eds.) *Educational foundations: An anthology of critical readings* (2nd Ed. pp. 44-63). Thousand Oaks, CA: Sage.

- Noel, J. (Ed.). (2013). *Moving teacher education into urban schools and communities: Prioritizing community strengths*. New York, NY: Routledge.
- Olsen, B. (2008). *Teaching what they learn, learning what they live: How teachers' personal histories shape their professional development*. Boulder, CO: Paradigm Publishers.
- Olsen, B. (2016). *Teaching for success: Developing your teacher identity in today's classroom*. New York, NY: Routledge.
- Olsen, B., & Buchanan, R. (2017). "Everyone Wants You to Do Everything": Investigating the Professional Identity Development of Teacher Educators. *Teacher Education Quarterly*, 44(1), 9-34.
- Olssen, M. (2003). Structuralism, post-structuralism, neo-liberalism: assessing Foucault's legacy. *Journal of Education Policy*, 18(2), 189-202.
- Palincsar, A. S., & Schutz, K. M. (2011). Reconnecting strategy instruction with its theoretical roots. *Theory Into Practice*, 50(2), 85-92.
- Patton, M. (2002). *Qualitative research & evaluation methods, 3rd edition*. Thousand Oaks, CA: Sage.
- Pease-Alvarez, L. & Thompson, A. (2011). Teachers organizing to resist in a context of compliance. In K. A. Davis (Ed.). *Critical qualitative research in second language studies: Agency and Advocacy*. (pp 227-295). Charlotte, NC: IAP.
- Philip, T. M. (2011). An "ideology in pieces" approach to studying change in teachers' sensemaking about race, racism, and racial justice. *Cognition and instruction*, 29(3), 297-329.
- Pressley, M., & Allington, R. L. (2014). *Reading instruction that works: The case for balanced teaching*. New York, NY: Guilford Publications.
- Pring, R. (2004). *Philosophy of Education Research*. New York: Bloomsbury Academic.
- Rabinow, P. (1984). Introduction in P. Rabinow (Ed.) *The Foucault Reader* (pp. 3-45). New York, NY: Pantheon.
- Ravitch, D. (2010). *The death and life of the great American school system: How testing and choice are undermining education*. New York, NY: Basic Books.

- Resnick, Lauren B. (1987). The 1987 Presidential Address: Learning in school and out. *Educational Researcher*, 16(9), pp. 13-20
- Rhee, M. (2013). *Radical: Fighting to put students first*. New York, NY: Harper Collins.
- Rogoff, B. (1990). Cultural similarities and variations in guided participation, Chapter 6 in *Apprenticeship in thinking: Cognitive development in social context*. New York: Oxford University Press.
- Rust, F. O. (2010). Shaping new models of teacher education. *Teacher Education Quarterly*, 37(2), 5-18.
- Sato, M. (2014). What Is the Underlying Conception of Teaching of the edTPA? *Journal of Teacher Education*, (July).
- Sawchuck, S. (2013). Teacher-Prep Programs Zero In on Effective 'Practice'. *EdWeek*, 31(15), 6.
- Schiffrin, D. (1994). *Approaches to discourse*. Malden, MA: Blackwell.
- Schiffrin, D., Tannen, D., & Hamilton, H. E. (Eds.). (2001). *The Handbook of Discourse Analysis*. Oxford, UK: Blackwell Publishing Ltd.
- Schön, D. A. (1987). *Educating the reflective practitioner: Toward a new design for teaching and learning in the professions*. San Francisco, CA: Jossey-Bass.
- Scott, W. R. (2005). Institutional theory: Contributing to a theoretical research program. In K.G. Smith & M. A. Hitt (Eds.), *Great minds in management: The process of theory development* (pp. 460-485). Oxford: Oxford University Press.
- Scott, W. R. (2008). *Institutions and organizations: Ideas and interests*. Thousand Oaks, CA: Sage.
- Scribner, J. P., & Donaldson, J. F. (2001). The dynamics of group learning in a cohort: From nonlearning to transformative learning. *Educational Administration Quarterly*, 37(5), 605-636.
- Scribner, S. (1997). Mind in action: A functional approach to thinking. In M. Cole, Y. Engeström, & O. Vösesquez (Eds.), *Mind, culture, and activity: Seminal papers from the Laboratory of Comparative Human Cognition* (pp. 354-368). Cambridge, UK: Cambridge University Press.
- Selznick, P. (1957). *Leadership in administration*. New York, NY: Harper & Row.

- Sleeter, C. (2001). Preparing teachers for culturally diverse schools research and the overwhelming presence of whiteness. *Journal of teacher education*, 52(2), 94-106.
- Sleeter, C. (2013). *Power, teaching, and teacher Education: Confronting injustice with critical research and action*. New York: Peter Lang.
- Sleeter, C., & Stillman, J. (2005). Standardizing knowledge in a multicultural society. *Curriculum Inquiry*, 35(1), 27-46.
- Smagorinsky, P. (2010). The culture of learning to teach: The self-perpetuating cycle of conservative schooling. *Teacher Education Quarterly*, 37(2), 19-32.
- Smith, E. R., & Avetisian, V. (2011). Learning to teach with two mentors: Revisiting the “two-worlds pitfall” in student teaching. *The Teacher Educator*, 46(4), 335-354.
- Solomon, J. (2009). The Boston Teacher Residency: District based teacher education. *Journal of Teacher Education*, 60, 478-488.
- Sonnentag, S., & Frese, M. (2002). Performance concepts and performance theory. In S. Sonnentag (Ed.) *Psychological management of individual performance* (pp. 3-25). New York, NY: Wiley & Sons.
- Souto-Manning, M. (2010). Challenging ethnocentric literacy practices: (Re)positioning home literacies in a head start classroom. *Research in the Teaching of English*, 45(2), 150-178.
- Stake, R. E. (1995). *The art of case study research*. Thousand Oaks, CA: Sage.
- Strauss, V. (2013). Why the NCTQ teacher prep ratings are nonsense. *Washington Post*. Retrieved from [https://www.washingtonpost.com/news/answer-sheet/wp/2013/06/18/why-the-nctq-teacher-prep-ratings-are-nonsense/?utm\\_term=.4f251d8951c1](https://www.washingtonpost.com/news/answer-sheet/wp/2013/06/18/why-the-nctq-teacher-prep-ratings-are-nonsense/?utm_term=.4f251d8951c1).
- Strom, K. (2014). *Becoming-Teacher: The negotiation of teaching practice of first-year secondary science teachers prepared in a hybrid urban teacher education program*. Doctoral Dissertation). Montclair State University.
- The New London Group. (1996). A pedagogy of multiliteracies: Designing social futures. *Harvard educational review*, 66(1), 60-93.

- U. S. Department of Education. (2013). A blueprint for RESPECT. Washington, D.C.: Author.
- U. S. Department of Education. (2016). Improving Teacher Preparation: Building on Innovation. Washington, D.C.: Author.
- U.S. Department of Education Press Office. (2009). Education Secretary Duncan Announces \$43 Million in Grants to Improve Teaching in High-Need Schools. Washington, D.C.: Author.
- UTRU. (2014). The UTRU Network. Retrieved from <http://www.utruncated.org/the-network>, June 27, 2014.
- Valencia, R., Valenzuela, A., Sloan, K., & Foley, D. E. (2001). Let's treat the cause, not the symptoms: Equity and accountability in Texas revisited. *Phi Delta Kappan*, 83, 321-326.
- Verkerk, M. J. (2004). *Trust and Power on the Shop Floor: An Ethnographical, Ethical and Philosophical Study on Responsible Behaviour in Industrial Organisations*. Delft, The Netherlands: Eburon.
- Villegas, a. M., & Lucas, T. (2002). Preparing Culturally Responsive Teachers: Rethinking the Curriculum. *Journal of Teacher Education*, 53(1), 20–32.
- Weick, K. (1976). Educational organizations as loosely coupled systems. *Administrative science quarterly*, 21, 1-19.
- Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. New York, NY: Cambridge university press.
- Wertsch, J. V. (1993). *Voices of the mind*. Cambridge, MA: Harvard University Press.
- Wideen, M., Mayer-Smith, J., & Moon, B. (1998). A critical analysis of the research on learning to teach: Making the case for an ecological perspective on inquiry. *Review of educational research*, 68(2), 130-178.
- Wiggins, G. P., & McTighe, J. (2005). Understanding by design. Alexandria, VA: ASCD.
- Wong, P. L. & Glass, R. D. (Eds.) (2009). *Prioritizing urban children, teachers, and schools through professional development schools*. Albany, NY: SUNY Press.



- Woods, P. (1996). *Researching the art of teaching: Ethnography for educational use*. New York, NY: Routledge.
- Wu, H. (2011). Bringing the Common Core State Mathematics Standards to Life *American Educator*, Fall 2011, Vol. 35, No. 3, pp. 3-13.
- Yin, R. (2009). *Case study research: Design methods, 4th edition*. Thousand Oaks, CA: Sage.
- Zeichner, K. (2009). *Teacher education and the struggle for social justice*. New York, NY: Routledge.
- Zeichner, K. (2010). The importance of strong clinical preparation for teachers. Presented at a U.S. Congressional Briefing organized by the American Association of Colleges for Teacher Education. Washington, D.C.
- Zeichner, K. (2010a). Rethinking the connections between campus courses and field experiences in college and university-based teacher education. *Journal of Teacher Education*, 61(1-2), 89-99.
- Zeichner, K. (2014). The politics of learning to teach from experience. In V. Ellis & J. Orchard (Eds.), *Learning teaching from experience: Multiple perspectives and international contexts* (pp. 257-268). New York: Bloomsbury.
- Zeichner, K. & Gore, J. (1990). Teacher socialization. In W.R. Houston (Ed.), *Handbook of research on teacher education* (pp. 329-348). New York, NY: Macmillan
- Zeichner, K. & Liston, D.P. (1987). Teaching student teachers to reflect. *Harvard Educational Review*, 57, 23-47.
- Zeichner, K. & Payne, K. (2013). Democratizing knowledge in urban teacher education. In J. Noel (Ed.), *Moving teacher education into urban schools and communities: Prioritizing community strengths* (pp. 3-19). New York, NY: Routledge.
- Zeichner, K., & Tabachnick, B.R. (1981). Are the effects of university teacher education washed out by school experience? *Journal of Teacher Education*, 32, 7-11.