Imagining Classrooms: A Comparative Case Study Of Pedagogy And Learning In Teacher Education

Lightning Jay

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Imagining Classrooms: A Comparative Case Study Of Pedagogy And Learning In Teacher Education

Abstract
This dissertation is motivated by the urgent uncertainty of teacher education pedagogy. The work is urgent because students and schools need teachers to be proficient, equitable, and self-sufficient from the moment they take the helm of the classroom, and it is uncertain because teacher education research has struggled to definitively articulate how most teacher educators teach and whether it affects teachers’ beliefs or practices in the long term. This uncertainty reflects the complexity of teaching and learning as well as the limitations of prior research on teacher education pedagogy, which has historically relied on small-scale self-studies in which teacher educators describe the workings of their own classrooms. Difficult to aggregate, disseminate, or evaluate, these studies often struggle to shed light on the broader field. In this dissertation, I compare the enacted practices of six secondary social studies and English Language Arts teacher educators at three institutions representing a range of pedagogical perspectives, and investigate the implications of those practices for teacher candidate learning. Data collection combined observations of teacher education coursework in six methods classes, with interviews with both teacher educators and candidates, as well as videos of teacher candidates’ teaching in the field. Analysis investigates three questions: How do teacher educators prompt candidates to engage in reflection about instructional practices? How does the discourse about practice construct images of students? And how do candidates take up teacher educators’ pedagogical content knowledge? The findings reveal that each methods course created its own imagined classroom, a projected space where novices and teacher educators constructed projections of teachers and students. The imagined classroom affords teacher educators substantial latitude to curate discussions of teaching, student learning, and the disciplines. Engaging in these projected spaces, novices appeared to internalize some elements of their instructors’ vision while retaining some of their own perspectives on teaching. Contrary to canards about education schools’ lack of rigor, this dissertation finds teacher educators and candidates engaged in nuanced reflective work. Further exploring the complexities of teacher learning and the challenges facing teacher educators will continue to support the systems responsible for developing future teachers.

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IMAGINING CLASSROOMS: A COMPARATIVE CASE STUDY OF PEDAGOGY AND LEARNING
IN TEACHER EDUCATION
Lightning Jay
A DISSERTATION
in
Education
Presented to the Faculties of the University of Pennsylvania
in
Partial Fulfillment of the Requirements for the
Degree of Doctor of Philosophy
2021
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I am lucky to have had inspiring teachers who made me believe that learning is joyful and meaningful.

I am lucky to have had generous students and patient co-workers who allowed me to become a teacher.

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ABSTRACT

IMAGINING CLASSROOMS: A COMPARATIVE CASE STUDY OF PEDAGOGY AND LEARNING IN TEACHER EDUCATION

Lightning Jay
Abby Reisman

This dissertation is motivated by the urgent uncertainty of teacher education pedagogy. The work is urgent because students and schools need teachers to be proficient, equitable, and self-sufficient from the moment they take the helm of the classroom, and it is uncertain because teacher education research has struggled to definitively articulate how most teacher educators teach and whether it affects teachers’ beliefs or practices in the long term. This uncertainty reflects the complexity of teaching and learning as well as the limitations of prior research on teacher education pedagogy, which has historically relied on small-scale self-studies in which teacher educators describe the workings of their own classrooms. Difficult to aggregate, disseminate, or evaluate, these studies often struggle to shed light on the broader field. In this dissertation, I compare the enacted practices of six secondary social studies and English Language Arts teacher educators at three institutions representing a range of pedagogical perspectives, and investigate the implications of those practices for teacher candidate learning. Data collection combined observations of teacher education coursework in six methods classes, with interviews with both teacher educators and candidates, as well as videos of teacher candidates’ teaching in the field. Analysis investigates three questions: How do teacher educators prompt candidates to engage in reflection about instructional practices? How does the
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# TABLE OF CONTENTS

ACKNOWLEDGMENT .......................................................................................................................... II

ABSTRACT ........................................................................................................................................ III

LIST OF TABLES ................................................................................................................................. VII

LIST OF ILLUSTRATIONS ................................................................................................................ VIII

INTRODUCTION ................................................................................................................................. 1

References ........................................................................................................................................ 12

CONSTRUCTING IMAGINARY CLASSROOMS: TEACHER EDUCATORS’ DIRECTION OF REFLECTION ABOUT PRACTICE ......................................................................................... 15

Theoretical Framework ..................................................................................................................... 20

Methods ........................................................................................................................................... 23

Findings ............................................................................................................................................ 32

Discussion .......................................................................................................................................... 48

References ........................................................................................................................................ 54

IMAGINING THE “URBAN” STUDENT: THE DISCURSIVE CREATION OF STUDENTS IN TEACHER EDUCATION METHODS COURSES .......................................................................... 59

Theoretical Framework ..................................................................................................................... 63

Methods ........................................................................................................................................... 66

Findings ............................................................................................................................................ 73

Discussion .......................................................................................................................................... 93

DEVELOPING NOVICE TEACHERS’ PCK FOR FACILITATING HISTORICAL INQUIRY DISCUSSIONS ......................................................................................................................... 109

Conceptual Framework .................................................................................................................... 114

v
LIST OF TABLES

Table 1.1: Codebook ......................................................... 30
Table 1.2: Percentage of Class Time Using Each Resource ................. 35
Table 2.1: Code Definitions ................................................... 71
Table 2.2: Percentage of TE and TC Comments About Students by Domain .... 74
Table 3.1: Participating Teacher Candidates .................................. 121
Table 3.2: Codebook for Methods, TC Videos, and Interviews ............... 133
LIST OF ILLUSTRATIONS

Figure 1.1: Analytical Scheme ........................................... 26
Figure 1.2: Percentage of Class Time by Activity Structure ............... 34
Figure 1.3: Average Percentage of Class Time Spent in Episodes of Practice ...... 35
Figure 1.4: Average Minutes in Episodes of Practice per 2-Hour Class and Average Minutes of Reflection Within Episodes of Practice .... 36
Figure 1.5: Average Minutes of Reflection per 2-Hour Class ................ 38
Figure 1.6: Average Minutes of Reflection per Class by Focus on Move, Aim, or Blend .............................................................. 39
Figure 1.7: Average Minutes Reflecting on Dilemmas per Class ................. 43
Figure 2.1: Total Number of Comments About Students by TCs and TEs .......... 73
Figure 2.2: Percentage of “Thinking” and “Knowing” Comments by Valence ...... 79
Figure 2.3: Percentage of TC “Individual” Comments by Identity Category ........ 81
Figure 2.4: Percentage of TE “Individual” Comments by Identity Category ........ 81
Figure 3.1: Model of Teacher Educators’ PCK for Discussion Facilitation .......... 115
Figure 3.2: Methods Course Instructional Sequences .................................. 139
Figure 3.3: Average SDI Scores for Alice and Becca ................................ 142
Figure 3.4: Andi and Ben SDI Scores ........................................... 158
Introduction

Most teacher educators never observe their students teach. And most teacher candidates never see their instructors address a K-12 student. A typical candidate practices teaching in a school their professors will not visit and discusses educational theory in a university that is inaccessible to their classroom mentors and students. In those universities, professors conjure imagined classrooms as they discuss hypothetical or partial representations of teaching. When candidates graduate, research suggests most of them will be ineffective teachers (Goldhaber, 2019) who do not use the techniques their professors taught (Feimen-Nemser & Buchman, 1985; Kennedy, 1999). Compounding matters, their students will probably be children of color attending a low-resource school, as the schools with the greatest need disproportionately hire the newest teachers (Ingersoll et al., 2021). Such is the existing portrait of teacher education. Faced with these facts, it is tempting to join the chorus claiming that teacher education does not work, that the abstract ideals candidates discuss with professors do not matter, and that teaching is ultimately learned on the job, not in the mind.

But the truth is, we don’t know. Despite decades of distress (Holmes Group, 1986; Levine, 2006), we lack the data to describe what happens in teacher education, or whether it matters. Virtually all data describing teacher education come from teacher educators’ self-studies. Difficult to validate, aggregate, or generalize (Grossman & McDonald, 2008), these idiosyncratic investigations almost never explain teacher educators’ effect on graduates’ teaching (Cochran-Smith & Zeichner, 2009; Sleeter, 2014). Attempts to evaluate the effects of teacher education by extrapolating from the
state exam scores of children taught by a program’s alumni are logically tenuous and empirically inconclusive (Goldhaber, 2019). Today, despite knowing that we need quality teachers, we do not enough about teacher education (Cochran-Smith et al., 2016).

This dissertation investigates teacher educator pedagogy and its potential influence on new teachers. It is located in the central paradox of teacher education: teachers learn about teaching in settings where they cannot actually teach. Yet, teacher educators are charged with developing teachers who can enact instructional routines and adapt to students’ changing thinking, behavior, and needs (Ball, 2018; Hatano & Inagaki, 1986). I ask how six teacher educators in diverse institutions evoke classrooms, students, and instructional scenarios for their candidates, how they collaboratively explore those imagined situations, and whether and how their choices influence teacher candidates’ thinking and teaching.

Framing this Dissertation

I consider teacher education a process of scaffolding complex classroom scenarios in order to develop novices’ interpretive frameworks for analyzing student needs and enacting instructional responses (Goodwin, 1994; Vygotsky, 1978). Experts can differentiate between salient and non-salient information even in complex situations, like a noisy classroom, because they hold advanced interpretive frameworks (Berliner, 2001). Novices, on the other hand, lack these frameworks. To them, classrooms are simply chaotic (Hammerness et al., 2005). When teachers struggle to read classrooms, they struggle to teach. Research indicates that teachers’ perceptions of classroom scenarios are intertwined with their instructional decision-making (Jacobs, Lamb, & Philipp, 2010; Sherin, Linsenmeier, & van Es, 2009). In the classroom, what you see informs what you
decide to do. And what you see is an expression of your professional vision, which is
enculturated over time (Goodwin, 1994). Perception and interpretation are developmental
processes, and teachers can learn to notice different elements of instruction and change
how they articulate principles of classroom instruction (van Es & Sherin, 2002). Those
principles, in turn, can enable teachers to interpret and respond to novel situations (Metz,
Kavanagh, & Hauser, 2020). In this light, becoming an expert teacher is a process of
learning to interpret and adapt to classroom situations (Hatano & Ignaki, 1985).

Teacher educators are therefore mediators, nurturing candidates’ interpretive
frameworks by scaffolding their observations and analysis (Vygotsky, 1978). The
classroom may overwhelm novices, but teacher educators can make interpretive decisions
about what elements of instruction are most important (Berliner, 2001) and curate
representative examples of teaching to distill the complexity of the field and narrowly
direct candidates’ attention (Grossman et al., 2009). In many professions, novices are
centrally enculturated through apprenticeships. Teacher educators lack the structure to engage in
shared professional work alongside their students, but they can evoke a similar learning
process by creating mediated opportunities to collaboratively reflect on complex practices
(Schön, 1983). Research has established that reflective analysis has the potential to
influence what candidates notice and how they form interpretations (Kang & van Es,
2019). If teacher educators can consistently shape how candidates interpret classrooms,
they should be able influence their instruction.

**Research Design**

This dissertation is a comparative case study of six teacher educators (TEs) and
their teacher candidates (TCs) at three institutions. A comparative design was selected to
examine how different teacher education pedagogies operated under similar circumstances (Yin, 2014). To ground the comparison, I selected three teacher education institutions in urban centers on the east coast of the United States preparing candidates for masters degrees and certification in secondary classrooms. Because I was interested in the relationship between enacted teacher education pedagogy, what happens in university classrooms, and novice learning and teaching, I elected to observe subject-specific methods classes which are theoretically the spaces most directly responsible for novices’ teaching practice. Within each institution I observed the secondary methods courses in English Language Arts and social studies because both courses were humanities that centered text-based student discourse, and because observing multiple courses at each institution meant that no institution was represented by a single TE.

Institutions were selected to represent a range of perspectives on pedagogy. Drawing from the literature on teacher education, I focused on two divides in institutional profiles. The first distinguishes between university-based teacher education programs, which typically require extensive classwork and student teaching prior, and alternative certifiers that offer a more direct route into the classroom (Finn & Maddigan, 2001; Grossman, 2008). The second picks up recent debates about the role of teachers’ enacted practice in teacher education. Advocates for centering enacted teaching as an instructional tool argue that inverting the traditional theory-first approach of teacher education may better prepare teachers for the classroom (Forzani, 2014), while critics insist that an initial grounding in theory and reflection is a prerequisite for robust and thoughtful use of instructional practices (Kennedy, 2016). Accordingly, I selected one university-based program that has embraced practice-based teacher education, one non-
university based alternative certifier that advertises the centrality of practice to its curriculum, and one university-based program that has not publicly embraced practice-based teacher education.

At each institution, I interviewed the two participating TEs three times and observed between three and six of their course meetings. Course sessions were selected for observation based on TEs’ recommendation that those meetings focused on teaching practices. Interviews focused on TE pedagogical decision-making (Ball, 2018; Lampert, 1985) and included think-aloud tasks (Ericsson & Simon, 1993) involving syllabi, videos of novice teachers, and videos of the TEs’ own teaching. To understand how TEs’ enactment was being understood by learners, I also selected four teacher candidates (TCs) from each course, with two selected by their TE and two selected randomly. All TCs had placements teaching in public or charter middle and high schools where the majority of students were Black or Latinx. TCs were interviewed once and asked to share three videos where they implemented concepts from their methods in their student teaching. TC interviews focused on their experience of their methods course and the coherence between their methods course and teaching placements. These videos were used as part of a think-aloud task exploring TCs’ noticing and pedagogical decision-making.

Data from these 6 TEs and 24 TCs were used to answer three core questions. A brief overview of the studies addressing these questions follows.

**Study 1: How do TEs prompt TCs to reflect about practice?**

The first study explores how TEs direct TCs’ thinking about instruction. The divide between the field and the university prevents TEs from utilizing authentic live
teaching in their classes, but it also affords them discretion. By selecting videos, transcripts, case-studies, and simulations, TEs can curate the examples of teaching their students see and manipulate how candidates engage with them. The choices are complex. When TCs reflect on completed examples of teaching, by watching a video of a classroom discussion, for example, they can adjust the speed of the classroom, pause at pivotal moments, and view scenarios multiple times (Sherin, Linsenmeier, & van Es, 2009). It opens ripe opportunities for analysis but does not give teacher candidates experience with the speed and challenge of authentic enactment (Stroupe & Gotwals, 2018). At the same time, if TCs are continuously prompted to practice without the time and support to build principles for decision-making, their learning may be rote, brittle, and reductive (Kennedy, 2016).

To discern how TEs prompt TCs to reflect on practice, I selected episodes of observation where TEs initiated an instructional activity focused on a discrete teacher behavior (e.g., facilitating a discussion, modeling a reading strategy, etc.), and coded the types of reflective thinking TCs engage in, distinguishing between reflection-on-learning, reflection-on-action, and reflection-in-action (Schön, 1983). Reflection-on-learning describes TCs’ thinking about experiences where they acted as K-12 learners (e.g., role-playing students in a model discussion), reflection-on-action sees TCs thinking back upon enacted or observed teacher behaviors, and reflection-in-action describes TCs enacting teaching behaviors within a bounded timeframe and a degree of uncertainty. This last category positions thoughtful action as a form of reflection because feeling their way through unfamiliar scenarios often activates novices’ meta-cognition. Within each category, I coded whether TEs presented instructional choices as “best practices” or
engaged novices in deliberation around affordances and constraints (Kavanagh, Conrad, & Dagogo-Jack, 2020).

The findings show that TEs have more in common than might have been expected, but even small differences may be meaningful. The use of practice was pervasive in all six methods classrooms. As TEs facilitated episodes of practice, they guided novices towards different ways of imagining their future work as teachers. Some TEs preferred to have TCs experience uncertainty, while others sought to scaffold the complexity by emphasizing replicable practices and discrete moves. This portrait of pedagogy suggests that TEs possess a shared set of tools and prompts further questions about how different ways of imagining classrooms might influence future teachers.

**Study 2: How do TEs and TCs talk about students when studying practice?**

While instructional practices are often the explicit topic of methods courses, discussions of teaching implicitly characterize the students for whom the teaching is intended. In urban schools of education, when primarily white TEs and TCs discuss instruction, they imagine Black and Brown students. An established body of literature documents that novice teachers’ imaginations of urban learners veer between the reductive and fetishized (Anderson & Stillman, 2013; Gutierrez, 2006), but these tendencies have not often been connected to methods instruction. The structures of teacher education require TEs to work with imaginary students and some elements of teaching require generalization (Metz, Kavanagh, & Hauser, 2020), but this work must be done carefully. This paper asks how discourse between TEs and TCs prompts TCs to encounter their future students.
I coded observations of methods courses for the ways that TEs and TCs
discursively created students. Through iterative inductive coding, I first analyzed each
utterance in isolation to understand how students were being imagined. When TEs or TCs
discussed students’ capacity for inquiry, investigation, and novel insight, their comments
were coded as reference to “thinking,” “knowing” codes reflected TE and TC reference to
students’ possession of relevant knowledge, epistemologies, or frameworks for knowing,
“feeling” codes described students’ socio-emotional experiences, and “social group”
codes noted when TEs or TCs indicated identity markers such as race, class, language,
and gender, or other individuating characteristics such as social position or personal
interests. I also coded the valence of each statement to understand whether students were
being spoken of positively or negatively.

Results showed that methods courses tended to imagine students as potent
thinkers with limited prior knowledge who were likely to be anxious in school.
Explorations of students’ social identities were limited. TEs seemed to exhibit a lot of
control over the discourses by curating representations of teaching, prompting certain TC
responses, and actively facilitating and directing the discussion. TCs generally followed
their TEs’ direction, although they tended to personalize the discourse by talking more
about students they knew than abstracted or generalized portraits of learners. The
structures of teacher education and the development of candidates’ identity as teachers
require the discursive construction of students. Scrutinizing that construction is an
opportunity to examine the pedagogical options available to TEs and to reconsider how
novice teachers should think about their students.
Study 3: How do TEs influence TCs’ thinking about classroom discussion?

This study asks how TEs shape TCs’ pedagogical content knowledge (PCK) for facilitating classroom discussions of history (Shulman, 1987). Teacher education research has struggled to demonstrate a consistent instructional effect on graduates’ thinking and teaching (Goldhaber, 2019). PCK’s description of a unique body of teacher knowledge provides a framework for describing what novices might learn in a subject-specific methods course, but there is lingering uncertainty about the specific components and development of PCK for social studies teaching (Cuenca, 2021; Powell, 2018). This study takes up Saye’s (2017) distinction between inquiry grounded in a specific discipline, such as history, and inquiry grounded in the broader practices of citizens to examine how candidates’ PCK is influenced by their TEs.

Bracketing the analysis to two social studies methods courses, this paper compares the PCK of two sets of TCs at the end of methods courses taught by TEs with differing expressions of the aims and processes of classroom discourse. Using observations of each course, as well as videos of the TCs teaching actual K-12 students and a think-aloud task prompting reflection on those videos (Ericsson & Simon, 1993), I compared the influence of teacher education on teachers thinking and enactment. The first set of TCs entered their teacher education programs aligned with their TEs. At the end of the year, their teaching and their reflection upon their teaching closely resembled the instruction they received in their methods course. The second set, whose initial PCK was less aligned with their instructors, also progressed towards the vision outlined by their TE, although their growth was less substantial. In each case, teacher education appeared to have an instructional influence on candidates’ thinking and action. In each
case, this influence was shaped by TCs’ incoming PCK. Continuing to influence the development of PCK and its transfer into the classroom at a granular level may inform future practice and research into the disciplinary and civic knowledges at the core of social studies education.

**Contribution**

Today, we know little about how TEs teach and TCs learn. By the time this study is completed, the participating candidates will have graduated. They will be teaching in classrooms across the country but will concentrate in overburdened under-resourced city schools. From there, we know the story. New teachers are likely to flounder, often do not receive professional support, and many leave the profession within a few years (Ingersoll et al., 2021). For those teachers and for their students, we have an obligation to make teacher education as powerful as possible. This dissertation compares the work and thinking of six TEs across differing contents, contexts, and pedagogical philosophies. These portraits of practice analyzing TEs’ shared tendencies, common pitfalls, and promising breakthroughs are intended to develop a deeper understanding of their tools, travails, and influence on novice learning.

I approach this study with profound respect for the participants. The demands on TEs are extraordinary. They work in contexts precluding authentic enactment. They are essential to our education system but learn and practice their craft in isolation (Cochran-Smith, 2003). Public discussion can denigrate schools of education and scholarly discourse can fixate on the ideological divides between institutions. I want to recenter that discourse on pedagogy, the actual teaching and work that teacher educators do. As a teacher educator, I want to be able to provide my future students with research-informed
instruction that recognizes the difficulty of learning to teach, responds to their needs, and supports them as they enter the classroom. It is the least that they and their future students deserve. I see this dissertation as a step towards valuing the imaginative, transformative, and necessary work of teacher education.
References


Constructing Imaginary Classrooms: Teacher Educators’ Direction of Reflection about Practice

Thirty-five years ago, Feimen-Nemser and Buchman (1985) gave the central dilemma of teacher education a name, the “two-worlds pitfall.” The problem stems from the separation between schools of education and K-12 schools. Typically, K-12 schools and teachers have no access to what is being taught in teacher education and teacher educators never see their teacher candidates interact with a K-12 student. This mutual invisibility makes it nearly impossible for methods courses to respond to the specific contexts of candidates’ student teaching. Instead, teacher educators and candidates typically discuss teaching. Their discourse constructs a shared mental representation of schooling, teaching, and learning, an imagined classroom. In this study, I ask how teacher educators build imagined classrooms using representations of practice and how their choices influence novices’ opportunities for thinking about instruction.

It is possible to read virtually the entire history of teacher education as a response to the two-worlds dilemma, an attempt to answer the question, “How can what we teach here, influence what they do there?” The recurring allegation that schools of education are more concerned with educational theory than actual pedagogical preparation (e.g., Conant, 1963; Levine, 2006), has led the field seek structural and instructional tools to increase the transfer between schools of education and K-12 classrooms. Structurally, the tug of war between institutions of higher education and normal schools throughout the middle of the twentieth century can be understood as a contest about where teacher education should be situated in relationship to the classroom. Today, victory of the
university appears somewhat pyrrhic, as it has done little to quell crises of legitimacy (Grossman, 2008). An array of programmatic reformers, including advocates of teacher residency programs (e.g., Hammerness & Craig, 2016), non-university-based teacher education programs (Cochran-Smith, 2021), and alternative routes to certification (Finn & Maddigan, 2001), all purport to be better able to solve the two-worlds problem. This dilemma has also spurred reforms within university-based programs. By the 1980s, the twin innovations of student teaching and the subject-specific methods course were mainstreamed as an attempt to build a direct connection between the intellectual world of the university-based teacher education program and the real world of the K-12 classroom (CAEP, 2020), and programs continue to experiment with integrating the university and the classroom (Kazemi et al., 2018; Quartz, Priselac, & Franke, 2009).

In pedagogical discussions, however, it might be more accurate to think of the two-world dilemma as a problem of three worlds. Through a Vygotskian lens, learning is a social interplay (Vygotsky, 1978). As teacher educators and novices discuss classroom teaching, they co-construct a shared mental representation of the classroom. Teacher educators introduce hypotheticals, narratives to inform novices’ imaginations of what students need and what a teacher could or should do. As they do so, they are in conversation with novices’ own experiences with classrooms (Lortie, 1975) and projections of themselves as teachers (Gaines et al., 2018). Because teacher education is separate from classrooms, when instructors and candidates talk about teaching, their imagination builds a new classroom that is neither located in the methods classroom nor an exact mirror of any specific physical classroom. Like Popper’s (1972) World Three, the imaginary classroom discursively co-constructed by teacher educators and novices is
a product of thought. The imagined classroom does not exist in the university or the field, but, through their thinking, it influences how teachers act in both places.

Within the last century, at least three broad paradigms have emerged to connect the imagined classroom and real teaching. Positivist process-product research drew a straight line from the imagined classroom to actual students. Informed by behaviorist psychology, this model conceived of a set of teacher behaviors that were deemed universally valuable because they correlated with student achievement (Gage, 1986). Behaviorist approaches to teacher education effaced the importance of context and posited that classrooms are somewhat predictable. Micro-teaching, bouts of brief simulated teaching, were thought to help teachers master practices in teacher education that could be directly transported to K-12 schools (Grossman, 2007). Teacher educator and candidates’ imagination of classrooms were presumed to be more or less accurate.

The cognitive revolution generated an intellectual critique of behaviorism. Inspired by frameworks like pedagogical content knowledge (Shulman, 1986, 1987), the focus shifted to developing teachers’ knowledge and capacity for decision-making through case studies and structured reflection. This intellectual approach to teacher education embraced the importance of the imagined classroom. Pedagogies of reflection aim to inform teachers’ principles for instruction as part of an ongoing process of

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1 I do not mean to connect this conception of the imaginary classroom as a distinct world to existing research on “third spaces” in teacher education (Beck, 2020; Gutiérrez 2008), which draws upon post-colonial Third Space Theory (Bhabha, 1994). This strand of research explores how alternative teacher education structures might be leveraged to disrupt the power embedded in institutions like the university, while I am attempting to describe the status quo practices within more typical teacher preparation programs.
learning from and tailoring to specific students and contexts (Grossman, Hammerness, & McDonald, 2009; Rodgers, 2002).

More recently, some scholars and practitioners have argued for centering enacted teaching practice in methods courses (Ball & Forzani, 2009; Grossman, Hammerness, & McDonald, 2009). Primarily framed within a sociocultural framework, this return to practice is conceptualized as scaffolding novices’ experience with the tools of teaching by curating and representing core practices of teaching, decomposing and codifying their essential elements, and prompting novices to attempt to approximate these practices in the context of the university classroom (Grossman et al., 2009; Grossman, 2018). The bid is to tether imagined classrooms to real ones, using representations and approximations of practice connected to authentic teaching to make the imagined classroom look and feel realistic, while using decompositions to make practice legible to novices. Because teaching is neither purely an enacted practice nor cognitive exercise, advocates of practice-based teacher education hope to develop teachers’ capacity for thoughtful action.

The move to center practice in teacher education is a significant and controversial departure from the field’s general focus on cognition and intellectual reflection. Some criticism is structural, expressing concern that a turn to practice might support a neoliberal bid to push universities to the margins of the teacher education landscape (e.g., Philip et al., 2018), but the primary point is pedagogical. Critics are concerned that pedagogies of enactment, teacher education focused on analyzing and attempting representations of teacher behaviors, will lead to narrow and brittle thinking. Teaching practices presented in a methods classrooms are inherently decontextualized. Without context and feedback from students, pedagogies of enactment might become a simplistic
and reductive parade of “best practices” that would devalue teachers’ thinking, reduce teaching to the mechanical enactment of teacher moves, and effectively commit the same sins as the bygone behaviorist model (Kennedy, 2016; Zeichner, 2012). If teachers are led to believe that teaching is predictable, the center of the work shifts towards action and away from cognition. In a related critique, scholars have raised the concern that when class time is occupied by specifying practices and rehearsing routines, developing teachers’ commitments to social justice may be marginalized (Zeichner, 2012; Zeichner & Conklin, 2016). Deemphasizing theory and reflection may rob novices of the time and tools to question the inequities of normative educational practices (Horn & Kane, 2019; Philip, 2019).

In effect, both advocates for and critics of pedagogies of enactment agree on the power of the imagined classroom. They both believe that the way novices imagine the classroom matters to their future teaching and that their imagination can be informed by their experiences in teacher education. They both see representations of practice, such as artifacts, narratives, audio, or videos, as powerful tools for shaping novices’ imagination and supporting collaborative analysis. The primary point of contention centers not on whether representations should be used, as few teacher educators would argue that novices should avoid seeing classrooms, but on the choice of what elements of teaching should be represented and how novices should be directed to reflect upon them. The counterpoint to centering the frequently enacted instructional “core practices” of a discipline (Grossman, 2018), is often representing different elements of teaching, such as principled improvisation (Philip, 2019), learning from communities (Souto-Manning & Martell, 2019), or aligning instructions to standards of equity and justice (Dinkelman &
Taking on the claim that representations of practice are powerful tools for shaping how novices think about teaching, I examine how six teacher educators use representations of enacted teaching practice.

**Research Questions**

In this study, I ask how teacher educators (TEs) provide opportunities for novices to engage in reflection. Comparing the work and thinking of six TEs from institutions representing a spectrum of perspectives on practice in teacher education, I ask the following questions:

1. To what extent and in what ways do TEs use practice to prompt reflection in their teaching?
2. When TEs prompt reflection in episodes of practice, do they focus on enacted instruction, underlying principles, or a blend of the two?
3. When TEs prompt reflection in episodes of practice, do they prescribe best practices or present instructional decision-making as a dilemma?

**Theoretical Framework**

Four decades ago, Schön (1983) argued that professional knowledge was characterized by the capacity for reflective adaptation, rather than the possession of a discrete body of knowledge. In this conception, professional expertise is not static knowledge, but a dynamic interplay between a practitioners’ thoughts, actions, and interpretation of professional dilemmas. Schön called this enacted knowledge “knowing-in-action” and considered its intelligent automaticity the mark of internalized professional expertise. Novices, by definition, have limited capacity for knowing-in-action. They are
not yet able to skillfully perform the tasks of their profession with automaticity. Instead, their professional behaviors are characterized by concerted intellectual effort, what Schön called “reflection-in-action.” Reflection-in-action is thoughtful, even self-conscious, work. It is provoked by uncertainty, in instances where professionals cannot operate on “autopilot,” but must rethink their approach in ways that blend their decisions about their next move and the broader structures of the task. Experts might briefly engage in reflection-in-action when presented with a new challenge, but novices reside in uncertainty. Reflection-in-action is simultaneously their baseline and their pathway towards knowing-in-action. Crucially, reflection-in-action, like the knowledge-in-action it develops, is neither entirely intellectual nor entirely embodied. Rather, reflective practice is a fluid interplay between thinking and doing.

Schön (1987) believed reflection-in-action could best be cultivated in “reflective practicums,” apprenticeships where novices engaged in authentic professional dilemmas alongside more knowledgeable practitioners who could titrate the balance between productive struggle and safe exposure to the uncertainty of practice. As they become familiar with their work, novices could construct frameworks to interpret professional problems and develop the capacity to act with automaticity. Schön does not deny the existence of codified expert knowledge or the utility of retrospective thinking, which he called “reflection-on-action.” But because reflective practice is enacted as well as intellectual, he theorized reflection-in-action as a necessary element of professional learning.

Although he was not initially writing about classroom teaching, much of Schön’s thinking dovetails with contemporary research on adaptive expertise in education.
Adaptive expertise centers teachers’ capacity for making improvisational interpretations and modifications (Hatano & Inagaki, 1986; Yoon et al., 2016) and builds on cognitive frameworks of pedagogical dilemma-managers (Lampert, 1985) and pedagogical content knowledge (Shulman, 1987), which describe the domain of professional knowledge possessed by teachers that enables responsive principled decision-making. It also borrows from earlier research on expertise by stressing the importance of cognitive frameworks that automatize routines and free space for responsive decision-making (Berliner, 2001; Hammerness et al., 2005). In conversation with Schön’s work, the research on adaptive expertise in education can be read as offering a domain-specific articulation of reflection-in-action, undergirded by experts’ capacity to swiftly interpret complex classroom situations and substantiated by the literature documenting gaps between novice and expert teachers’ interpretative frameworks, instructional decisions, and classrooms results (e.g., Berliner, 2001).

If reflection-in-action is a necessary component of developing adaptive expertise, it stands to reason that it would be a prominent feature of teacher education. The structures of teacher education programs, however, are ill-suited to fostering expertise through experience. Contrary to the apprenticeship model of Schön’s (1987) reflective practicums where novices’ learning, doing, and reflecting are intertwined, teacher education typically separates subject-specific methods courses from field experiences. In most cases, novices learn about and practice teaching in separate spaces with a mutual invisibility between the university and the field, as neither methods teachers nor field supervisors typically know what one another are doing. This gap is the genesis of the two-worlds pitfall.
Methods

Participants

I purposively selected six TEs at three urban teacher education institutions representing a range of views on pedagogies of practice. Each institution was located in a large city on the east coast of the United States, and offered students master’s degree and certification. Despite their contextual similarities, each institution’s public profiles advertised differing pedagogical philosophies. Institution A is a large research university that has embraced practice-based approaches to teacher education. Institution B is a large non-university based alternative certifier that advertises the centrality of practice to its curriculum, although it does not publicly use the academic language of practice-based teacher education. Like other alternative certifiers coming out of the same wave of educational reform, Institution B offers a more direct route into the classroom by allowing teachers to take on full-time professional work as they complete their masters, rather than spending a year student-teaching (Cochran-Smith, 2021; Finn & Maddigan, 2001). Institution C is a large research university that describes its teacher education program as progressive, with a focus on research on inquiry. Faculty members at Institution C, although not the TEs in this study, have published research criticizing practice-based teacher education and alternative certifiers. In addition to their pedagogical differences, the institutions structured coursework and fieldwork differently. Both university-based institutions offered a one-year program (including summer, fall, and spring semesters) where teacher candidates (TCs) enrolled in multiple classes per semester and worked as student teachers in placements where their classroom mentors gradually increased their instructional responsibility over the course of the year. TCs at
Institution A stayed in a single field placement for the entire year, while those at Institution C switched placements between the fall and spring semesters. Institution B’s program, however, ran for two years throughout which TCs were fully employed as teachers of record. During each year of the program TCs took a single year-long course.

At each institution, I interviewed and observed the TEs responsible for the secondary social studies and English Language Arts (ELA) methods courses. Social studies and ELA methods courses were chosen because they have significant overlap in content, including a shared valuation of text-based inquiry, and because selecting two courses avoided representing any institution with a single TE. Three of the methods courses, social studies and ELA at Institution A and ELA at Institution C, ran for a single semester in the fall. Three of the courses, social studies and ELA at Institution B and social studies Institution C, were year-long courses taught by a single instructor. I attempted to follow the logic of institutions and instructors by observing class sessions in both fall and spring semesters when they were presented as a year-long course, and only observing the fall semester in single-semester courses. Although Institution B offers a two-year program, I only observed methods courses from the first year as these were more analogous to the introductions to the profession offered at Institutions A and C. All 6 participating TEs were White. Five were women. Their ages ranged from 35 to 50 years old, with experience in urban teacher education ranging from 5 years to over 20. All the participating TEs at the university-based institutions held Ph.Ds., while the TEs at the alternative certifier had master’s degrees. At Institutions A and C, class size ranged from 12 to 30 teacher candidates (TCs), the majority of whom were white women. The courses at Institution B were larger, between 30 and 45 students, and more racially diverse with
white-presenting TCs comprising a little less than half of the classes and Black and Latino-presenting TCs accounting for most of the other half. Most TCs at Institution B were women. In this study, I refer to TEs by institution and subject, such that AS is Institution A’s social studies instructor, AE is the ELA instructor at institution A, BS is the social studies teacher at Institution B, and so forth.

**Data Sources**

I interviewed each TE three times and observed their methods courses. Course sessions were selected for observation based on TEs’ recommendation that those meetings connected to practice. As a result of differing TE recommendations and logistical considerations, the number of observations varied such that CE was observed three times, AS, BS, BE, and CS, were observed four times, and AE was observed six times. Three of the four observations of CS occurred online as the start of the COVID-19 pandemic forced a rapid shift in her instruction. Data collection at all other sites were completed before in-person schooling shut down. Observations were filmed and transcribed. Interviews focused on TEs’ decision-making surrounding practice and included think-aloud tasks (Ericsson & Simon, 1993) involving syllabi, videos of novice teachers, and videos of the TEs’ own teaching.

**Data Analysis**

Data analysis occurred in three stages (Figure 1.1). I first divided observations into episodes to identify episodes of practice. I then coded each episode of practice for the form of reflection in which TCs were engaged. Reflections about instructional practices were then further coded to identify the focus of the reflection (i.e., whether TEs were drawing attention to discrete instructional moves or the broader aims of instruction)
Segmentation and Episodes of Practice. The first level of analysis divided observations into episodes based on the activity structure employed (TE lecture, whole group discussion, small group discussion, TC independent work) (see Stodolsky, 1998). Episodes were defined as lasting least three minutes. For example, when BS began class by leading TCs through a brief guided meditation, reviewing assignments from the previous week, and delivering a brief synopsis of the sessions’ learning goals, this was coded as one continuous episode of TE lecture. Although the subject of the BS’s talk changed, the organization of the class did not. Interruptions to BS’s talking included a moment where she asked a question, received a short response from a TC, and then resumed her talk. The TC’s response lasted less than three minutes, so it was not coded as a separate activity structure. The “TE lecture” segment, including BS’s changes in topic, ran until BS directed TCs to talk with their peers about their homework for the class. The
ensuing peer-to-peer discussion lasting five minutes, indicating the end of the “TE lecture” activity structure and the start of “small group” activity. All instances where TCs were primarily engaged as listeners were coded as TE lecture, including watching a video or model were coded as “TE lecture.” If TCs actively participated, even by role-playing K-12 students, those segments were coded as “whole group” or “small group,” depending on who they were speaking with.

After observations were segmented into activity structures, I coded the resources depicting practice that were available to TCs in each segment (e.g., case studies, video of teaching, transcripts of classes, etc.). Resources were considered available if they were the explicit topic of discussion and either physically accessible by TCs, as in the case of lesson materials or transcripts, or had been recently shared within that class session, as in the case of a video or live model of instruction. When TCs were asked broad conceptual (e.g., “Why might some discussions fail?) or recall question (e.g., “Think back to the best classroom conversation you have ever had. What made it so great?”), without any material aid to anchor their conversation, those episodes were coded as not having resource present. Activity segments where TCs had access to resources representing teaching practice (Grossman et al., 2009) were coded as episodes of practice. Resources were considered to represent teaching practices if they showed a teacher’s behavior, student thinking, or the product of a teaching behavior. Using this definition, TCs watching their TE model an instructional technique, evaluating a sample of student writing, or analyzing a classroom text were all coded as episodes of practice. If, however, TCs discussed an instructional technique without a demonstration, described a comment made by a student in their field placement, or read criteria for a successful lesson plan,
they might be said to be learning about, but not through practice. Those examples, which lacked concrete representations, were not coded as episodes of practice. In most cases, episodes of practice spanned multiple contiguous activity structures. For instance, when a TE modeled a think-aloud, asked TCs to analyze to the model with a partner, and then facilitated a whole class debrief, it was coded as a single episode of practice comprised of segments of TE lecture, small group discussion, and whole group discussion, all of which used the resource of the TE’s model.

**Reflective Practices.** Secondary coding addressed TCs’ opportunities for reflection during episodes of practice. Drawing on Schön (1983), I defined reflection as thinking about enactment and distinguished between three forms of reflection: reflection-on-learning, reflection-in-action, and reflection-on-action (Table 1.1). Reflection-on-learning described TCs’ thinking about experiences where they acted as K-12 learners (e.g., role-playing students in a model discussion or reading challenging texts to reflect on their own strategies for reading comprehension). Reflection-on-action described TCs’ retrospective thinking about teacher behaviors they had enacted or observed. Reflection-in-action described TCs enacting teaching behaviors within a bounded timeframe and with a degree of uncertainty. Schön (1983) posited that thoughtful action constituted a form of reflection when surprise disrupted the normal modes of action and motivated active experimentation as novices worked. For this reason, coding did not consider demonstrations, situations in which novices delivered a set script without elements of uncertainty or surprise, to be reflection-in-action.

**Reflective Focus.** Two sets of subcodes were applied to segments of reflection-on-action and reflection-in-action. The first described the content of the reflection,
distinguishing between reflection about moves and reflection about structural aims. Moves were defined as discrete teacher actions that could be implemented in under a minute, such as a question. Structural aims were larger elements of instruction such as the lesson objective, use of formal discourse structures like a debate, or goals of instruction such as disciplinary literacy, social justice, or democratic citizenship that could possibly be expressed through a teacher’s action, but require long-term planning and integration.

**Reflection Facilitation.** The second sub-code noted instances when TEs highlighted instructional dilemmas. Reflective segments were coded as including dilemmas when TEs highlighted a tension between multiple possible instructional actions (Kavanagh, Conrad, & Dagogo-Jack, 2020). When TEs presented one instructional choice as a “best practice” or discussed multiple methods without exploring a tension those segments were coded as non-dilemmas. Modeling a single method often implicitly signals that the modeled method is a best practice. Merely alluding to alternative options without presenting them (e.g., “This is *one* way, but I’m not saying it’s *the* way [to launch a Socratic Seminar]”) does little to help TCs find alternatives and was not coded as a dilemma Similarly, providing multiple options in list form without acknowledging a tension (e.g., “If students aren’t responding you could use wait time, you could cold call, you could have them write…” ) does not necessarily prompt TCs to reckon with the potential trade-offs of their instructional decisions. TCs might infer a large list of “best practices” that they ought to emulate, rather than considering how they themselves ought to evaluate what is best.
<table>
<thead>
<tr>
<th>Coding Category</th>
<th>Definition</th>
<th>Application</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reflection-on-learning</td>
<td>Reflection focusing TCs’ thinking about experiences where they acted as K-12 learners.</td>
<td>Episodes of Practice</td>
<td>“Can I just ask [the TCs roleplaying] students in the class, what did you just feel?…How did that play out in your brains as you’re listening?”</td>
</tr>
<tr>
<td>Reflection-on-action</td>
<td>Reflection focusing TCs’ retrospective thinking about teacher behaviors they had previously enacted or observed.</td>
<td>Episodes of Practice</td>
<td>“What were the ways and tools that she used to introduce preposterous [in the video we watched]?”</td>
</tr>
<tr>
<td>Reflection-in-action</td>
<td>Reflection in which TCs thought about and experienced enacting teaching behaviors within a bounded timeframe and with a degree of uncertainty.</td>
<td>Episodes of Practice</td>
<td>[As you roleplay teaching, there are] three basic moves: One is I can say ‘pause,’ two ‘rewind,’ and three I can say, ‘Can you try saying…’ You should all be comfortable pausing your classmate and asking what they're thinking or where they're going or what you might say, you might want to try out a line.”</td>
</tr>
<tr>
<td>Reflection focus: Moves</td>
<td>Reflection about teacher actions that could be enacted in Reflection-on-action and Reflection-in-action</td>
<td>Reflection-on-action and Reflection-in-action</td>
<td>“I want you to look through your transcript and pick...”</td>
</tr>
</tbody>
</table>

Table 1.1: Codebook
one minute or less. | out at least one example of two things:….A response that you think pushed students work, the kind of learning that you want. And then secondly, a response that you feel like could use some improvement.”

| Reflection focus: Aims | Reflection about teacher actions or principles that could not be enacted in under a minute. | Reflection-on-action and Reflection-in-action | “You guys made an amazing case for why small group work is necessary to the disciplinary thinking of history. We really focused on that and all came up with a new definition for what we mean when we say small groups”

| Facilitation for dilemmas | TE prompting that highlighted the tension between two or more possible instructional options. | Reflection-on-action and Reflection-in-action | “We’re looking at these dilemmas and all the responses. There isn't one that is the best, but I want you to be aware there are lots of different things to do in any given situation, and you should make a principled decision about which one to do and why.”
Facilitation for non-dilemmas  | TE prompting that did not highlight any tension between two or more possible instructional options.  | Reflection-on-action and Reflection-in-action  | “[As you practice] watch your rolling stops for moments that you would actually stop in class. Meaning, let's say I said, “I need all eyes in three and two and one great, let's move on.” I haven't actually stopped to make sure that everyone is with me… Practice that in practice because the more you do that, the more likely it's going to happen in your class.”

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**Positionality Statement**

Analysis was necessarily colored by my own history as a teacher and teacher educator and my relationships with the participants. Institutions were selected to provide a range of pedagogical perspectives. Due to my own experiences in the field, I had a variety of relationships with participants in this study. These relationships ranged from close colleague to new acquaintance. Although I endeavored to ensure ground analysis in the data, my experiences, relationships, and beliefs are undoubtedly part of this research.

**Findings**

Analysis reveals that all six TEs frequently initiated episodes of practice. Within episodes of practice, TEs tended to prompt post-facto retrospection (reflection-on-action), discuss isolated instructional moves, and present teaching in normative terms. The
variation amongst the TEs demonstrated opportunities to use episodes of practice to inspire robust deliberation about the aims, means, and effects of instruction, even while suggesting that such deliberation is not the norm.

Course Structures, Episodes of Practice, and Opportunities for Reflection

Although institutions were selected for their professed differences, their courses were structured similarly. All six methods courses met weekly, ran between 105 and 135 minutes, and devoted multiple sessions to instructional practices like lesson planning, modeling, and facilitating discussions. Within the observed course sessions, TEs allocated their time similarly. TCs in 5 of the 6 courses spent most of their class time in whole group discussions, with time devoted to listening to their TE, working in small groups, and working independently, in decreasing order of frequency (Figure 1.2). TE lecture comprised between 19% and 29% of each TE’s class time and was the second-most frequently used activity in all cases. Independent work time never took more than 17% of class time and, for all but one TE (BE), was the least frequent mode of engagement. The biggest differentiator between TEs’ activity structures was the distribution of time between whole group and small group work. The outlier TE was Institution B’s social studies instructor, BS, who was the only TE to devote more class time to small group discussion (46%) than whole group (19%).
Figure 1.2: Percentage of Class Time by Activity Structure

Episodes of practice were a substantial part of every course. They were present in every course and comprised the majority of class time for 4 of the 6 TEs (Figure 1.3). Even BS, the TE with the least amount of time in episodes of practice, incorporated representations into one third of her teaching. TEs even used similar resources to initiate and ground episodes of practice. I observed seven forms of representation in TEs’ classrooms (Table 1.2). Four of those resources, TC demonstrations, TE models, videos of instruction, and analysis of lesson materials, were used by at least four TEs. While some resources were used sparingly (three TEs never used transcripts and the three who did spent less than 13% of their class time doing so), others accounted for significant portions of methods instruction. In AS, BE, and CE’s classes, TCs spent more than a third of their total time in class viewing or analyzing TC demonstrations or TE models. While there are idiosyncrasies (e.g., BS was the only TE who did not ask TCs to practice teaching publicly, AE was the only TE who analyzed student work, and CS spent much
more time examining curricular materials than her peers), TEs largely shared a commitment to episodes of practice and used similar representations to initiate those episodes.

**Figure 1.3: Average Percentage of Class Time Spent in Episodes of Practice**

![Bar chart showing average percentage of class time spent in episodes of practice for different groups.]

<table>
<thead>
<tr>
<th></th>
<th>TC DEMONSTRATION</th>
<th>TE MODEL</th>
<th>VIDEO</th>
<th>LESSON MATERIALS</th>
<th>CASE STUDY</th>
<th>TRANSCRIPT</th>
<th>STUDENT WORK</th>
</tr>
</thead>
<tbody>
<tr>
<td>AE</td>
<td>12%</td>
<td>16%</td>
<td>21%</td>
<td>6%</td>
<td>3%</td>
<td>3%</td>
<td>5%</td>
</tr>
<tr>
<td>AS</td>
<td>39%</td>
<td>22%</td>
<td>7%</td>
<td></td>
<td></td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>BE</td>
<td>11%</td>
<td>32%</td>
<td>1%</td>
<td>13%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BS</td>
<td></td>
<td>12%</td>
<td>5%</td>
<td>10%</td>
<td>6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CE</td>
<td>31%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>9%</td>
<td></td>
</tr>
<tr>
<td>CS</td>
<td>20%</td>
<td></td>
<td>31%</td>
<td></td>
<td></td>
<td>13%</td>
<td></td>
</tr>
</tbody>
</table>

**Prompting Reflection During Episodes of Practice.** The presence of practice in all the courses did not, however, indicate that novices had uniform learning experiences. TEs used practice to promote different amounts and kinds of reflective thinking. Depending on who their TE was, TCs might spend as little as 16 minutes reflecting about
practice (CE) or as much as 57 minutes (AS) per two hours of class (Figure 1.4). Four TEs, (AE, AS, BE, and CS) spent at least a quarter of their class time engaging their students in reflective thinking.

*Figure 1.4: Average Minutes in Episodes of Practice per 2-Hour Class and Average Minutes of Reflection Within Episodes of Practice*

![Graph showing average minutes in episodes of practice and reflection per 2 class hours for AE, AS, BE, BS, CE, and CS.]

The variation in opportunities for reflection stemmed not only from the frequency of episodes of practice, but TEs’ instructional decisions within each episode. Some TEs facilitated extended reflective conversations based on brief examples of practice. AE, for example, spent 10 minutes debriefing a 4-minute video and CS led a 17-minute discussion after allotting TCs only 4 minutes to review a class transcript. By contrast, BE once modeled a lesson for 50 minutes before giving TCs 6 minutes to reflect. BE and AE spent nearly the same amount of time in episodes of practice (BE spent 1 additional minute in practice per class), yet, over the course of four average weeks, BE’s students spent 92 fewer minutes in reflection, largely because so much of his instructional time
was spent modeling. Demonstrations by TCs created a similar divide. CE and CS each created summative assessments where TCs planned and then enacted a lesson in their methods course. In their performances, TCs adhered to their script and received written feedback after the end of class. These performances but were not coded as reflective practice because TCs were not prompted adapt their performance in-real-time (reflection-in-action) or to think about the experience before the end of class (reflection-on-action).

TCs in AE, AS, and BE’s courses also acted as teachers in front of their peers, but these demonstrations were structured as rehearsals where TEs and TCs asked the rehearsing TCs to improvise revisions, explicitly initiating reflection-in-action.

**Variations in Forms of Reflection During Episodes of Practice.** TEs initiated different forms of reflection. Half the TEs, (AE, AS, and BE) prioritized the in-the-moment deliberation of reflection-in-action, while the other half (BS, CE, and CS) preferred retrospective reflection-on-action (Figure 1.5). Of three TEs who preferred reflection-on-action, only CS ever utilized reflection-in-action. A contrast in motivation for these forms of reflection surfaced in TEs’ description of activities. CE described the performances in her class, saying:

> The purpose was to give students an opportunity to sort of test drive a piece of what they were thinking about…I worry about the amount of class time devoted to say those lesson [performances], but then they seem to really appreciate the opportunity to see their classmates teach…the tension is just in having enough time to reflect on what they've done to make it a really meaningful learning experience. So, it's not just the doing but it's reflecting on the doing…It would have been much more pedagogically sound to have time to debrief every one of them.

In her account, retrospection, or reflection-on-action, is where TCs learn to teach. BE, however, insisted that TCs learn through practice:
[I try to] make practice really as authentic as possible, where it's not just practice of like a very isolated skill, like just ‘wait time,’ but embedding ‘wait time’ into like a full vocabulary delivery lesson… I also think that there’s some room for interpretation, for flexibility. Room for like, interpreting how this looks for me, and what I believe is my own kind of pedagogy. What is my kind of philosophy of teaching?…Practice is crucial. I will always keep practicing my class.

He imagined the barrier between doing and thinking as permeable and believed that authentically embedding the practice in context would spur the construction of principles in the moment. BE’s decision to create small bursts of active practice reflected his belief in reflection through doing, just as CE’s decision to engineer extended demonstrations reflected her conviction that novices need time to digest the doing after the fact.

**Figure 1.5: Average Minutes of Reflection per 2-Hour Class**

![Graph showing average minutes of reflection per class](image)

Reflection-on-learning occurred in all classes, but never occupied more than 6 minutes per two-hours. Because reflection-on-learning was infrequent and explicitly positioned TCs to take the perspective of students (e.g., “I want to know how you felt as students in [the model lesson]” (AS), and “Sometimes we have our teacher hat on and we're thinking about what we would do as a teacher. Take that hat off…really reflect on your experience as a participant [in the model discussion]” (AE)), the following analysis
of TC reflection will focus on reflection-on-action and reflection-in-action to understand how methods courses prompted TCs to think about teaching practices.

**Focus of Reflection**

TEs consistently directed the focus of TCs’ reflection by drawing attention to the granular moves of teachers or the broader aims and structures of instructional activities. Most frequently, TEs focused on instructional moves (Figure 1.6), discrete actions made by teachers in under a minute. Blended reflection, episodes of practice in which TCs considered both moves and structures, was comparatively rare and only occurred in three TEs’ classrooms (AE, AS and CS).

*Figure 1.6: Average Minutes of Reflection per Class by Focus on Move, Aim, or Blend*

![Bar chart showing average minutes of reflection per class by focus on move, aim, or blend. The chart includes data for AE, AS, BE, BS, CE, and CS.]

In most cases, TCs adhered to their TEs’ prompts. Examples from AS and BS, show how the same representation could be used to spur TCs to reflect on either the structural aims of historical discussions or the teacher moves animating such discussions. Before facilitating a model historical discussion in her methods class, BS primed TCs to
“pay particular attention to the metacognitive journey that we’re having and experiencing in that discussion.” At the end of the model, she asked TCs to work in small groups to launch a reflective conversation about the aim of classroom discussion by asking, “How would you characterize the relationship between discourse and thinking?” At the end, BS summarized the classes’ reflection by highlighting the dialectical nature of both history and discussion, saying, “[there is] a give and take…[which] goes back to how you define history. It’s not static…That’s another commonality that I’m seeing in the chart here, that [discussion] is one of the closest ways to approximate the give and take that's necessary in doing the discipline.” BS’ priming, prompt, and summary all guided TCs to think about the aim and structure of discourse, rather than the specific moves a teacher uses to sustain it.

AS, on the other hand, used the same representation, a model historical discussion, to explore teaching moves. She primed TCs by having them watch a video of classroom discussion and pay attention to “What kind of thinking did you hear the kids doing?…What kind of things did you see [the teacher] doing in the facilitation?” AS then led her own model discussion, after which she asked TCs, “What did you see that you thought worked? And what did you see that was actually, I don’t know, muddled or could have been clearer?” Their debrief conversation zeroed in on whether AS had made the right move in the model discussion when Dave², a TC role playing as a student, made an argument based on a nuanced interpretation of whether Abraham Lincoln’s use of the word ‘creature’ to describe an enslaved person was derogatory. At the end, AS summarized that discussion:

² All TC names are pseudonyms.
I think it's a big call, right? I mean, in this case, I think I maybe did the wrong move in response to Dave. And I think partly it was because it was his first time talking…If I were to do this again, if it came up in my next period, I would say, “Dave is bringing up this point that the word creatures is, you know, ‘God’s creatures,’ it was a sort of religious term, and I will confirm that Lincoln was religious.” So, I could sort of say that. What do you guys think?…Does that change our conversation? I think I should have done that. Does that change our conversation?

Although TCs in both classes reflected on model discussions in which they role-played students while their instructors facilitated, the debriefs were very different. AS zoomed in on minute pedagogical decisions while BS panned out to the broad disciplinary implications of discourse. In two cases of reflection-on-action using the same representation, TEs’ facilitation was the engine, guiding novices towards either considering instructional moves or structural aims.

Although TEs usually prompted novices to reflect upon instructional moves and aims separately, enacted teaching requires an alignment between moves and structural aims. AE, AS, and CS explicitly fostered that alignment within in their methods classes. AE and AS facilitated discrete activities directing novices to connect aims and moves. They distributed worksheets listing teacher moves and directed TCs to identify how the moves advanced instructional goals such as promoting student-to-student talk, disciplinary reasoning, and textual analysis. At other times, the blending of moves and aims was developed over the course of an entire class rather than a specific activity, as CS showed in a class on historical reading. She began by explicitly linked teacher moves to instructional structures while she reviewed a homework assignment requiring TCs to modify a complex primary source for their students. Comparing two TCs’ modifications, she noted, “You're dealing with very different students. So, if we keep a sort of a guide
for ourselves, how much do I need to change this to make it accessible for my students? And how much can I retain of the authenticity and the rigor of the original document without creating a barrier for my students?” Picking up on this comment, TCs discussed how their moves to alter a primary source advanced the broader structural aims of having students engage in primary source-based inquiry. CS then sent novices into small groups and gave them 12 minutes to modify a different unwieldy text for students. As TCs wrestled with the task, they initially discussed moves that could make the text more accessible, such as “I would excerpt it” and “[We could add a preface to] front-load the more factual info.” After brainstorming, TCs began deciding which modifications they actually wanted to make. This discussion ran into questions of their broader goal, such as when one TC said, “I think it gets down to what you use the document for. If you’re using the document to teach the facts, or if you’re using it as a way to build historical empathy and really have students learn the what the firsthand experience was like.” CS curated this opportunity, giving TCs two opportunities for reflection-in-action with text modification and inserting commentary about the connection between moves and aims in the middle of those rounds of practice. The complex task of blending moves and structural aims appeared to require intentional prompting. When TEs asked broad open-ended questions such as “What did you think of that?” or simply allocated time for questions and answers, TCs often asked their instructors what to do in specific situations, leading TEs back towards discussing moves. Absent explicit prompting, TCs in BE, BS, and CE’s class did not spontaneously engage in blended discussions.
Facilitating Reflection About Dilemmas

AE, AS, and CS, the same three TEs who focused reflection on a blend of instructional moves and structures, frequently prompted novices to reflect on pedagogical dilemmas by asking them to adjudicate between multiple reasonable but imperfect teacher options (Figure 1.7). Each of these three TEs spent roughly half of their reflective episodes engaged with dilemmas. BS and CE, by contrast, never facilitated reflection about dilemmas and BE did so for only 2 minutes per class. For AE and AS, facilitating reflection-in-action was linked to their focus on dilemmas. They were twice as likely to center dilemmas during the in-the-moment demands of reflection-in-action than in post-facto reflection-on-action (In the average class AE spent 20 minutes analyzing dilemmas in reflection-in-action and 10 minutes analyzing dilemmas in reflection-on-action. AS averaged 15 minutes per class analyzing dilemmas in reflection-in-action and 7 minutes analyzing dilemmas in reflection-on-action.). CS, however, was equally adept at exploring dilemmas through reflection-in-action and reflection-on-action, doing so for an average of 11 minutes in each form per class.

Figure 1.7: Average Minutes Reflecting on Dilemmas per Class
AS placed dilemmas and reflection-in-action at the core of her syllabus. Her methods course was anchored by two class periods rehearsing the instructional activities of conducting a think-aloud and facilitating a text-based discussion. In these sessions, TCs took turns role-playing as the “teacher” while their classmates acted as K-12 students. As a TC rehearsed, AS and the other TCs would “pause” the rehearsal to give feedback, ask questions, and make suggestions. This interaction required rehearsing TCs to depart from their lesson plans and make real-time adjustments. In one instance, Jake, the rehearsing TC, made a lengthy statement revoicing a claim a “student” made about Lincoln’s motivations for delivering the Emancipation Proclamation. A second TC, Linda, raised her hand.

Linda: I want to pause…I think that you stated the conclusion just then. And it was like too early to state it…I would have tried to like, wait and hold off before restating.

AS: So, what do you suggest he say?...

Linda: What evidence in the text leads you to that? Or like, does anyone disagree? Instead of saying yes or no [to evaluate the students’ claim], I think that you could save that till the end.

At the end of this exchange, they restarted the discussion at the point immediately before Linda raise her hand, allowing Jake to enact a different response. Later in the discussion, AS paused the rehearsal again and asked the class, “Where should Jake go next?” The class generated five possible directions for the rehearsing candidate, including directing the class to examine the source, inciting a debate between two students with diverging claims, and bringing in additional contextual information. Although AS praised the potential of each option, Jake was required to select a single action to restart the
rehearsal. In both cases, TCs were engaged in a discussion about what Jake ought to say next, a discrete teacher move. AS’ repeated pushes to engage the class in thinking through the options in front of Jake and the distribution of authority that allowed Linda to pause the conversation engaged the entire room in the pedagogical dilemmas and the principles of discussion behind them.

AE took the embrace of uncertainty a step further by using videos and transcripts, typically tools for reflection-on-action, to prompt a segment of reflection-in-action connecting the methods class to TCs’ field placements. AE assigned all her TCs to film themselves facilitating a text-based discussion in their field placements and As part of this assignment and bring the video, a transcript of the video, and a written reflection identifying moments of pedagogical uncertainty in their video to their methods class. Prior to the assignment’s due date, one TC, Dana, volunteered to share her video and reflection. The class watched as Dana played her video, pausing at the moments where she had identified a pedagogical dilemma. Her uncertainty became a discussion prompt. AE asked the class to generate multiple pedagogical options for Dana and to “consider what’s at stake” for Dana and her students in each moment. Although Dana had recorded her video before class started, none of the other novices had seen it. For them, this was reflection-in-action. They were not evaluating what Dana had done, but actively trying to solve problems, unaware of the reactions their suggestions might create. Not only did AE decline to endorse any of their suggestions as a “best practice,” her facilitation suggested skepticism that a “best practice” even existed. In the next class, as AE prompted the class to discuss their own dilemmas in pairs, she underscored the importance of dilemmas:
At each of the timestamps you already identified…I want you to pause the video and ask your colleagues the question that you wrote down about this moment. And use this question as a discussion starter, not as a question on a worksheet, which you're looking for the right answer. Most of these questions have multiple right answers. A question like ‘what should I do here? or ‘how should I respond to this comment?', there's no one right answer. There are a lot of possible answers. And the point actually is that you come up with multiple possibilities, and that you talk together about the affordances and the constraints of any of those choices. Some choices might get more students involved in the discussion but might put the particular student whose idea you're using at risk in some way. I need to talk about that…Never be satisfied with just one possible option.

AE constructed this episode of practice to explore and embrace dilemmas, a demonstration the potential to use episodes of practice to non-normative ends.

These examples notwithstanding, most episodes of practice did not center dilemmas. They usually featured directive advice about a move, such AE’s comment during a debrief of a model discussion that “a principle I have when starting a discussion, which is I always let three students speak before I say anything.” Such advice was often paired with an explanation describing the value of the move or a prompt asking TCs to generate an explanation in their own words, such as when BE showed a clip of a teacher using kinetic gestures to reinforce a vocabulary term and asked, “Why those things are powerful…What's the value of that?” Normative reflections about moves were often short, lasting a few talk-turns. Discussions about instructional structures and aims were often more extensive, even if they did not examine instructional dilemmas. CE spent 29 minutes with a case study about Youth Participatory Action Research (YPAR). The class acknowledged that the example would need to be modified to fit different school contexts, discussed YPAR in entirely positive terms without naming any conflicts that might arise in the modification. BS’ course was centered on two instructional practices, whole groups discussion and small group inquiry, that she believed belonged in every
TCs’ pedagogical repertoire. Over the course of six classes, TCs reflected on models, generated principles of successful discussions and inquiries, and planned lessons to implement in their placements. In the four classes within this sequence that I observed, BS did not facilitate reflection about instructional dilemmas. Still, TCs’ conversations were robust, drawing on their experience as learners, with students, and their goals for education. BE was the only TE who frequently used reflection-in-action, but did not guide novices towards dilemmas. He built practice into his course to develop “muscle memory.” TCs would break into small groups and take turns delivering brief 3-5 minute bursts of instruction before receiving peer feedback and re-practicing. He did not encourage TCs to deliberate about the critiques they received, choosing instead to maximize the amount of time available for practicing instruction.

BS, CE, and BE, the TEs who rarely centered dilemmas, repeatedly stated that the representations of practice they shared were, as BE said, “A way, not the way.” Although those acknowledgements did not prompt exploration of those putative other ways, they reflected the TEs’ awareness of teaching as complex. CE explained that she sought a balance in the instruction, saying, “What I worry about with novice teachers is this urge to just grab whatever they’re told is the best structure without interrogating what’s behind that.” At the same time, she offloaded some of the responsibility for that interrogation on field placements because “The fact that [the TCs] are all in different classrooms themselves opens up that complexity.” The directness of affirming an instruction practice without exploring dilemmas that might arise in its enactment did not seem to indicate that TEs believed there was a single best way to teach.
Discussion

This study’s findings suggest that pedagogies of practice are prevalent, versatile, and intentional in teacher education. Each teacher educator, regardless of institutional affiliation, consistently utilized similar representations of enacted teaching to prompt reflection. The variety of reflective thinking they inspired demonstrates the malleability of the tools and the importance of TE discretion, and argues for the importance of understanding, empowering, and sharing pedagogy for teacher education.

The Prevalence of Practice

The widespread presence of representations of practice in methods classrooms belied the scholarly literature, public discourse, and policy infrastructure surrounding teacher education. Researchers often worry that teacher education is a black box, lacking a coherent research agenda (Cochran-Smith et al., 2016; Sleeter, 2014), empirical evidence of teacher education’s influence (Gershonsen, 2021; Goldhaber, 2019), or even a common language to describe teacher educator pedagogy (Grossman & McDonald, 2008). TEs typically have no shared training or oversight (Swennen, Shagrir, & Cooper, 2009; Zeichner, 2005), and national standards and assessments are loosely applied and hotly contested (Gitomer et al., 2021). To the extent that a public discussion about teacher education exists, it focuses on institutional philosophies and control (Philip et al., 2018). Virtually the entire landscape of teacher education would predict chaotic idiosyncrasy, and yet the six TEs in this study opened their classroom doors to reveal similar methods courses.
In each classroom, TEs were showing TCs models or videos of complex instructional practices, leading whole class discussions of those representations, and giving TCs time to attempt those practices in modified and bounded ways. Every TE prompted TCs’ retrospective reflection-on-action, asked them to consider their instructional aims, and recommended specific instructional practices. These tendencies crossed institutional boundaries and highlighted the extent to which institutional affiliation did not predict pedagogy. No institution had a monopoly on enactment and enactment by TEs from the same institution often took different forms. BE and BS were colleagues, but BE facilitated more episodes of practice, prompted more reflection-in-action, more consideration of the blend between move and action, and more discussion of dilemmas than BS. BS spent the least amount of class time in episodes of practice despite being part of an alternative certifying institution that touted its use of practice. CE and CS were no more similar in their pedagogy, with CS’ use of practice being more similar to AE or AS’ “practice-based teacher education” than her fellow “progressive” TE. The variation between colleagues suggests that the presence of pedagogies of enactment cannot be attributed to institutional influence. Just two decades ago, centering enacted practice was being proposed as a revolution in teacher education (Ball and Cohen, 1999). The results of the study suggest that it may now be routine.

*It’s the Teacher (Educator), Not the Tool*

Facing the two-worlds pitfall (Feimen-Nemser & Buchman, 1985), six TEs reached for similar pedagogical tools to construct imagined classrooms. The differences in the worlds they built demonstrated the malleability of practice in teacher education and the importance of TEs’ pedagogical decision-making. In each methods course,
discussions of teaching distilled some of the classroom’s complexity. Real teaching is relentlessly complicated. Student needs shift unpredictably, creating discretionary spaces demanding improvisational responses (Ball, 2018). The division between the field and teacher education insulates methods courses from the tumult. TEs chose what elements of teaching TCs reflected upon and encouraged them to perceive the classroom in particular ways. This careful construction of the imagined classrooms presented TCs different ways to understand and prepare for their career.

TCs in AS, AE, and CS’s classes consistently confronted complexity. They were routinely asked to engage in pedagogical dilemmas and examine the relationship between instructional moves and structures. They were often prompted with the idea that there was no “right” answer in teaching, to share their dilemmas with peers, and acknowledge that minute teacher moves were inseparable from the broader aims and structures of teaching. These TEs explicitly guided novices to imagine classrooms that are complex and unpredictable. Their pedagogies directly pushback on the notion that episodes of practice in teacher education are regimented and rote (e.g., Kennedy, 2016; Zeichner, 2012). BE, BS, and CE imagined classrooms that were more stable. They were less likely to throw their TCs into uncertainty by asking them to reflect-in-action, link moves to aims, and examine dilemmas. TCs could hope to do the “right” thing by implementing some of the techniques from their teacher education. They could focus on developing specific competencies, such as the direct instruction moves in BE’s class or the discourse and inquire structures in BS’s. It is not clear that BE, BS, and CE thought of teaching as any less complex than their peers did. It is entirely possible that their decision to imagine simpler classrooms was a pedagogical decision about how to prepare novices for that
complexity. It may be that teacher educators’ decisions to advocate for specific instructional strategies were intended as scaffolds, prompted by the belief that novices could find the classroom overwhelming and that more sophistication and nuance might be introduced with time.

The differences in the TEs’ imagination of the classroom, however, extend beyond a simple bifurcation between the complex and the simple. AE and AS, institutional colleagues, advocates of complexity, and the most frequent practitioners of pedagogies of enactment, had real differences in how they guided TCs to think about teaching. AE used TCs’ videos and transcripts to open dilemmas, asking them enumerate possibilities and embrace uncertainty. AS used rehearsals to engineer a forced choice. After opening the dilemma, she asked TCs to close it. AE rarely spoke about moves without connecting them to broader aims and structures. AS frequently did. With access to similar TCs in similar placements, these two TEs used similar tools to different ends. The message reverberating off the walls of the six methods courses in this study is that TEs matter immensely. Neither the tools nor the context seemed to supersede TEs’ discretion, direction, and convictions.

To be sure, these results are influenced by the limitations of the design. I observed a minority of each TEs’ course. The findings do not capture the entire range of how practice was used over the entire semester, and the trends represented likely do not generalize to accurately describe how any one teacher educator usually teaches. This is particularly true for CS, whose course was forced to shift online due to the COVID-19 pandemic. More broadly, this study made no attempt to select representative or typical TEs, instead selecting for a range of views on practice. With these caveats in mind, both
the prevalence of practice and the variation among TEs’ use of it may still be helpful for considering the way teacher education does and might occur.

**Intentional Practice**

Whether practice is prescriptive or exploratory, rote or robust, appears to lie within the control of the TE. What remains unknown, however, is how TEs’ choices support novices’ future teaching, or what combination of pedagogies is most likely to solve the problem of enactment (Kennedy, 1999). Schön theorized that reflection-in-action was more vivid, authentic, and situated than reflection-on-action. From this standpoint, AE and AS, who most frequently gave their novices opportunities to reflect-in-action about enacted teaching and pedagogical dilemmas, gave their students the most meaningful chances to learn. But it is possible that their pedagogy is overly ambitious. Novices struggle to parse practice (Berliner, 2001), and the evidence that reflecting-in-action may help them enact (e.g., Reisman et al., 2019) is balanced by studies showing that it may be overwhelming (e.g., Stroupe & Gotwals, 2018). Learning instructional moves and structures might scaffold TCs’ entrance into the classroom. It remains unknown whether and how a novices’ capacity to evaluate and enact teacher moves in the future will be influenced by opportunities to situate moves within a broader instructional context. In all likelihood, there is a happy medium between prescription and exploration, one that this study is not equipped to evaluate. TCs seem to benefit from a blend of general rules and practice responding to novel circumstances (Metz, Kavanagh, & Hauser, 2020). If TEs exclusively ended discussions in dilemmas, it might undercut TCs’ capacity to enact instructional routines with any efficacy or fidelity. At the same time, if TEs portrayed teaching as entirely a routine operation, it could enervate TCs’ capacity to
adapt to the unpredictable circumstances of classroom instruction (Ball, 2018; Hatano & Inagaki, 1986).

While this study cannot evaluate the efficacy of the different pedagogical strategies, it supports those questions by offering a framework that can be used across contexts. In a field that often lacks shared language to describe instruction (Grossman & McDonald, 2008), the delineation between reflection-in-practice and reflection-on-practice can be used to compare an ELA methods course in a progressive institution to a social studies course in an alternative certifier. The critical next step in this research is to begin understanding how pedagogies of enactment support learning. For practitioners, there may be benefits to simply considering how frequently teacher educators provide novices chances to reflect-in-action, grapple with dilemmas, and join moves to structures. Researchers might further contribute to this project through the design of longitudinal, comparative, or causal research that begins to isolate the influence of specific pedagogies on novices’ instruction.

If imagining classrooms and reflecting about practice is a typical, or even necessary, element of teacher education, understanding the components of useful reflection ought to be a central concern of future research. The work of the TEs in this paper is a study in potential. Like all teachers, their work is unfinished, still evolving in response to their perceptions of their students’ needs and their formal and informal monitoring of their own success. Much remains unknown about these TEs, pedagogies of enactment and teacher education as a whole.
References


Imagining the “urban” student: The discursive creation of students in teacher education methods courses

Teaching is situated and responsive work, an exchange between teachers and students. The paradox of teacher education, however, is that this work is usually learned in isolation from actual students. In the typical methods course, novices talk about teaching miles away from the schools where they student-teach. A half-century of scholarly consensus argues that teachers’ perceptions of students influence their pedagogical choices (e.g., Corno, 2008; Rist, 1970; Rosenthal & Jacobson, 1968). Students are teachers’ scene partners, the essential element without whom teaching is meaningless. To think concretely about instruction when students are absent from the methods classroom, teacher educators and preservice teacher candidates co-construct imaginary classrooms, shared projections of students, teaching, and learning. They create, edit, and refine their perceptions of students through curated representations of the classroom and their shared discourse.

If perception informs instruction, then teacher education has an interest in shaping novices’ perception of students. Research on teacher noticing suggests that teacher educators might influence how candidates think about students by developing their “interpretive frames,” the schemas through which teachers understanding schooling (Sherin, Jacobs, & Philipp, 2011). Interpretive frames influence what teachers notice, how they interpret it, and what they decide to do (Russ & Luna, 2013; Sherin et al., 2011), a process so seamless that noticing, interpreting, and deciding can be considered a single perceptive move (Jacobs, Lamb, & Philipp, 2010). The noticing literature shows
that teacher educators can influence candidates’ interpretive frames by directing their attention in ways that help novices discriminate between meaningful and trivial elements of the classroom, effectively scaffolding their noticing (Sherin et al., 2009; van Es & Sherin, 2021). Teacher educators might do this by curating and dissecting examples of teaching practice, what Grossman et al. (2009) called representation and decomposition. Noticing literature has primarily attended to teachers’ interpretive frames for students’ thinking in math and science (e.g., Kang & van Es, 2019), although recent work and has demonstrated that teacher attention to students’ race (Shah & Coles, 2020) and social identities (van Es, Hand, & Mercado, 2017) can be shaped following similar patterns.

A second route to shaping candidates’ perception of students runs through language. Since the advent of post-structuralism, scholars have attended to the way that language shapes people’s lived reality (Foucault, 1977; Tsui, 2013). The constructive power of language is overtly visible in the ways that formal categories like “English Language Learner” or “Special Education Student” induce instructional and institutional consequences that materially shapes students’ experiences, regardless of whether they reflect a “true” representation of the student’s self (Flores, Phoung, & Venegas, 2020; Rogers, 2002; Rosenthal, 1968). Informal “naming,” such as the difference between perceiving a student as a “good student” or “outcast” (Wortham, 2004), has much the same influence on students’ life. Ultimately, language mediates virtually all interactions between students and teachers as part of recurring cycle by which classroom identities are dialogically constructed, expressed, and reinforced (Rymes, 2015, 2020). Within this framework, changing how novices talk about students is inseparable from changing how they think about and interact with them.
The discursive construction and reproduction of identity is of particular concern in urban education. The “urban” is already contested space of complex and contradictory projected meaning (Leonardo & Hunter, 2009; Noguera, 2003) and most new teachers are white and come from “non-urban” areas (Ingersoll et al., 2021). These novices’ perception of their students are often overdetermined by their perceptions of the urban, leading to reductive and fetishized portraits of the children they teach (Anderson & Stillman, 2013; Gutiérrez, 2006). Those perceptions often have dire consequences for the well-being of students of color (Bal, Afacan, & Cakir, 2018), to say nothing of their learning (Chin et al., 2020).

Teacher education has devoted substantial resources to changing the way novices discuss, perceive, and teach urban students. Most of the teaching and research about candidates’ perception of students occurs in courses explicitly dedicated to helping candidates understand the interactions between school and society (e.g., Carter Andrews et al., 2019; Philip, 2019; Picower, 2009). These courses are, however, separate from the methods courses where candidates learn to teach. The literature on teacher noticing and on classroom discourse would suggest that bifurcating perception of students from interaction with students is inauthentic. When methods courses discuss teaching, they are necessarily informing candidates’ perception of students. If challenging candidates’ deficit-oriented beliefs is not in methods instructors’ job descriptions, instructors might avoid that work. The division between learning about students and learning about instruction may play a role in scholars’ persistent struggle to consistently trace the influence of school and society courses on teachers’ beliefs and practices (Cochran-Smith et al., 2016), particularly if there is a lack of alignment between the two courses. Because
methods courses’ talk about students is likely to have significant ramifications for instruction and because it is under-studied, this study focuses on the construction of students in English Language Arts (ELA) and social studies methods courses.

Previous research on social studies teacher education has typically addressed candidates’ understanding of students as a matter of content knowledge. Power, class, race, gender, and identity are all elements of social studies curriculum and many scholars have approached the issue with the hope that preparing candidates to understand the social and historical construction of identity will enable new teachers to better understand their students’ identities (e.g., Demoiny, 2018; King, 2014; Smith et al., 2021). A second strand of research in social studies teacher education begins by helping novice teachers, particularly white candidates, understand their own identity in relationship to power, privilege, and history prior to encountering students (Crowe, Mooney, & Hawley, 2018; Crowley & Smith, 2015; Salinas & Castro, 2010). Comparatively few studies bring students into focus for social studies novices (exceptions include Blevins & Talbert, 2015; Conklin et al., 2010; Love, 2019). ELA teacher educators have extended the research on perceiving students further in a body of literature on responsiveness. Some of this work focuses on pedagogies of responsiveness, both in terms of attending students’ thinking (e.g., Kavanagh et al., 2019) and culture.\(^3\) Cultural responsiveness in ELA methods courses has included prompting novices to reconsider their vision of literacy in terms of the practices of their students’ communities (Muhammad, 2018) or their own

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\(^3\) Culturally relevant pedagogy has a long history in social studies education (e.g., Ladson-Billings, 2001; Love, 2018), but has received relatively little study in the context of methods courses and teacher education (exceptions include Conklin & Hughes, 2016; Starker & Fitchett, 2013).
experiences (Haddix, 2010) and developing their capacity to link literacy, instruction, and insight into the dynamics informing students’ identities (Sealey-Ruiz, 2021).

The research literature in social studies and ELA demonstrate the existence of multiple frameworks for developing novice teachers’ perception of students in humanizing and justice-oriented ways within methods courses. And yet, scholars of teacher education have not demonstrated a consistent instructional effect on candidates’ perceptions or instruction (Anderson & Stillman, 2017; Cochran-Smith et al., 2016). The gap between the possibility of these frameworks and the evidence of their influence raises the question of whether the fields’ routine practice has capitalized on this literature. Rather than further proposing how teacher educators should talk about students, I ask how current teacher educators in urban ELA and social studies methods courses are imagining students.

**Theoretical Framework**

This study is informed by the proposition within Critical Discourse Analysis that discourse about the classroom produces the reality of the classroom (Rogers et al., 2005; Rymes, 2015), and a Complex Dynamic Systems perspective on teacher identity, which posits that preservice teachers are engaged in the unfinished work of assembling a teacher identity from a wide-ranging and shifting web of influences (Beauchamp & Thomas, 2011; Henry, 2016). Taken together, these two frameworks suggest that novice teachers’ uptake of the identity of “teacher” is mediated by discourse. Put simply, talking about teaching is part of becoming a teacher.
While scholars disagree about whether identities are entirely products of communal discourse, there is consensus that discourse is a crucial mechanism through which social identities emerge and become legible (Gee, 2001; Taylor 1994). A direct consequence of the social and discursive nature of identity is that the ways that teachers talk with students shape both parties (Markee, 2015; Rymes, 2015). To be a teacher is to be in relationship with students, and speech form and expresses those relationships. The imagined classroom in teacher education, however, is unusual in that not all the constructed characters are able to participate in the dialogue. Typically, students are active participants in classroom discourse, influencing their teachers’ construction and projection of identity (Rymes, 2020). In teacher education courses, students are absent. Rather than a dialogic co-construction of teacher and student, discussions of candidates’ comments regarding students are better understood as projections honing their own identity as they assume the identity of teachers (Garner & Kaplan, 2019; Henry, 2016). The identity of “teacher” is inextricable from its relationship to “student,” so students remain at the heart of most discourse in methods class despite their inability to participate in the discussion. Thus, preservice teachers’ negotiations between their possible teaching selves necessarily involve concocting their future students (Gaines et al., 2018).

The history of learning theories offers a number of possible ways that novices might articulate the influences on students’ learning, each of which position teachers to respond to different elements of a student’s person and experience. Cognitivist discourse construes learning as an internal individual act, an interaction between what a person already knows and new information expanding or challenging their schemata (Gardner, 1985). Even as later cognitivist work has featured greater consideration of the interaction
between the learner and the environment (McGilly, 1994), cognitivist language primarily primes a teacher to respond to students’ prior knowledge and active processing. Sociocultural language, however, positions learning as communal and intersubjective rather than individual (Vygotsky, 1978). There is still an interaction between thinking and prior experience, an individual’s zone of proximal development is largely informed by their socialization, but relocating thinking to the social introduces a broader array of influences. For teachers to guide students’ participation, they need to be aware of the elements mediating that interrelation experience (Rogoff, 1990). That might include considering students’ emotions, relationships, and social identities, all of which reflect interpersonal and societal influences (Wertsch, 1985).

Like cognitivists and other sociocultural thinkers, critical sociocultural thinkers argue that promoting student thinking requires understanding what they know and how they have come to know it. They insist, however, that understanding the social element of learning requires an analysis of power as relationships and identities are created and maintained by power (Esmonde, 2017). Attending to students’ identities means appreciating ways of understanding that may lie beyond hegemonic boundaries (Bang, 2017), avoiding reductive and deficit-oriented attempts to tailor instruction to students’ experiences (Gutiérrez & Rogoff, 2003), and positioning learning to speak back to the everyday life of students (Moje & Lewis, 2020).

Methods classes may not involve deep didactic immersion in particular theories, but those traditions inform the language available to describe learning and students. They name students’ thinking, knowledge, and social experience as essential to learning and direct teachers to consider these dynamics in particular ways. As language or concepts
from these traditions makes their way into teachers’ vocabulary, they become part of teachers’ identity development. A Complex Dynamic Systems framework for identity development argues that identities are situated, social, and unstable (Akkerman & Meijer, 2011; Trent, 2014). A new experience or idea can rearrange how a person thinks about themselves. In a methods course, novices are tentatively trying on the identity of “teacher” and are therefore unlikely to use learning theories in stable ways. It would be unusual to see a new teacher have an explicit and static identity as a cognitivist. Rather, novices are likely to use new theories fluidly and somewhat inconsistently as part of constructing their unfinished teacher identity (Garner & Kaplan, 2019; Pillen, den Brok, & Beijaard, 2013). At the same time, a critical discourse approach would caution that language should not be taken lightly. Even if learning theories are deployed inconsistently, their language matters and conveys underlying logics of identity, power, and possibility that are important to track (Rogers et al., 2005). The language used to describe students is a lens into the way novices are becoming teachers. Understanding how that language emerges from the interplay between novices and teacher educators teacher is essential to explaining the role of teacher preparation plays in the developing novices into teachers.

Methods

Participants

ELA and social studies teacher educators (TEs) were purposively selected for this comparative case study from three institutions claiming expertise in urban education. Each institution is located in a large city on the east coast of the United States and offers
master’s degrees and certification. To present a diverse portrait of teacher education, Institutions were selected to represent a spectrum of pedagogical perspectives. Institution A is a large research university that advertises its practice-based approach to teacher education. Institution B is a non-university based alternative certifier, and Institution C is a university that describes its teacher education program as progressive. ELA and social studies were selected because the shared centrality of text-based discourse provided an opportunity for cross-disciplinary comparison while avoiding the pitfall of representing any institution with a single TE. At the two university-based programs, Institutions A and C, students’ methods courses are taken concurrently with other courses, but students at Institution B take a single course per semester. Not only are TEs at Institution B their TCs’ sole instructor, they also visit each TC in their teaching settings multiple times per semester. This relationship is both a pedagogical tactic and a reflection of the fact that TCs at Institution B are full-time teachers of record, with greater need for coaching and less available time than TCs at Institutions A and C who are student teachers and have less instructional responsibility. Institution B’s program typically runs two years, while TCs usually graduate Institutions A and C after a single year.

TEs were assigned pseudonyms reflecting their institution and subject area such that AS taught social studies at Institution A, AE taught ELA at Institution A, and BS taught social studies at Institution B. Five of the participating TEs were white women between the ages of 30 and 50, and one TE (BE) was a white man. At Institutions A and C, class size ranged from 12 to 30 teacher candidates (TCs), the majority of whom were white women. The courses at Institution B, the alternative certifier, were larger, between 30 and 45 students, and more racially diverse with white-presenting TCs comprising a
little less than half of the classes and Black and Latino-presenting TCs accounting for most of the other half. Most TCs at Institution B were women.

**Data Sources**

As part of a larger project, each TE was interviewed three times and their course meetings were observed between three and six times. Course sessions were selected for observation based on TEs’ recommendation that the classes would include substantial discussions of teaching practice. Observations were filmed, transcribed, and coded using Dedoose. Interview data was not coded for this study, but were consulted for the purposes of triangulation.

**Data Analysis**

Analysis began by segmenting observation transcripts based on the activity structure TEs employed (e.g., lecture, whole group discussion, small group discussion, etc.) (see Stodolsky, 1998). Segments that included concrete representations of teaching practice (e.g., case studies, video of teaching, transcripts of classes, etc.) were tagged as episodes of practice (Kavanagh, Conrad, & Dagogo-Jack, 2020). Subsequent coding focused on episodes of practice because TEs intentionally constructed these discursive spaces by introducing representations of practice and these episodes were explicitly positioned as opportunities to learn about instruction, which implies the presence of a student. Analysis of the segments proceeded in two stages, first working at the level of the utterance, and then analyzing episodes of continuous discussion in sequence.

**Utterance analysis.** I applied a provisional coding scheme (Miles, Huberman, & Saldana, 2014) to utterances within episodes of practice and distinguished between comments from TEs and TCs (Table 2.1). Coding began with an *a priori* interest in
comments about students’ thinking, knowledge, and social identity informed by the contrast in cognitivist, sociocultural, and critical sociocultural theories’ conceptions of those concepts. As discussed in the theoretical framework, each of these learning theories offers ways to understand the relationship between students’ thinking and environment, with a cognitivist framing describing the relationship in terms of individual knowledge and a sociocultural lens taking a sharper interest in identity and social relation. To see how TEs and TCs utilized these concepts to describe thinking and learning, comments were coded “thinking” when TEs or TCs discussed students’ capacity for inquiry, academic tasks, and the construction of novel insight. This includes comments reflecting upon students’ past academic performance and projecting their ability to engage in future class tasks. Because students’ capacity to read was inextricable from their engagement in the disciplinary literacy processes at the heart of these secondary methods courses, discussion of students’ reading abilities were tagged as “thinking.”

To understand how TEs and TCs spoke about students’ incoming states, I coded for references to preexisting knowledge, funds of knowledge (Moll et al., 1992), epistemologies, or relevant experiences. The “knowing” code could be applied to knowledge was bracketed to information gained prior to the instructional activities being discussed in class arising from both academic (e.g., “You can assume kids will have that content knowledge since you just taught it,” or “It seems like he doesn’t know how to use quote marks.”) and non-academic experiences (e.g., “When a student contextualizes and brings in their own knowledge into the framework of a discussion that not everybody knows…How do you how do you utilize that.”). Finally, since sociocultural theories emphasize learners’ social positioning, I coded for comments about students’ social
characteristics. “Social group” comments indicated identity markers such as race, class, language, and gender, or characteristics such as social status or personal interests. General comments such as “adapt this for your students” that did not name any distinct elements of students’ identity were not coded as “social identities.” I also did not code gendered pronouns as “social groups” comments unless the speaker elaborated on their significance. Simply referring to a student as “he” was not sufficient.

Iterative coding surfaced an additional fourth category, the recurrent theme of attending to students’ socio-emotional experience. I coded any reference to students’ emotions as attending to “feeling.” A sociocultural reading of “feelings” would likely situate students’ expressions of emotions into their relationship with the other people in the classroom. Constructivists might be more likely to consider emotions a reflection of students’ mental processes, with frustration or doubt demonstrating disequilibrium and enthusiasm signaling certainty, or as modifiers that influence the rate of mental processing (e.g., “This is kinesthetic learning and because it’s kind of fun and engaging it’s going to be stickier,” “If he’s frustrated, he’ll withdraw and shut down the discussion.”). Following this emergent trend, I coded references to students’ socio-emotional experiences in class, such as any references to emotions, feelings, or relationships.

In addition to these four parent codes, I applied two sets of subcodes to describe the content of comments about students. “Positive” and “negative” subcodes to indicate the valence used to describe students, such that a “negative thinking” code would indicate a participant describing a student’s struggle to understand and a “positive knowing” code showed a participant outlining a fund of knowledge they believed that students had. As
socio-emotional experiences and social identities were not discussed hierarchically, valence subcodes were only applied to “thinking” and “knowing.” The second subcode emerged inductively from the data. Noticing that TCs frequently referred to their student teaching, I coded for “personalization” or “generalization” to distinguish between instances where TCs discussed specific students they personally knew and instances when they discussed children in the abstract. Personalization was frequently indicated by personal pronouns, as when TCs referred to “my students” or “my class.”

Table 2.1: Code Definitions

<table>
<thead>
<tr>
<th>Code</th>
<th>Definition</th>
<th>Example</th>
</tr>
</thead>
</table>
| Thinking | TE or TC comment describing students’ capacity for inquiry, academic tasks, and the construction of novel insight. | **Positive:** “[I had a student] who made this argument, still one of the best essays I’ve ever gotten my life. She argued, essentially, the prompt was flawed… Hamlet is not crazy. And even the conversation that Hamlet is crazy is because he’s smarter than the reader and the reader attacks him as a defensive mechanism. She was a sophomore! 15!”  
**Negative:** “So we gave students a question to keep in mind as they read…We also had initially put ‘What is his ideology?’ But we weren’t sure whether students would be able to identify what that was.”  
**Personalized:** “I remember this one class, there was like nothing. It was like, ‘I don't know. I don't know.’ Okay, like it was just opt out left and right. Wow.” |
| Knowing | TE or TC comment describing students’ funds of knowledge including both academic and extra-academic knowledge. | **Positive:** “[Student]? Remember last week when you were telling me about the San Antonio Spurs? Why don’t you bring that information to the class and you know, tell everyone else about the team that you’re very passionate about.” |
**Sequence analysis.** Because I viewed methods courses as developmental spaces where TCs were engaged in identity construction, I was interested in how TEs’ discursive contributions might interact with or influence TCs’ statements as well as how TCs might influence their peers. To understand the dialogic nature of these exchanges, I recontextualized the utterances by analyzing them within the discursive sequences in which they occurred. Discursive sequences were defined as episodes of talk with at least three utterances referring to students occurring with less than two minutes separating
each utterance. In analyzing the sequences, I attended to the different contributions of TEs and TCs, looked at the ways that sequences emerged and ended, and noted who initiated and closed extended conversations about students. I asked how positive and negative comments were ordered, how questions were deployed, and the extent to which discursive sequences remained consistent in tone and topic.

**Findings**

*The Imagination of Students: Utterance Analysis*

Discussions of students in all six methods courses overwhelmingly focused on their capacity as thinkers (Figure 2.1), with group identity being the least frequently discussed dimension for both groups. This general trend was borne out in each individual course, as statements about thinking comprised the majority of comments about students in every methods course (Table 2.2). Although there was course to course variation, no course devoted more than a third of their discussion to any other dimension of students.

*Figure 2.1: Total Number of Comments About Students by TCs and TEs*
Table 2.2: Percentage of TE and TC Comments About Students by Domain

<table>
<thead>
<tr>
<th>TEACHER EDUCATOR</th>
<th>THINKING</th>
<th>KNOWING</th>
<th>FEELING</th>
<th>SOCIAL GROUP</th>
</tr>
</thead>
<tbody>
<tr>
<td>AE</td>
<td>57%</td>
<td>7%</td>
<td>32%</td>
<td>5%</td>
</tr>
<tr>
<td>AS</td>
<td>77%</td>
<td>11%</td>
<td>6%</td>
<td>1%</td>
</tr>
<tr>
<td>BE</td>
<td>52%</td>
<td>16%</td>
<td>16%</td>
<td>17%</td>
</tr>
<tr>
<td>BS</td>
<td>72%</td>
<td>6%</td>
<td>11%</td>
<td>10%</td>
</tr>
<tr>
<td>CE</td>
<td>86%</td>
<td></td>
<td>14%</td>
<td></td>
</tr>
<tr>
<td>CS</td>
<td>69%</td>
<td>11%</td>
<td>6%</td>
<td>14%</td>
</tr>
</tbody>
</table>

**Imagining student thinking.** TEs and TCs tended to describe student thinking in optimistic terms. Most utterances were coded as positive, replete with examples of students getting correct answers and avowals of their intellectual capacity. Even when they did make negative comments, such as discussing students’ confusion or suggesting that an academic task might be too difficult, TEs and TCs took care to affirm students’ fundamental capacity. Nearly half the time that TEs (46%) or TCs (43%) made a negative comment about a students’ thinking, they included a statement endorsing students’ capacity for positive thinking *within the same utterance*. For instance, in an episode of practice about facilitating historical discussions about texts, CS said, “If a student made an incorrect or irrelevant observation, I’m going to redirect the student to the specific features [of the text]…I don’t say, ‘You're wrong,’”…I ask them another question that sends them back to the text…You’re trying to get the kids to really dig deep.” CS offered

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4 CE’s tendency to use small groups during episodes of practice presented a number of logistical issues relating to audibility and transcription. As a result, only 10 codeable utterances could be drawn from her course.
the image of students making reading errors, but offset it with the insistence that appropriate teacher support could contribute to deeper thinking.

TEs rarely lingered on descriptions of students’ inability, instead they repeatedly emphasized teachers’ responsibility for and control over student thinking. The message was that students’ success was within teachers’ locus of control. AS ended a lesson on facilitating discussions saying:

I think we often think as teachers that if you have a good day…we are often like, “That was an awesome day! The kids came in and had a lot of energy.” Or, like “My second period, they’re just ready to talk.”…What I want to try to do is give you more agency to self-analyze. Yes, second period might be awesome and you might have some real talkers in there. But you can do a lot more, right if you have the tools to unpack what you're doing…or the tools that are available the moves that are available to you in any given moment.

AS’ narration is at the core of TEs’ talk. They frequently positioned TCs as the key to unlocking students’ capacity for great thinking. For many of the TEs, that empowering message was married to the caveat that instruction needed to be tailored to specific students. CS, for example answered a question about publicly correcting students by saying, “It depends. It depends on the student. It depends on the class and depends on the relationship between the class and the student.” BE emphasized that teaching had to be “responsive to the current needs of students.” The overall message in TEs’ talk was that all students were capable of learning, but they required teaching that connected to their specific needs.

TCs seemed to broadly share their instructors’ views. They focused on student thinking, imagined ameliorating unsuccessful student thinking, and articulated teacher identities centered on instruction customized to individual students and classrooms.

Watching a peer practice a think-aloud in AS’ course, one TC ruminated, “He did a much
better job of connecting [the historical thinking moves]. I'm thinking of my students…How can I translate that process for 8th graders into something that’s repeatable?” He recognized that teaching his students required tweaking his peers’ approach. Their thinking depended on his tailoring. CS created this kind of problem-space for her TCs by asking them to revise a district-provided lesson. Reviewing their modifications, one TC ran through a list of specifications:

We imagine that we’re teaching kids in 9th or 10th grade… Rather than asking them to come up with a definition on their own…we’re going to do a matching activity…To really focused the cognitive load on the primary source, we're eliminating that secondary source. And we're just going to teach that content through a mini-lecture to…make sure that the students are focused on using all their reading energy for the primary source.

Her groups’ modifications are rooted in their initial decision to imagine early high schoolers, and their subsequent decisions reflect an uncertainty about these imaginary students’ thinking. Their choice to remove some of the recommended text and substitute a vocabulary matching activity for an open-ended response, suggest that they believed students would struggle with the districts’ plan. At the same time, their decision to center primary source analysis, the task with the greatest degree of difficulty and disciplinary authenticity, reflects an optimism about what students might achieve. Their decision-making ultimately reaffirms the belief that students can do rigorous thinking, but only if the path is cleared for them. In both of these examples, TCs imagined a change in instruction that might lead to a change in thinking.

TEs and TCs fluidly moved between cognitivist and sociocultural frames to explain the importance of tailoring instruction to specific students. AE advised TCs to limit their feedback to students such that they are “focusing in on one particular thing so
that you offer helpful instruction and improve one thing because people don't have enough cognitive space to work on everything at the same time” and AS framed differentiating instruction for English Language Learners (ELL) as a question of not overtaxing students’ capacity for “active processing.” At times, whole activities were explicitly framed through cognitive science, as when BE incorporated a mini-lecture on schema theory into a demonstration of close reading or when CS explained how a lack of background knowledge made it harder for students to interpret primary source documents:

It’s a problem to students’ historical understanding, but it's actually a problem for reading as well. Because it's really hard for students to make sense of this funky outdated vocabulary with weird spelling and something of a dry style, if they don't have the background knowledge to understand the things that are being talked about. That adds to the cognitive demand of the work because they have to be constantly trying to figure out what's going on…going back to our cognitive science class last term, instead of that seamless interaction between existing schema and the new information.

Cognitivist language was frequently and explicitly used to help TCs create mental models of students’ thinking and provoke sympathetic and strategic responses.

TEs also drew from sociocultural theory, particularly in prioritizing student-centered collaborative inquiry. Every TE discussed scaffolds for student learning and centered classroom discussions as an essential instructional activity. Some TEs went further. BS spent three course sessions on facilitating small group work, each emphasizing the importance of social learning by decentering the teacher and positioning students to lead the learning. AE might have offered the most direct expression of the understanding that students learn in concert with one another in her description of classroom discussion: “We're starting with a seed. And someone's going to throw the
seed of an idea on a table, and it's going to be an unfinished idea. And our job by the end of this discussion is we will have each contributed to the growth of that seed. So, we will have built an idea. We will have grown a whole idea with each other's ideas.” For the most part, these statements of sociocultural convictions coexisted with cognitivist ones. For example, prior to the class where she explained the cognitive science underlying students’ reading, CS also said,

There are definitely teachers who do not value student discussion. [But] we are Vygotskians…We are people who believe that there is such a thing as social learning, and that part of how we construct our understanding of the world is in communication with others. And it can’t just be your teacher. It has to be your peers as well…I think there's some learning that just doesn't happen as well if kids aren’t able to talk about and kind of wrestle with each other.

BS went further, blending both dialects into her closing comment at the end of a class on small group work: “It’s in groups on purpose, because that in of itself is a scaffold…That is my argument for all of you who are going to stop doing this independent work [all the time]. The group work itself is actually a scaffold also…You could call that processing time in groups to make meaning.” BS made a social learning argument by invoking students’ individual cognitive structures. Her phrase “you could call that” implied a theoretical bilingualism, using two languages to describe the single phenomenon of student thinking. Across the six classes, TCs were encouraged to utilize the same conceptual heterogeneity to describe students’ thinking in ways that straddled the line between multiple learning frameworks while demonstrated fluency in each.

Imagining Student Knowledge. In contrast to the extensive and optimistic discussion of students’ thinking, discussion of their knowledge were less frequent and more negative (Figure 2.2). TEs’ and TCs’ discussion of student knowledge tended to
focus on what students might not know, with 84% of TE comments about knowledge and 81% of TC comments coded as negative. Although there was variance between courses, negative knowledge comments methods outnumbered positive ones in every methods course. For TCs, comments about knowledge focused on concerns that students’ lack of knowledge would inhibit their access to class content. For example, a social studies TC wondered aloud while practicing modifying classroom texts, “Do they know what that means, dictatorship? These are concepts that I’m not sure if all the students would know because they don’t get government [class] until 12th grade.” Negative TC comments about student knowledge only cooccurred with positive statements about their thinking 21% of the time. Compared to the rate of the same co-occurrence with TEs (34%), as well as the rate at which TCs created co-occurrence between negative and positive thinking (43%), TCs appeared less optimistic about addressing shortcomings in student knowledge.

*Figure 2.2: Percentage of “Thinking” and “Knowing” Comments by Valence*

Although TEs discussed students’ lack of knowledge at roughly the same rate as TCs, they were more likely to focus on structures of knowledge than discrete content.
information. AS counterposed instruction on historical thinking against what students knew, saying, “Students already have a schema of [reading for comprehension] and I kind of want them to think of sourcing as something different.” Although she is focusing on students’ lack of knowledge of sourcing, AS’ acknowledgment of their reading knowledge signals to TCs that students do not have generalized incapacity to know things. Similarly, AE offered an extended elaboration of how reading for literary analysis cut against students’ learned expectations of school.

Kids do not [lean into puzzling aspects of a text] unless you explicitly tell them to and say, “[Focusing on textual puzzles] is the work of disciplinary meaning making.” Kids when you ask them to talk about text, they will tell you what they’re sure of. Why? Because that’s what school is. Playing school is raising your hand and saying what you’re sure is true. And that is, in fact, not the work of interpreting literature. When you engage in interpretation of literature, you’re diving into a whole bunch of things you’re actually not sure about, and you’re posing them as possible interpretations…If you don’t say that out loud to kids, what they will do is they will tell you what they’re sure of.

AS and AE both named missing knowledge, in this case schemas for reading, but explicitly affirmed students’ capacity to engage in disciplinary thinking if provided instruction. Neither TEs nor TCs consistently portrayed students as possessing existing knowledge that was an asset for learning. TEs, however, were more likely to discuss knowledge as starting point for learning, while TCs were more likely to see a lack of knowledge as derailing future learning. Focusing on students’ lack of knowledge might be a logical extension of the imperative to tailor instruction. If teaching ought to occur in response to individual student need, it might make sense to focus on what students do not know. At the same time, it is possible to tailor instruction to students’ strengths, the
personalities, interests, and knowledge they already possess. TE and TC discussions did not emphasize students’ existing funds of knowledge.

**Imagining Students’ Group Identities.** TEs and TCs rarely discussed students’ social identities in specific terms. Comments about students’ group identities occurred with 1/7 the frequency of comments about students’ thinking. When they did characterize students in relationship to groups, both TCs and TEs primarily focused on groupings defined by academic ability (Figures 2.3 and 2.4). In most cases this came in the form of stating that classrooms usually contained “a really diverse range of learners,” as one TC put it. This trend was more pronounced in TEs’ comments, in part because TEs never named students’ race or class.

*Figure 2.3: Percentage of TC Social Group Comments by Identity Category*

![Figure 2.3: Percentage of TC Social Group Comments by Identity Category](image1)

*Figure 2.4: Percentage of TE Social Group Comments by Identity Category*

![Figure 2.4: Percentage of TE Social Group Comments by Identity Category](image2)
When TCs did name students’ social identity markers, they often connected that identity to negative comments about students’ thinking and knowledge. Over 1/3 (39%) of TCs’ “social group” codes co-occurred with negative “thinking” codes and 15% co-occurred with negative “knowing” codes, as opposed to 30% and 9% for positive “thinking” and “knowing,” respectively. In BE’s class, one TC imagined students as less wealthy, less knowledgeable, and less ready for classroom learning than their teachers:

Because of what we looked at earlier, how low-income families and high-income families’ difference between the vocabulary that's used in a low-income household versus the high-income households…there might be bias…You’re going to assume that your students should know certain words because you did…or you might assume that they don't know what you know.

In a more nuanced comment, a TC in CS’ class narrated an experience with ELL students in her field placement:

[I was teaching the] three themes of colonialism, capitalism, and race through the lens of slavery in the United States. And for us, given the context of where I’m student teaching, the idea as broad as possible, as simple as possible, even though they’re very, very, very broad and dense terms…[In class, students repeatedly said European colonists] wanted land and they wanted money. [I saw] the misconception was this idea of money was already here…students weren’t able to grasp the idea of natural resources…I took the moment to have a discussion about the word “rica” in Spanish, which means wealth. But rica means a lot of things in Spanish, it can mean wealth, it can mean bounty, it can mean all these other things. And by having that discussion of what does this word mean in a way that is very familiar to them, they were able to understand...So, making a connection to something that they know already, rather than giving them the answer, because I knew that they could get there.

This TC, who identified as Asian American, was able to connect with existing funds of knowledge to bring greater sophistication to students’ answers. Her faith that students “could get there,” however, stood in contrast to her earlier comment that dense concepts needed to be conveyed “as broad as possible, as simple as possible.” This TCs comment found her thinking about both what her students knew (rica) and did not know (natural
resources) as she puzzled over how she might help them make new connections. She was unusual in that she explicitly named and connected to students’ funds of knowledge. Most other TCs seemed torn between their desire to affirm students’ capacity as thinkers and their anxiety that students may know less because of their social identities, making it more difficult to realize powerful thinking.

TEs addressed students’ identities in different terms. They often linked student identity to positive thinking, with 67% of comments about identity co-occurring with positive thinking codes. Most frequently, when students’ ELL or IEP status arose, TEs moved quickly into practical suggestions for supporting their access to classroom tasks. Speaking about students with hearing disabilities, CS suggested, “allowing students to be able to rehearse their answers by doing turn and talks or small group work is a really good idea, in part so that they work on the wording and conciseness. It can help them feel comfortable.” AS framed a discussion of ELL students around the question of “What do your students need in order to make meaning?” The swift pivots to differentiation might suggest constructivist priorities in which individual difference is not explored as producing different funds of knowledge, but as an aspect of a student en route to the same forms of rich thinking as all their classmates.

**Imagining Student Emotion.** TCs and TEs primarily discussed students’ socio-emotional experiences in relationship to classroom participation. They worried that students would be scared to share their thinking, demonstrating a broad commitment to social learning. AE encouraged TCs to empathize with students’ fears, saying, “Discussions are scary…When you're in a discussion, has anybody felt their heart beating a little faster? Or like, ‘I don't really want to share my idea?’ I have.” BS and AS
emphasized teachers’ ability to influence students’ emotions about sharing. BS conjured an imaginary student “Sarah” and said, “If I’m sitting with Sarah’s table…I want Sarah to feel like I’m engaging with her. And I’m really like listening to their table’s ideas. So, it’s gonna be great. It’s gonna be fun.” AS explained, “They might not be excited and you got to bring the excitement. There’s a lot of work of being a high school teacher that's about bringing the excitement, bringing the energy. And you can change the energy of a space with your energy.” In each of these cases, TEs are not attending to students’ emotions as goals in and of themselves, but as gates which can open or close social participation and learning.

TCs were also concerned that students’ anxiety would prevent them from participating, often reifying their assumptions of students’ not knowing and the teacher’s role as the engine of student thinking. For instance, one TC in BS’ class suggested supporting students’ anxieties by normalizing not knowing and telling students, “‘You’re not expected to know this vocabulary word because we haven't taught it to you.’ Just letting them know that at the beginning so that they don't see a word and then immediately check out.” She imagined students’ feelings about lacking knowledge being a larger impediment to their learning than the lack of knowledge itself. Similarly, a TC in AE’s class noted that the interpersonal dynamics might deter student learning: “In my classroom setting…there are students that are very vocal. So, they will very, very harshly respond to other students’ ideas if they disagree. So, then it becomes an issue of like wanting to share only when the people around you agree with you.” This TC empathized with students who are reluctant to share and again suggests that students’ fear will shut
down their thinking, although in this case she located that fear in relationship to other
students rather than the teacher.

**Episode Analysis**

Thus far, the findings have detailed what TCs and TEs said about students. They
have not, however, addressed how those statements emerged discursively in the methods
classroom. The following findings were generated by contextualizing the individual
utterances into sequential segments to show how TCs and TEs’ utterances were
produced.

**Initiating and Framing Discourse.** Most episodes of talk about students
emerged as a series of TC answers in response to TE questions. TE questions initiated 39
(87%) of the 45 coded discursive sequences and appeared to shape the content of the
ensuing discourse. When BE asked TCs, “What worked?” after they watched a video of a
teacher using pictures to introduce literal and figurative meanings for a vocabulary term,
it prompted an episode comprised of 4 consecutive positive comments about student
thinking. TCs imagined that this technique would be “relatable to a child…makes them
more able to understand it,” “meets students where they're at…here's how you might
have already experienced [the term]…or dare I say, even used this word and not even
known it before,” could help a student “identify it both ways when they’re reading a
specific text,” and “if a student sees the context here is leaning towards a literal meaning,
maybe they can pull out the context versus figurative.” By contrast, when BE asked TCs
to *critique* his teaching after a model, the episode contained 3 comments about
unsuccessful student thinking, one comment about students’ lack of knowledge, and one
comment noting both successful and unsuccessful student thinking. In each case, he
requested that TCs take a particular side and they complied. Overall, 110 of 246 (45%) TC contributions matched the valence of the immediately preceding statement, meaning that TCs were often agreeing with one another, utilizing the valence framed by the TE, and rarely initiating disagreement with one another. Because many statements were either neutral or contained both positive and negative valences, only 11 (4%) TC statements directly contradicted the valence of the previous statement (going from negative to positive or vice versa).

Beyond the influence of their prompting, TEs also dictated the flow of discursive episodes by framing the conversation around representations of teaching that they curated. TEs often predetermined what examples of teaching and learning to talk about, and there appeared to be a correlation between TEs’ chosen representation and the valence of talk that ensued. When TEs modeled they primarily prompted TCs to talk about the effectiveness of the model, leading to more comments about the possibility of student thinking. Portrayals of actual enactment, such as videos or transcripts of teaching were more frequently paired with instructions prompting critique. This may partially be due to the fact that TEs often used models to introduce new instructional practices and representations of enacted practice were usually presented later in the learning cycle, or perhaps the discomfort involved in publicly criticizing a TE in their methods course.

While there was variety in the representations of instructional practice TEs introduced, AE was the only TE who devoted extensive class time to analyzing any artifact of student thinking. She did so twice during classes I observed, once prompting TCs to plan a writing conference in response to a piece of student writing and later engaging in a detailed analysis of a students’ think-aloud about a poem. The latter
activity was part of a class where AE introduced the teaching practice of listening to students thinking. She was the only TE to call analysis of student thinking a stand-alone competency. AE began this class with cognitive empathy by asking TCs to monitor their own experience reading unfamiliar and challenging texts, including a poem and the text of a Yu-Gi-Oh playing card. TCs reflected on how their own funds of knowledge enabled or inhibited their reading and how they reacted to frustration. They shared that “I checked out” and “I was like, ‘What am I reading?’” AE tied their experience to students’: “That is the feeling a lot of your students have a lot of the time. The feeling of getting a text in front of them, looking at it for a little bit, then checking out…Being like, I don't know, this doesn't make any sense. I don't know why I'm being asked to do this.” This transitioned into an activity analyzing a student’s read-aloud of the same poem TCs had just struggled with. The conversation initially focused on the students’ thinking, as AE asked, “Where do we anticipate that this student is going to struggle?” and “What is he doing that is supporting him to make some meaning of this text?” At the end of the conversation, however, AE pivoted:

I would argue that one of the most important things that this student needs is knowledge that meaning doesn’t arrive and doesn’t exist in the poem. That he has to actually make it…Because a lot of students when they don't know that…they think ‘I don't understand it. It's there, and I don't understand it.’…One of the biggest things I would support him with is actually just the idea of metacognition…He doesn't know all the things he's doing, it doesn't seem like. He didn't know he was asking questions of the text. He didn't know…the moments when I'm the most confused are the moments where I've hit up against probably the most important part…He was thinking ‘I am doing something wrong.’ And learning how to see those moments as the most generative moments and believing that that’s true about the reading process is one of the most important things that a student can learn.
The content of AE’s closing statement was not unusual. She described something that students were unlikely to know and proposed a teacher intervention that could lead to powerful thinking without explicitly characterizing the students’ social identity. Yet, that comment had greater significance at the end of this class. TCs had shared the students’ emotional experience. AE’s framing in terms of what to talk about, what example to use, and what prompts she offered created a different discursive space than what was available in her peers’ courses, even though many of them used similar language and concepts.

Co-construction, Contestation and Personalization. TE planning alone did not dictate the entirety of the discourse. TE and TC collaboratively constructed, redesigned, and refashioned discussions through their talk. In response to their TEs’ tendency to guide talk towards generalized transferable takeaways about students, many TCs personalized, making explicit and to the students they knew from their placements. Nearly 1/3 (32%), of TCs’ comments in discursive episodes were personalized. At times, personalization vivified the shared imagination of students. When AE asked TCs to speculate on the emotional stakes of a teachers’ response to students’ reluctance to participate, one TC said,

I've been dealing with this because…during our first Socratic seminar I was like, “I’m purposely not going to talk.” And the first group got so off-task. They thought of it as their own little recess…My first response was like, fire and vengeance, like, “You will pay attention and do the work.”…But if you take a hard stance…[The risk for the teacher is] her students feeling trustworthy of her. If she tries to push something that they do not want to share publicly, they're going to lose trust.

Her story served to deepen the conversation AE was trying to initiate.
In other instances, TCs used personalization to reroute, contest, or recontextualize TEs’ planned discussions. In a class on facilitating discussions, one TC asked CS how that lesson might apply to her classroom which had, “four students with hearing disorders… [one with] a processing disorder…At least three that I can think of off the top of my head with severe speech impediments.” The conversation pivoted away from enumerating the benefits of discourse in general towards a discussion of how that TC might support her specific students. In his class on vocabulary instruction, BE asked TCs to read a classroom text and identify a word that they would teach to students via direct instruction. After a few TCs suggested words like, “esteemed” and “immersed,” one TC suggested “urban.”

TC 1: I chose urban, because…my students, they won't get it. And in my thoughts, I’m assuming they already know what that word means. So that's the first word that they will see and not understand, so I feel like that's where the bias comes in. It's like, ‘Okay, yeah they know that.” And then just continue, but they will miss everything that's happening in the story going forward.

TC 2: Building off of that point. Initially…we didn't realize that word. And then [another TC] pointed it out. And it's one of those things where only because I went to college, the word became very…vibrant to me, I became aware of the definition, but once you’re living in a quote unquote urban community, you're not going to be aware of the word. So, taking that bias out of it and thinking in the minds of the children would allow them to be put into a better place to understand the meaning of the text.

TC 3: Adding on to what she said…

BE: Her name is [TC 2].

TC 3: Adding to what [TC 2] said, urban was the first word that I saw. My students, they’re all low income. And I am too. So, I definitely remember growing up and not knowing what urban was. But when it's described, I'm like, “I know what that is.” I know if my students, like, they all probably have an idea of what it is. They probably know what it is, but they just never put a word to it. It’s like teaching this word, we'll just put a word to something that they may already know and live in.
BE: And we can keep going down this conversation. One word could be riddled with all sorts of decision making...What you think is important is inherently a biased thing...By choosing a word, you are inherently implementing your own bias into that classroom. Just be mindful of that when you choose words that you're going to teach explicitly your students so that you're mindful of what are the high-leverage words.

In this segment, three Black-presenting TCs began to personalize by talking about themselves, their students, and the connection between identity and knowledge. Their white TE interjected to maintain discussion norms before ultimately redirecting towards his intended learning target around high-leverage academic vocabulary. This excerpt is a site of contest. TCs were pushing to imagine students that mirror what they see in their classrooms. They wanted to center socio-economic class and, perhaps, race, name their identification with students along those lines, and articulate potentially untapped funds of knowledge. The exchange occurred publicly, enabling their peers who are white, suburban, or otherwise different from the imagined students to eavesdrop, and is directly tied to an instructional action. It was, however, different than the discussion BE intended to have when he planned class.

TEs were active participants throughout discursive episodes. Only 6 of the 46 (14%) exchanges I recorded occurred in small groups without TEs. In whole group episodes, TEs made substantive contributions describing students in 82% of episodes. Their active facilitation most frequently served to maintain alignment with the framing and prompting of the episodes. TEs rarely directly disagreed with TCs, but were more likely to offer ideas and reframing when TCs’ comments did not match the prompt framing the discourse. A TC in BE’s class expressed reservations about an instructional technique intended to spark exploratory inquiry, saying, “I feel hesitant about using this
without first thinking about what students I’m using it with because of that step one. I think if the students are afraid of making mistakes or they’re uncomfortable with that, then you might not get much of a response and that out kills the exercise flat.” BE responded by saying, “I want to linger on that for a second. Let’s imagine that the culture of error is established. What is the value of actually doing that first step?” Although the first half of BE’s response acknowledges the TC, the second half redirects towards a discussion of the benefit of the proposed instructional practice. BE never tells the TC he is wrong to assume that students will be anxious or unprepared, instead he asked the TC and the class to imagine students who had been better prepared by their teacher.

While most TC contributions were aligned with TEs’ framing, in some instances TCs prompted TEs to make comments whose valences contradicted their own prompts. In her social studies class AS modeled the process of doing a think-aloud with a primary source to prepare the TCs to replicate the practice in their placements. One TC interrupted the positive discussion of how this kind of modeled thinking might support students to question how it would fit into his classroom:

TC 1: I’m concerned about some context that might be needed for some students to understand what the role of the Secretary of War is…It’s something that I know that my several of my seventh graders would go right over their head. They wouldn’t even understand the motivation of the President ordering the Secretary of War to defend him…I think that it would have confused some of the students in my class.

AS: Very possibly, very possibly. I think you’ll notice I deliberately didn't use the word cabinet. I said he had some advisors. But yeah, there's a whole lot of background knowledge there. Absolutely. TC 2, what do you think?

TC 2: I think that's true. But I also think that the students will just understand that the Secretary of War is an important person to the President. And like, isn’t that what they’re supposed to gain out of it?
AS: I think that’s…enough…One solution to TC 1 would have been for me to say, “I have no idea what the Secretary of War is, but it sounds like a kind of important position”…You don't need to feel pressured to explain all of it. You can just notice that this might be a gap for students and then model not knowing.

TC 1’s anxiety about student knowledge disrupted AS’ plan. She intended to have a conversation about what students can think rather than what they did not know. Like BE in the previous example, AS was focused on sharing an instructional approach that could empower TCs to support student thinking. Where BE sidestepped the TCs’ interjection, AS affirmed the TC, acknowledged that students may indeed lack knowledge, and offered instructional strategies to respond to the possibility. Neither AS nor BE conceded the core of their lesson. They conveyed the instructional technique and their conviction in students’ capacity for thinking without getting into contest of interpretation with a TC.

But each case included a concession. BE undercut his TC’s discursive and interpretive authority, while AS potentially reified a negative conception about students’ knowledge. Each of these examples is an instant, a fraction of the time TEs and TCs spent together. While they may not have an indelible effect on TCs’ conception of students, they demonstrate the interactive unfolding of teacher and student identities in methods classes.

AS and BE chose not to contradict their TCs. They may have made that choice to sidestep conflict with a TC, to avoid being sidetracked, or because they didn’t know the students the TC was claiming were anxious, lacking knowledge, and unprepared. Perhaps if AS and BE, or the other TCs for that matter, had access to those students they could contest the TC’s presentation of them, but the remove of the methods class renders each TC the expert on their own students. These exchanges are emblematic of the delicate collaboration needed for TCs and TEs to co-construct of imagined classrooms.
Discussion

These six urban methods courses were absorbed in the work of constructing and populating imaginary classrooms. TEs and TCs collaboratively imagined capable thinkers in need of teachers, students whose knowledge, emotions, and group identity were important but often unstated. The expectations of students developed in these courses reflect the circumstances of teacher education, the experience of TCs and the pedagogies of TEs.

Embracing the Imagined Classroom

This study examines the discursive co-construction of students during conversations about instructional practice. Talking about students in methods courses presents a predicament for TEs. TCs usually want to talk about their students, the children they see in student teaching, but TCs typically have no way to see the classrooms their novices are describing. Compounding matters, TCs are unreliable narrators. All novices are likely to miss salient elements of classroom instruction (Berliner, 2001), and novice white teachers engaging with “urban” students are particularly likely to misunderstand their students’ knowledge, capacity, and intentions (Anderson & Stillman, 2017; Gutiérrez, 2006; Shah & Coles, 2020). Second, even if TEs were able to visit every TCs’ teaching placement and spend enough time to understand the idiosyncrasies of each classroom, those classrooms would still remain invisible to other TCs. To the extent that social learning benefits from a shared text, methods courses will struggle to make dozens of disparate classroom contexts visible and legible to novices who are still forming their fundamental frameworks for understanding teaching.
and students. Finally, TEs’ primary responsibility extends beyond student teaching placements. TEs prepare TCs for their careers. Most novice teachers are not hired by the school in which they student teach (Goldhaber, 2019), and even those that are need to prepare to teach students they do not yet know (Nolen et al., 2011). These tensions demand the creation of imaginary classrooms where TEs and TCs can collaboratively discuss teaching.

If we accept that imaginary classrooms are a feature of teacher education, then we might consider how the TCs in this study might be served by their imagination of students. The findings of this study show that the image TCs developed was substantially influenced by their TEs. TEs chose what to talk about and how it should be discussed, and TCs usually followed along. Over and over, I observed TEs directing TCs towards the potential of student thinking and the importance of responsive instruction. That juncture may be an ideal place to begin the formation of teachers’ professional vision (Goodwin, 1994). It dispels some of the most pernicious stereotypes of “urban” students as incapable while developing teachers’ locus of control (Rose & Medway, 1981), the sense that they can make a difference. From a TE’s perspective, focusing on the importance of disciplined, text-based, inquiry and discussion might allow them to sidestep a candidates’ claim about students’ insufficient knowledge. Maintaining a positive discourse about how good teaching can support students may be a long-term bet that if TCs engage in dialogic teaching, they will come to realize how much knowledge their students actually possess. Similarly, TEs’ reluctance to provide detailed descriptions of students’ social identities may be a strategy to support novices’ ability to generalize and think flexibly about students, a characteristic of expert and adaptive teaching
Drilling down on individual student variation might support candidates in their student teaching at the cost of preparing them for their broader career as endless customization may leave novices overwhelmed by novelty and grasping for principles to guide their future instructional choices (Metz, Kavanagh, & Hauser, 2020). The fact that six TEs, from two disciplines, at three institutions made similar choices is likely an endorsement of the utility of constructing students in this way. If nothing else, it is a marvel that six TEs arrived at similar instructional choices without access to a shared training infrastructure. Before rushing to revise, we should consider the ways in which existing pedagogies are an adaptive response to the circumstances that require teacher education to occur with and through imagination.

**Improving the Imagined Classroom**

While the imaginary classroom may be an understandable response to the predominant structures of teacher education, there may be other ways to make TCs’ imaginations of students more grounded, equitable, and effective. Scholars have argued that the decontextualized structures of teacher education drive of inequality precisely because they encourage white TEs and TCs to engage in abstract normative musing about students of color, rather than develop situated knowledge by enmeshing themselves in students’ communities, lives, and identities (Sleeter, 2017; Souto-Manning & Martell, 2019). This study’s finding that the discourse around students is effectively color-mute (i.e., silent about students’ racialized identities, (Pollock, 2004)), as well as gender-mute and class-mute underscores this concern.⁵ Resituating teacher education to bring TEs

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⁵ TCs in each institution did engage in some discussion around education and power. In Institution A and C, TCs participated in school and society courses in addition to their methods courses. In Institution B, TCs
closer to students might enable instructors to speak with greater specificity and knowledge about the “urban” students awaiting TCs. The residency model of teacher education, for instance, integrates teacher education with novices’ field work (Hammerness & Craig, 2016; Papay et al., 2012). Facilitating long-term relationships between TEs and placement schools, having methods teachers routinely visit field placements, and clustering placement schools so that TCs are located in a single community could allow TEs to talk about individual students in ways that could resonate for all members of the discussion (Quartz, Priselac, & Franke, 2009). Scholars and practitioners of justice-oriented teacher education have already explored the potential of erasing the sequestration of teacher education by placing TCs in classrooms (Kazemi et al., 2018) and communities (Matsko & Hammerness, 2014; Philip, 2019). They have also recommended recruiting and empowering more TEs and TCs of color, who could build bridges between TCs’ and students’ identities and experiences (Bristol & Goings, 2019; Salinas & Sullivan, 2007).

Institution B is an interesting case in this regard. As an alternative certifier, it positions itself much closer to the field than most university-based programs and recruits a more diverse group of TCs. But, despite TEs’ routine visits to TCs’ schools, TCs’ multi-year commitments to their schools, and the close ongoing relationship between Institution B and many TCs’ schools, BS and BE relied upon imagined classrooms in the same ways as their colleagues. It raises the question of whether there is a tipping point.

covered similar content in the summer prior to their methods course and each methods course had at least one day on educational justice written into the syllabi. This study’s findings, are drawn entirely from the observed course sessions. During those sessions discussions of race, gender, and class were infrequent, as described in the results. These findings suggest that, at least in the observed sessions, those concepts were not being wrapped into thinking about instruction at the time of this study.
How situated is situated enough? Perhaps the number of novices in each course, over 25, and the fact that their schools were spread across the city presented so much variation that the most meaningful way for TEs to address students and learning was through a generalized imagined student.

Even absent structural change, existing pedagogies can make students more visible. TEs are already widely incorporating representations of instruction and students into their methods courses (Jenset, Klette, & Hammerness, 2018). More TEs might follow AE’s lead and select representations that feature real students simply by substituting videos of classroom instruction for demonstrations by TEs. Rooting discourse about students in real classrooms could invert the typical process of episodes of practice. Typically, TEs directed TCs’ attention to instructional practices, either by personally demonstrating or showing videos of things that teachers do. Thinking about students usually emerged during debriefs of those activities as TCs speculated about applying the techniques they observed to their placements. However, when TEs embraced TCs’ interest in personalizing by prompting them to scrutinize student work, supporting TC-led discussions of identity, and incorporating their student teaching, it did not appear to detract from TCs’ ability to speak about principles and techniques of practice. Leaning further into the unusual pedagogies already present within their methods courses might help TEs make their instruction more specific and present TCs with greater opportunities to explore differentiating, scaffolding, and personalizing teaching.

TEs might also embrace different or more decisive theoretical frameworks. TEs in this study fluidly moved between cognitivist and socio-cultural languages. Critical
language explicitly centering the raced, classed, and historically and geographically situated experiences of urban students rarely entered their lexicon. Scholars of teacher education have offered theoretical models and empirical studies how social studies and ELA TEs might work from a critical stance. Their examples include extensive discussion of students’ social identities framed in culturally sustaining and historically responsive terms (Love, 2019; Muhammad, 2020), and deep exploration of students’ funds of knowledge and epistemologies (Bang & Medin, 2010) and cognitive frameworks (Hammond, 2014). Research has explored critical teacher education pedagogy (e.g., Carter Andrews et al. 2019, Conklin & Hughes, 2016) and explicitly centered the aim developing TCs’ understanding of students (e.g., Sealey-Ruiz & Greene, 2015). Still, the powerful and expanding body of research surrounding critical teacher education must contend with the inertia of field. TE pedagogy remains obscure and understudied (Cochran-Smith et al., 2016), but the observations of the six methods courses in this study suggest that critical pedagogies, theories, and discourse may not yet have achieved saturation. Of course, this study does not capture the full range of pedagogies practiced by the TEs in this study and cannot be generalized to typical TE practice. By observing only a few of their course sessions and isolating their episodes of practice, this study decontextualizes their work and misses other methods by which TEs influenced novices’ conception of students. At best, this work only raises the question of how students are or should be represented.

Understanding the Imagined Classroom

This study looks at discourse in six teacher education classrooms. Cutting across content areas, institutions, and pedagogical philosophies is unusual in a field dominated
by single-site self-studies by TEs (Vanassche & Kelchtermans, 2015), and was critical to identifying the shared tendencies and compelling idiosyncrasies of each methods classroom. Comparative research is, however, only a starting point for addressing the question looming over all teacher education research: “Does it matter?” There is theoretical grounding to believe that the discourse in methods’ courses influences TCs’ identity development (Hanna et al., 2020; Henry, 2016; Kaplan & Garner, 2017), but teacher education research has historically struggled to demonstrate causal connections between the methods classroom and the future beliefs and actions of teachers (Cochran-Smith et al., 2016; Goldhaber, 2019; Tatto, Richmond, & Carter Andrews, 2016). Conceptualizing the identity of “teacher” as a complex dynamic system means that when context shifts, identity and action will be recontextualized (Henry, 2016; Kaplan & Garner, 2017). As such, it is unclear what will transfer from teacher education to the field. The imaginary student of the methods course might melt the moment TCs take on real students. Further longitudinal research will be important to understanding what the discourse imagining students means for teachers and students in-person. This study also raises questions about how insights from such future research might filter back into the methods classroom. Although the TEs in this study had a number of similarities in their practice, TE education and professional development is typically scattershot (Swennen, Shagrir, & Cooper, 2009; Zeichner, 2005) and lacks a shared language to spread pedagogy (Grossman & McDonald, 2008). Addressing the questions of what matters and how it can be spread has implications for all teacher education, but holds particular significance in urban education where the question of teachers’ mindsets, perceptions of students, and capacity are heightened.
References


Love, B. L. (2019). *We want to do more than survive: Abolitionist teaching and the pursuit of educational freedom.* Beacon Press.


104


Trent, J. (2014). Innovation as identity construction in language teaching and learning: Case studies from Hong Kong. *Innovation in Language Learning and Teaching, 8*(1), 56-78.


Developing Novice Teachers’ PCK for Facilitating Historical Inquiry Discussions

Pedagogical content knowledge (PCK) was supposed to change the way teachers are educated, understood, and esteemed. Lee Shulman’s ambitions for the term were visible in the dual pieces in which it was introduced. In the first (Shulman, 1986), he outlined PCK’s contribution to describing the knowledge of teachers. The second (Shulman, 1987), built on that foundation to argue that this new articulation of knowledge could simultaneously serve to restructure teacher preparation and justify teaching’s status as a profession. The creation of PCK was part of the same zeitgeist of teacher education reform animating the Holmes Group (1986), Carnegie Task Force (1986), and Shulman’s own work establishing national board certification (Shulman & Sykes, 1986). The claim that teachers hold “that special amalgam of content and pedagogy that is uniquely the province of teachers, their own special form of professional understanding” (Shulman, 1987, p. 8), was simultaneously a research-based description of how teachers think, a pedagogical theory for how teachers should be taught, and a policy claim about how they should be valued.

Structurally, many aspects of Shulman’s vision have come to pass. The near universal adoption of subject-specific methods courses and mentored student teaching attest to the ways teacher education has accepted the task of developing teachers capable of enacting a disciplinary body of knowledge (CAEP, 2020). Yet, despite the ways PCK has restructured teacher education, it is unclear whether it has succeeded educationally. The teacher education classroom remains, to a dispiriting degree, a black box. We know
little about how novices learn, how teacher educators teach, and whether teacher education is effective in cultivating PCK (Cochran-Smith et al., 2016; Goldhaber, 2019). The year before Shulman debuted PCK, Feimen-Nemser and Buchman (1985) coined “the two-worlds pitfall” to describe how the university and field are often disconnected or working at cross purposes. Nearly 40 years later, the problem persists (Braaten, 2019). PCK has become the consensus aim of teacher education, but it is unclear how teacher educators can encourage it, how novices learn it, and, in some cases, what precisely we mean by PCK.

This paper uses at the case of social studies discussion facilitation to explore the relationship between teacher educator pedagogy and teacher candidate reflection and enactment to understand how PCK is conveyed and taken up. Using a comparative case study design (Yin, 2014), I look at how two social studies teacher educators express their PCK and consider what two pairs of novices’ enactment of and reflection upon discussion facilitation reveal about developing PCK for discussion facilitation in history classes.

**PCK in Teacher Education**

Prior to the advent of PCK in the 1980s, prospective teachers might acquire content knowledge in university courses not explicitly tailored to teachers, such as a survey lecture course on American history. When then did receive instruction in pedagogy, it was unlikely to be differentiated by subject-matter. The prevailing behaviorist model of teacher education relied on positivist process-product research to identify beneficial instructional behaviors, such as giving students praise, and used pedagogies based on direct instruction and micro-teaching to prompt teacher candidates
to practice (Gage, 1986; Grossman, 2005; Reynolds, 1989). PCK upended the status quo with its claims that teacher cognition was the primary engine of instruction and that cognition rested on disciplinary-specific knowledge (Shulman, 1986, 1987). As researchers soon found out, PCK is a sprawling concept. The project of articulating the bodies of knowledge comprised by PCK is vast and ongoing. An incomplete list of posited domains of knowledge for teaching would include knowledge of the purpose for teaching and curriculum (Grossman, 1990), knowledge of students (Ball, Thames, & Phelps, 2008), knowledge of technology (Koehler & Mishra, 2009), knowledge of social justice (Dyches & Boyd, 2017), and knowledge of Critical Race Theory (Chandler, 2015), each of which emerge in and through a teachers’ knowledge of their content area.

The disciplinary dimension of PCK is built on Schwab’s (1978) theory that disciplines contain both substance and syntax, which is to say that they are defined by the processes and epistemologies that govern the way knowledge is constructed (syntax) as much as they are by the topic of the knowledge itself (substance). Teachers are therefore charged with understanding what is known, what it means to know, and how to help a person to come to know. In all, it is a staggering responsibility for teacher educators.

PCK is a framework for knowledge and many of the critiques of PCK begin by challenging what it means to know. The 1980s and 1990s were the high-water mark of cognitivism, a time when knowledge was primarily construed as an internal individual process (Gardner, 1985). Teaching, however, is enacted and embodied and social. Some researchers have alleged that research on PCK has hewn too closely to a cognitivist perspective and failed to appropriately value enacted teaching (e.g., Henze & Van Driel, 2015; Settlage, 2013). This critique has profound consequences for teacher education as it
precisely mirrors the “problem of enactment” (Kennedy, 1999), the ongoing struggle to show that teacher education has a meaningful effect on what novices do in the classroom. Although Shulman was clear that PCK was inextricable from enactment, the persistence of the problem of enactment suggests that PCK has not yet solved the “two-worlds pitfall” (Feimen-Nemser & Buchman, 1985). To the contrary, teacher education remains in a crisis of legitimacy that centers precisely on the charge that it does not adequately prepare novices to enact high quality instruction (Grossman, 2008). Shulman noted these shortcomings himself when, 20 years after introducing PCK, he said, “teacher education does not exist in the United States” (2005, p. 7). Today other scholars, many of whom once researched subject-specific PCK (e.g., Ball & Forzani, 2009; Grossman, Hammerness, & McDonald, 2009), have taken up that challenge and spent the past decade directly addressing the problem of enactment by engaging novices directly in practice, rather than solely building their knowledge about practice. Despite these efforts, teacher education’s practice and efficacy remain obscure. This is, in part, because most of what we know about teacher education’s influence on novices’ thinking and reflection relies on teacher educators’ self-studies, which are inherently small-scale, qualitative, and highly situated (Vanassche & Kelchtermans, 2015) and difficult to validate, replicate, aggregate, or generalize (Grossman & McDonald, 2008). Today, scholars cannot definitively say what goes on in most teacher education courses (Clift & Brady, 2005; Wilson, Floden, & Ferrini-Mundy, 2002), or whether it builds PCK that works in the classroom (Goldhaber, 2019). Teacher education needs research that connects teacher education pedagogy to novices’ PCK as evidenced in both what they think and what they can enact.
The Case of Social Studies Discussion

Social studies classroom discussion is a prime example of how teacher education has struggled to deliver enacted PCK. Study after study has confirmed that student-driven classroom discourse is productive for a wide array of student outcomes, but most teachers rarely facilitate substantial student-to-student talk (Nystrand et al., 2003; Reisman, 2015; Saye & SSIRC, 2013). This pattern of missed opportunities appears across subject areas, but it may be most troubling within the social studies where classroom discussion is a core disciplinary practice (Cuenca, 2021; Fogo, 2014). Indeed, the competencies enhanced by student-centric discourse lie at the very heart of the subject, including argumentative reasoning (Kohlmeier & Saye, 2019; Wissinger & De la Paz, 2016), historical thinking (Freedman, 2015; Reisman, 2015), democratic citizenship (Parker & Hess, 2001), and understanding social and civic identities (Brown et al., 2017; Goldberg, 2013). Possessing deep content knowledge does not appear to make teachers more likely to lead classroom discussions (McCrum, 2013; Voet & DeWever, 2016), suggesting that this discussion facilitation extends beyond content knowledge into PCK. The fact that discussion is so rarely taken up in classrooms is a problem for social studies and, insofar as it represents the shortcomings of teachers’ PCK, a representative problem for teacher education.

Previous research on teacher education has explored the practice of facilitating social studies discussions through the lens of PCK, although it has tended to separate instruction, enactment, and reflection. Kavanagh et al. (2019) described how three teacher educators’ approach to teacher education managed to support both the pedagogical capacity to facilitate discussions and the content knowledge to make those
discussions meaningful, but they did not collect data on how candidates enacted that instruction. In a related article, Reisman et al. (2019) looked at the enacted teaching of four cohorts of teacher candidates, including some whose methods instruction had been profiled in a preceding piece, but did not explore the candidates’ thinking about their instruction. Monte-Sano (2011) and Monte-Sano & Budano (2013) collected a more robust set of data from candidates, including videos of enactment and interviews, but they did not illustrate their teacher education instruction. A few other studies have looked at the development of discussion facilitation in in-service contexts (e.g., Kohlmeier & Saye, 2017; Saye et al., 2009), but there is not yet a robust literature on the topic. As it stands, the existing body of literature is sufficient to justify positioning social studies discussion facilitation as a valuable site to develop PCK, but it has not outlined a clear relationship between teacher educator pedagogy and novices’ enacted and intellectual PCK.

Conceptual Framework

This study uses Kavanagh et al.’s (2019) nested model of teacher educator PCK (Figure 3.1) to conceptualize how teacher educators influence novice’s PCK. This model suggests that teacher educators’ PCK consists of three related domains of knowledge, visually represented as concentric circles. The largest circle, teacher educators’ PCK (the ways teacher educators teach their methods course) encompasses both their vision of good teaching, teachers’ PCK, and their understanding of how students think about the subject of history, students’ CK. A skillful teacher educator will be able to effectively convey (teacher educators’ PCK) powerful pedagogies (teachers’ PCK) that will inspire student learning (students’ CK). Teacher educators’ PCK is overarching because it is the
medium through which the other domains are expressed. Candidates only have access to their instructors’ visions of instruction and student learning insofar as the instructor can convey those visions. Only enacted teacher educators’ PCK can influence novices.

**Figure 3.1:**

*Model of Teacher Educators’ PCK for Discussion Facilitation* (Adapted from Kavanagh et al., 2019)

Of course, novices also hold preexisting beliefs about what social studies is, what a classroom discussion looks like, and how a teacher should facilitate one. While this model focuses on teacher educators, each intersection between teacher educators’ and novices’ PCK has the potential for alignment or disjuncture. Greater alignment between instructors’ and novices’ PCK (i.e., a shared instructional vision) could suggest that teacher educators faced a less daunting task. It would presumably be easier to teach a
candidate how to facilitate text-based inquiry, if they were predisposed to believing that inquiry was valuable. Aligned PCK might facilitate faster, deeper, or more lasting learning, although there is not yet a mature research base to confirm this supposition.

Prior research on social studies, unfortunately, primarily predicts disjuncture between instructors and candidates. Prospective social studies teachers vary widely in their motivations for teaching social studies (Hawley, Crowe & Brooks, 2012) and both substantive and syntactic content knowledge (Savage, 2019), a diversity that would make it difficult for an instructor to have aligned PCK with the majority of her students. Candidates’ lack of uniformity reflects social studies’ peculiar status as content-area formed from multiple academic disciplines including history, geography, and economics as well as civics, which is meaningfully distinct from political science as practiced at a post-secondary level. This strange brew has always had an ambivalent relationship with academic disciplines (Seixas, 2001; Thornton & Barton, 2010), with the result that there is no consensus definition of social studies’ foundational content knowledge.

The lack of a clear definition of PCK for social studies has not stopped PCK from featuring prominently in social studies research, teaching, and teacher education (e.g., Crocco & Livingston, 2017; Cuenca, 2021; van Hover & Hicks, 2018). A number of scholars have taken up the challenge of laying a foundation for social studies teaching, and, to date, there are two primary approaches to this problem. The first argues that each individual discipline within social studies has its own PCK, such that there is different knowledge for teaching economics (Ayers, 2016; Joshi & Marri, 2006), civics (Toledo, 2020), and geography (Reitano & Harte, 2016). The second argues that there is an overarching body of knowledge that crosses the boundaries between the various social
studies that can be articulated in relationship to how these concepts meaningfully apply to a citizen’s life (Cuenca, 2021; Powell, 2018). Saye (2017) used the language of Disciplined Inquiry (DI) and Disciplined Civic Inquiry (DCI) to distinguish between these two camps, with DI describing appeals to the academic disciplines and DCI appealing to the expertise possessed by expert citizens rather than expert academics.

Within the realm of DI, history has received the most extensive study. Disciplinary history scholars argue that for students to productively participate in disciplinary discussion, the teacher must engage them as competent sense-makers, and orient them to the text, to each other, and to the practices and content of the discipline (Kavanagh & Rainey, 2017; Reisman et al., 2018). For history teachers, orienting to the discipline involves prompting students to scrutinize accounts of the past with particular attention to the reliability of their source, the influence of their context, and evidentiary weight of corroboration (Wineburg, 1991). Because this kind of thinking is neither innate nor intuitive (Wineburg, 2001), teachers often use document-based lessons to prompt argumentation and provoke uncertainty by presenting evidence that represents the incomplete and unreliable historical record (Reisman, 2012, 2015). At the heart of this thinking is the question of reliability. Historical thinking takes an epistemic stance of skepticism, assuming that texts must be scrutinized at a meta-textual level without a presumption of accuracy. According to the disciplinary framework, then, a teacher’s facilitation of discussion—even at the level of the utterance—can be evaluated by the extent to which it successfully guides students towards argumentation authentic to historical thinking.
To date, DCI, the attempt to articulate a broad definition of PCK for social studies, has received less study than DI. Saye (2017) described DCI as being derived from the actions of an expert citizen, the kind of thoughtfully engaged person teachers might hope students will become. Two recent attempts to articulate an encompassing social studies PCK converge on descriptions that express DCI. In the first model, Cuenca (2021) built on the work the National Council for Social Studies did to articulate a series of core practices for social studies in its College, Career, and Civic pedagogical (NCSS, 2013) and teacher education frameworks (Cuenca, 2017). He focused on a model of inquiry that is text-based, but staunchly student centered. With its explicit connection to students’ lives and civic engagement, this DCI vision of PCK faces the present where DI PCK faces the past. In the second, Powell (2018) offers an intellectual history of social studies’ search for a disciplinary foundation before arriving at a similar endpoint, again positioning text-based inquiry as a central practice in social studies, saying, “Sorting competing claims and marshaling evidence to support claims and commitments are key skills not only of historians and social scientists but also of citizens as well” (p. 259). The DCI vision of discussion is broader and more civic-minded than that offered within a history DI model. Engaging with the epistemic skepticism and meta-textual reading of historians is neither precluded nor required. Rather, the relationship to civic life positions students’ capacity to argue, make connections to their lives, and share their thinking as the centerpiece of DCI social studies inquiry.

**Research Questions**

In this study, I ask how teacher educators’ enactment of PCK influences their novices’ thinking about and enactment of discussion facilitation. Using a comparative
case study design (Yin, 2014), I observed sessions dedicated to facilitating classroom discussions of history in two secondary social studies methods courses and asked how the teacher educators’ enacted pedagogy presented classroom discussions. I then interviewed two sets of teacher candidates from each course, one pair whose initial PCK appeared to align with their teacher educators’ and one whose did not, and coded videos of their attempts to lead discussions with high school students. Analyzing these interviews and videos, I ask the following questions:

1. How do teacher educators enact their PCK for facilitating historical discussion?
2. How do novices’ PCK for facilitating historical discussion, as expressed in their enactment and reflection, reflect the instruction in their methods courses?
3. What is the relationship between novices’ incoming PCK and their learning about facilitating discussion in methods courses?

**Methods**

**Participants**

I initially recruited three secondary social studies methods teacher educators (TEs), purposively selecting three institutions to represent a range pedagogical and philosophical views on teacher education. The COVID-19 pandemic interrupted data collection at the third site, changing the design to a binary comparison. The TEs who remained in the study both taught social studies methods to preservice teachers pursuing master’s degrees and secondary classroom certification from institutions in major cities that advertised their expertise in urban education, but their institutional structures were very different. The first TE, AS, taught in an R1 university whose teacher education
faculty had made a concerted pivot towards practice-based teacher education in both pedagogy and research. AS, a white woman in her early 40s, had a Ph.D. in education and a master’s in history. She taught the first semester of year-long social studies methods course. In addition to their coursework, each candidate student-taught in a local public neighborhood, magnet, or charter school. Over the course of the year, candidates gradually increased their instructional responsibility, moving from observing their classroom mentor to leading instruction. In the year I observed, there were 12 students in AS’ course, including an undergraduate student, a Ph.D. candidate observing the course, and four candidates pursuing middle grades certification. The preservice teachers were demographically diverse, although men, white students, and people in their early 20s were the slight majority.

The second TE, BS, taught in an alternative certifying institution. A new graduate school of education (Cochran-Smith et al., 2020), this institution operated independent of a larger university and was created as part of the education reform efforts of the 2000s. The teacher education program was designed as two-years of coursework throughout which candidates were fully employed as the teacher of record in a city school. BS, a white woman in her late 30s with a master’s degree in education, taught both semesters of the first-year methods course. Demographically, the average student in BS’ 30-person course was white, male, and in their early 20s. Teachers in their late 20s and early 30s and Black teachers made up a larger fraction of the cohort (roughly 1/3) than in AS’ class. About half the candidates were employed by charter management organizations (CMOs), with the other half working in public schools or unaffiliated charters. The CMO teachers typically received intensive support from their networks including pre-scripted
lesson plans, individualized coaching, and professional development, while those in public and unaffiliated schools typically had greater autonomy and less support.

I initially selected four teacher candidates (TCs) from each course to create contrasting case studies, eventually settling on a two-by-two comparison. Two TCs were nominated by each TE, based on who they felt were likely to internalize the methods course, and two other TCs were randomly selected from the methods courses. TCs who were not teaching secondary social studies classes were excluded. The selected TCs were roughly representative of the larger cohort in terms of teaching placement, although the participants in AS’ class included an overrepresentation of TCs of color and BS’ participants overrepresented older participants (Table 3.1). I completed data collection and analysis with all eight TCs before selecting four to construct case studies. Case studies paired novices based on their PCK before and after their course, and the relationship between their PCK and their TEs’. For clarity, I assigned TCs from AS’ class pseudonyms beginning with A and those from BS’ class pseudonyms beginning with B.

Table 3.1: Participating Teacher Candidates

<table>
<thead>
<tr>
<th>Pseudonym</th>
<th>TE</th>
<th>Gender</th>
<th>Experience</th>
<th>Ethnicity</th>
<th>Course</th>
<th>Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alice*^</td>
<td>AS</td>
<td>F</td>
<td>Recent College Graduate</td>
<td>White</td>
<td>11th Grade US History</td>
<td>Public</td>
</tr>
<tr>
<td>Abigail*</td>
<td>AS</td>
<td>F</td>
<td>Recent College Graduate</td>
<td>Asian American</td>
<td>9th Grade World History</td>
<td>Public Magnet</td>
</tr>
<tr>
<td>Andi^</td>
<td>AS</td>
<td>F</td>
<td>Recent College Graduate</td>
<td>Asian American</td>
<td>9-12th Grade US History</td>
<td>Public Sheltered ELL</td>
</tr>
<tr>
<td>Albert</td>
<td>AS</td>
<td>M</td>
<td>Over 10 years of business experience</td>
<td>Black</td>
<td>10th Grade African American History</td>
<td>Public Magnet</td>
</tr>
<tr>
<td></td>
<td>LAST</td>
<td>TEMP</td>
<td>OCCUP</td>
<td>ETHN</td>
<td>GRADE</td>
<td>SCHOOLS</td>
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<tr>
<td>------</td>
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<td>------</td>
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<td>------</td>
<td>-------</td>
<td>---------</td>
</tr>
<tr>
<td>Becca*^</td>
<td>BS</td>
<td>F</td>
<td>Recent College Graduate</td>
<td>White</td>
<td>9th Grade World History</td>
<td>CMO</td>
</tr>
<tr>
<td>Bernie</td>
<td>BS</td>
<td>M</td>
<td>ABD Ph.D. in Political Science</td>
<td>White</td>
<td>11th Grade US History</td>
<td>CMO with co-teacher</td>
</tr>
<tr>
<td>Ben^</td>
<td>BS</td>
<td>M</td>
<td>7 years of community and youth mentorship work</td>
<td>Black</td>
<td>9th Grade World History</td>
<td>Public Self-Contained Special Education</td>
</tr>
<tr>
<td>Byron</td>
<td>BS</td>
<td>M</td>
<td>10 years of work in schools, including as a curriculum consultant</td>
<td>Black</td>
<td>10th Grade World History World History</td>
<td>Independent Charter</td>
</tr>
</tbody>
</table>

*Nominate for participation by TE  
^Included in final paper

Data Sources

I observed and filmed four sessions of each course. This paper focused analysis on the three sessions each TE devoted to facilitating discussions during the first semester of their course. I observed all three of BS’ discussion classes, but could only attend the first two for AS. Additionally, each TE participated in three semi-scripted interviews about their pedagogical decision-making and completed video stimulated reflection tasks using footage of their instruction (Lyle, 2003).

To understand how methods courses were reflected in both TCs thinking and teaching, I conducted one semi-structured interview with each TC and requested three videos of them facilitating classroom discussions in their teaching placements. This request built on assignments from their methods courses, as both TEs required TCs to
submit a video of an in-class discussion. In AS’ class TCs also wrote memos reflecting on their videos, which I collected. TC interviews focused on their learning in their methods course, and included a think-aloud task reviewing a video of themselves leading a discussion (Ericsson & Simon, 1993). During that think-aloud, TCs were asked to describe what they noticed watching themselves teach, their instructional aims, what they saw themselves doing successfully, and what they might change.

Data Analysis

Tracing PCK for social studies discussion across three data sources (observations of methods courses, interviews, and videos of instruction) required multiple codebooks, each of which is detailed below. These codebooks are conceptually linked by their use of the Science Discourse Instrument (SDI) to describe the discursive structures of classroom discourse (Fishman et al., 2017; Osbourne et al., 2019), and Saye’s (2017) distinction between DI and DCI for social studies to describe the content of classroom discourse. Coding was an iterative inductive process that moved from methods course observations to videos of teaching to interviews with TCs before recursively returning to each source to triangulate and refine codes (Miles, Huberman, & Saldana, 2014).

Methods Course Observations Coding. I coded the videos of methods courses to indentify TEs’ enacted PCK (teacher educators’ PCK) and the information about teaching (teachers’ PCK) and learning (students’ CK) they sought to convey. To describe the process of TEs’ enacted PCK, I divided observations into episodes based on the activity structure employed (TE lecture, whole group discussion, small group discussion, and TC independent work) (see Stodolsky, 1998) and whether TEs or TCs were doing most of the cognitive work. Each episode lasted at least three minutes and continued until
there was a structural shift. For example, when AS began class by giving her students an overview of the session, a reminder of their upcoming assignment, and feedback about their homework, it was coded as a single continuous episode of TE lecture despite the changes in topic. The next episode, whole group discussion, began when AS asked a question that generated more than three minutes of continued conversation between TCs and AS. Any instance of TCs acting primarily as listeners were coded as TE lecture, including watching a video or live model.

To understand how TEs structured each episode, I coded for the resources depicting practice within each segment (e.g., case studies, video of teaching, transcripts of classes, etc.). Activity segments where TCs had access to resources that showed TCs’ enacted teaching behavior, or representations of teaching (Grossman et al., 2009), were coded as *episodes of practice*. Times when TCs discussed an instructional technique without a demonstration, described a comment made by a student in their field placement, or read criteria for a successful lesson plan were occasions where TCs might be said to be learning *about* practice, but not *through* practice. They were not coded as episodes of practice.

To describe the content of TEs’ enacted PCK, what TCs were being asked to learn about social studies discussion, I built a codebook combining SDI and the distinction between DI and DCI for social studies (Table 3.2). The SDI is a validated observation tool for six discursive moves, three from teachers (Ask, Press, and Link) and three from students (Explain, Co-construct, and Critique). I selected SDI despite its scientific orientation because no comparable tool for assessing wide-ranging disciplinary discussion exists for social studies classrooms (exceptions like Huijgen at al.’s, 2017).
observation protocol limit their scope to specific historical heuristics rather than the entire practice of discussion). Further, SDI is functionally content neutral as only rates the forms of discourse, not their content. This design choice, a concession to the variety in scientific discourse, enables SDI to be transferred to history because historical argumentation also relies on explicit claim-evidence relationships. In the methods courses, I coded for instances of the analysis of the discursive moves, rather than their enactment. For example, when TEs spoke about the importance of asking open questions, the transcript was coded “ask” even if the TE did not actually ask TCs to engage in a historical debate. The exception to this rule was the in-class model where TEs and TCs were role-playing participants in a classroom discussion of history. Given that participants’ engagement in these activities was explicitly meta-cognitive, that they were prompted to consider their comments both as contributions to the class discourse and as models of discourse, I applied the SDI to comments within in-class model discussions such that a rehearsing TCs would have their comment coded as “explain” and “critique” if they made an evidence-based claim contradicting a peer. Coding operated at the level of the utterance and differentiated between TEs’ and TCs’ contributions.

To supplement SDI’s content agnosticism, I created an additional codebook for social studies education reflecting Saye’s (2017) Disciplined Inquiry (DI) and Disciplined Civic Inquiry (DCI) (Table 3.2). DI coding focused on the heuristics that have been the heart of historical thinking research in the United States, sourcing, corroboration, and contextualization (Wineburg, 1991) and noted broader references to the reliability of texts and the epistemological problem-space created by the limitations of the historical record (Reisman, 2015). The DCI codes captured references to contemporary relevance,
connections between historical content and teachers’ or students’ personal identities, informed civic action, and inquiry that was not explicitly grounded in historical sources (Cuenca, 2021; Powell, 2018).

Table 3.2: Codebook for Methods, TC Videos, and Interviews

<table>
<thead>
<tr>
<th>Code</th>
<th>Definition</th>
<th>Example</th>
</tr>
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| SDI: Teacher Ask      | TE or TC discusses or enacts open-ended questions and eliciting diverse student responses. | Methods: “These questions need to be interesting or provocative, but also plan for students to take multiple sides, or points of view. And the evidence…that go into it have evidence that can be used to prove both.”  
TC Video: “Did the North or South fire first at Fort Sumter?”  
TC Interview: “One of the things that we worked on…is how to take a lesson and make it debatable so kids are gathering facts and then thinking about them on their own.” |
| SDI: Teacher Link     | TE or TC discusses or enacts moves connecting students’ ideas.               | Methods: “Students thinking with others, this is your goal, right? It is not that you have a conversation with students, but the students are working with each other, which means you want to work on linking contributions.”  
TC Video: “It’s complicated. Does that contradict what [student] just said?”  
TC Interview: “I’m trying to ask leading enough questions that are getting them to think of how their ideas are connected.” |
| SDI: Teacher Press    | TE or TC discusses or enacts moves pressing students to support their claims with | Methods: “Probing, [TC] gave us an example of that, asking students to explain their thinking by pressing them” |
| SDI: Student Explain | TE or TC discusses students’ claims and evidence, or a student makes such a claim in class. | Methods: “For example…’I think the government started the Battle of Little Bighorn and…I'm using document B to support my claim.’…Another [facilitation move to prompt that kind of answer] is textual press. Where do you see that in the document? What's your evidence? … What's important here is that when you have a whole bunch of kids talking about stuff that's not in the text, you mark the text. You say, okay, but let's zero in on this line.”

TC Video: “I said the Qin and Han dynasties are very similar because Documents 1 and 3 showed they both used bureaucracy.”

TC Interview: “[I tell students] this idea of as long as your thinking is rigorous and backed up by evidence, it doesn't matter what the conclusion is.”

SDI: Student Co-construct | TE or TC discusses students’ connections to one another’s ideas, or a student makes such a connection in class. | Methods: “See if you could have sustained six kids talk and build off each other before you say anything.”

TC Video: “I agree with [Student] and want to add on that it wasn’t only trade.”

TC Interview: “One of the big things
we talked about a lot is if a kid doesn't find that part [that the teacher highlighted] important, but they find something else important, and they have the evidence to back it up, then that's great...Did the kids talk about everything I would have wanted them to talk about? No, of course not but they're still having a good discussion and they're pushing each other's thinking. And they're challenging each other. And they're using the documents to do it in a way that doesn't even require my input.”

| SDI: Student Critique | TE or TC discusses students’ critiques of the contributions of other students or the teacher, or a student makes such a disagreement in class. | Methods: “So orienting students to each other, it's like who agrees who disagrees? There's something very surface level about it, but actually to do it well you want to pin it on those points that are juiciest, right on those points that have the most disagreement.”

TC Video: “[Student] said they were similar because of the bureaucracies, but if you look at document 2 it says that they used different philosophies...they're not that similar.”

TC Interview: “[Controversy] pushes students to think harder because they have to defend their argument...when you've been given the sources and the purpose of using these sources is to be able to make your argument stronger, you have to think more critically about each source.”

| DI: Historical Thinking | TE or TC reflects upon sourcing, corroboration, contextualization, or close reading, or makes meta-commentary about historical processes. | Methods: “[When you're] modeling disciplinary thinking, [you are] bringing it back to the core discussion, modeling using text and analyzing it, modeling contextualization...in the course of discussion.

TC Video: “Let's look at the source for that real quick. Can you speak to
<table>
<thead>
<tr>
<th>DCI: Civic Inquiry</th>
<th>TE or TC reflects upon a connection to the present, civics, or student communities and identities, or makes meta-commentary about social participation.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methods: “This is an important skill, regardless of whether you’re in this class. This is the kind of thing I want you to do when you go online, or you click on something and you’re like, ‘Oh, my gosh, this thing happened.’ Do you trust that source? Who’s writing it? So this is something I want you to do throughout your life, not just because I’m asking you to do it today.”</td>
<td></td>
</tr>
<tr>
<td>TC Video: “[South Africa during apartheid] is like us, like the white people…want to have everything and they want the other people to have nothing…Donald Trump has the same entitlement.”</td>
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<tr>
<td>TC Interview: “[I aim] to foster those skills of critical thinking that obviously go beyond that discipline. Because…I don’t need a country full of adults that can list off facts about the war of 1812. What we want is when we graduate these kids and send them off into the world is to say you are a critical thinker. And you do not take things for face value. And, you know, to question and challenge the status quo.”</td>
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</tbody>
</table>

**Instructional Video Coding.** I coded videos of TCs’ classroom instruction using SDI and the DI/DCI codebook. SDI scores the frequency and sophistication of each of
the six discursive moves on a rubric from 1 to 4, with 1 representing a move being absent, 2 indicating emergent and inconsistent use of the move, and 3 and 4 signaling consistent proficient use. I applied this coding scheme to all provided videos, even those that did not meet the formal requirements for SDI coding, which requires videos to run at least 15 minutes and feature extended student-to-student talk. As the analytical focus of this study was TCs’ uptake of their methods instruction, I focused the DI/DCI coding on TCs’ utterances, carrying forward the category distinctions created for coding methods courses and noting when they either directly prompted or modeled contributions expressing disciplinary conceptions of history or social studies. Unlike the SDI, DI/DCI coding worked on a binary, simply noting the presence or absence of inquiry concepts in TCs’ comments throughout the discussion.

**Interview Coding.** Interview coding carried forward the codebooks from the videos and methods courses. Coding again at the utterance level, I drew codes from the 6 SDI categories to note which elements of discourse TCs attended to. DI and DCI codes were also applied at the utterance level as TCs described what they learned in their methods course, their personal professional vision, and their teaching. Their comments about their video were coded when they elaborated on a move in the discussion, regardless of whether it was framed positively or negatively. For example, if a TC said, “I should have asked a sourcing question there.” It would be coded as both “ask,” for the suggestion to open discourse via questioning, and “DI,” for the reference to sourcing texts, despite the fact that TC was noting the absence of a DI ask in the video.

**Findings**
In their methods courses, AS and BS demonstrated similar teachers’ PCK, positioning text-based student-centered classroom discussion as a critical instructional activity for encouraging deep historical learning in students. Their enacted teacher educators’ PCK, however, represented the foundation of the discipline differently. AS’ enacted PCK framed history in terms of Disciplined Inquiry (DI), centering on the epistemological uncertainty of investigating the past, while BS took a Disciplined Civic Inquiry (DCI) tack, which represented history as a process of ongoing argumentation without highlighting a foundational skepticism. TCs’ thinking and teaching appeared to reflect their TEs’ enacted PCK, although TCs whose incoming PCK was aligned with their TEs seemed to grow more.

**TEs’ Teachers’ PCK**

When AS and BS described the discussions they hoped their TCs would lead, their teachers’ PCK, they both insisted that text-based student-centered discourse was essential to students’ apprehension of history. AS said, “[My] goal is to help my teacher candidates get really good at understanding how to design instructional activities where students construct knowledge…how to design a compelling question that points students to evidence, how to get students to reason about that evidence in meaningful ways, and how to get them to come up with arguments that have evidentiary warrants.” In BS’s words, her aim was that TCs understand “discourse as a way of engaging in the disciplinary thinking of history…not discourse as like…‘Oh, it's nice to have a discussion at the end if we have time,’ but actually, the active exchange of ideas, the dialectic… is necessary…for [an] epistemological understanding of history as a discipline where knowledge is constructed, therefore all of it is biased.” These shared teacher PCKs, however, were necessarily routed through AS and BS’ teacher educators’ PCK.
**TEs’ Teacher Educators’ PCK: Teaching teachers about discussion**

AS and BS structured their courses similarly, each devoting 3 of their 14 course sessions the first semester to the pedagogy of historical discussions (Figure 3.2). Each TE planned those sessions as an arc, moving from the conceptual to the practical, and drew on some of the same pedagogical tools, including videos of classroom discussions, model discussions where the TCs roleplayed students, and assignments requiring TCs to film themselves facilitating a discussion in their teaching placement. As they taught the individual class sessions, however, differences in enacted teacher educators’ PCK emerged. AS’ course featured more enactment and a focus on DI while BS devoted more time to TC reflection and DCI.

**Figure 3.2: Methods Course Instructional Sequences**

**AS’ Methods Course (L)**
- Prior to Day 1: TE Model of Reading Like a Historian Historical discussion
- Day 1: Classroom Video, Group Model
- Day 2: Rehearsals
- Day 3: Rehearsals, Assignment: Facilitate discussion in teaching placement

**BS’s Methods Course (R)**
- Prior to Day 1: Inquiry project, Visit to historical archives, TE Model discussion
- Day 1: TE Model, Group work: What is the connection between discourse and thinking?
- Day 2: Group work: What are the criteria of successful discussions?
- Day 3: Classroom Video, Assignment to facilitate discussion in teaching placement, Class sessions on small group work and historiography

**AS’ Enacted PCK.** From the very start of the semester, AS’ instruction linked a DI conception of history to discourse. On the first day of class, AS facilitated a model
discussion hinging on the historical thinking skill of sourcing. Throughout the course, she spiraled historical thinking concepts like sourcing, contextualization, and corroboration and explicitly positioned the three days dedicated to facilitating discussion, Weeks 11-13 of the semester, as the culmination of work they had already done on questioning, direct instruction, and disciplinary literacy.

During the three weeks dedicated to discussion, AS consistently utilized episodes of practice. In the two sessions I observed, 73% of the time (175 minutes) was spent analyzing representations of discussion. In Week 11, AS had TCs watch a video of a teacher leading a discussion, read a transcript of that discussion, and participate in a model discussion led by AS, all episodes of whole group practice. Introducing the video, AS told TCs, “Listen first to the level of historical thinking that the kids are engaged in. Are they sourcing? Are they contextualizing? For now, just pay attention to that…[Later] we will read the transcript and listen to what she's doing to facilitate.” After the class spent 10-minutes listing the historical thinking skills they noticed, AS pivoted into a mini-lecture on facilitation moves and an activity annotating transcripts of the video for teachers’ discursive moves. In this way, AS led TCs along a path starting with attending to DI historical thinking and moving towards the instructional actions used to that supported that form of thinking. This section of class lasted 55 minutes, after which AS led a discussion where she modeled the union of pedagogy and thinking, highlighting how her questioning led the class to debate whether they found the sources reliable and their peers’ inferences plausible.

In weeks 12 and 13, TCs rehearsed. One by one, TCs took turns leading discussions with their peers roleplaying students while AS offered commentary and
coaching. The nearly four hours dedicated to rehearsals allowed almost all TCs a chance to lead a roughly 15-minute discussion. AS used these rehearsals to push DI historical thinking. In one rehearsal, Antonia, a TC, was leading a discussion of a carving commissioned by the Indian emperor Ashoka when Albert, another TC, gave an unexpectedly thorough and wide-ranging analysis. AS paused, explained how Albert’s answer appeared to foil Antonia’s plan for the discussion, and asked the class:

AS: How can we help [Antonia]? Where is the historical tension in this document?

Andrew: The first historical tension I see is…that this [text] is from the mouth of the king himself, right? Like, of course, he’s going to say that [his kingdom is] great.

AS: Beautiful…So, Albert demolished this, ‘Oh they used to be warlike and now it's peaceful boom, got it.’ Andrew is saying, ‘Not so fast. Is this a reliable account?’…Let's pick up from Albert’s comment and Antonia I want you to pose that question about reliability to the class.

In this pause, AS positioned questions as the driver of students’ historical thinking.

Seeing Antonia struggle, she asked the class to reorient Antonia towards the disciplinary content and framed the historical tension as an entry point for reengaging students. At the end of the rehearsal, AS directed TCs to analyze, “How did [Antonia] model that kind of [historical] thinking in her facilitation?” This sequence was typical of AS’ rehearsals in that it focused on discursive moves guiding students to tangle with the reliability of sources. Although she was more directive with TCs who seemed to be floundering and more exploratory with TCs who appeared to be on the right path, AS’ enacted PCK consistently asserted the centrality of historical thinking to historical discussion and the need for directive facilitation.
AS was explicit about her DI vision of the aims of discourse, repeatedly differentiating the kind of discussion she understood as “historical” from other kinds of classroom talk. AS said:

At the core of the kind of discussions I want all of you to have is the following question: How do we know what we know?…You've got to engage [students] in this interpretive work. I don't want them to pick up a document, like “It says here. So therefore, that's what I believe.”…What if this is written by fascist propaganda machine, and they just read the document like, “It says it there, so I believe it?”

When a TC suggested facilitating a discussion about the morality of Truman’s decision to drop the atomic bomb on Hiroshima, AS interjected, “That’s a valuable discussion…[But] that is not a historical discussion of this text, where [students] are being invited to interpret the claims that this text is making.” AS objected to the Hiroshima discussion because she saw it straying from DI towards DCI. Her conviction that historical analysis ought to precede ethical evaluation and that students would not engage in historical analysis spontaneously was at the core of her argument that teachers needed to actively facilitate discourse:

You’re facilitating discussion because…if you can break out of that IRE sequence, kids are engaged in more thinking… There is a very critical role for you to play…This isn't a model where the teacher goes out and the kids are just self-running the discussion…If kids haven’t had experience with discussion…and you suddenly are like, “Cool, sit in a circle and lead the discussion,” it might be a beautiful discussion, but it won't be about the texts and it won't necessarily be grounded in the history.

The point was not to simply engender more thinking, but certain kinds of thinking.

BS’s Enacted PCK. Unlike AS’ commitment to center classroom discussion on disciplined inquiry of history, BS’ enacted teacher educators’ PCK suggested a greater emphasis on discourse for disciplinary citizenship inquiry (DCI). Like AS, BS introduced her novices to the pedagogy of discussion and the discipline of history prior to the
sessions dedicated to facilitating classroom discourse. Unlike AS, however BS separated the pedagogy from the disciplinary content knowledge. Early in the semester, BS modeled a whole-class discussion using a paired set of readings about classroom management. This discussion prompted reflection on social learning and text-based discourse, but the texts were not treated as historical artifacts and TCs engaged in the discourse as teachers thinking about classrooms, not historians. On a separate day, novices learned about historical inquiry by visiting a museum’s historical archives. This trip did not include instruction on discussion facilitation. After her classes on facilitating discussion, examined below, BS returned to teaching about history with two classes on historiography. Her enacted PCK did not obscure or minimize DI, but did address it separately from the specific pedagogy of classroom discussion. Her demonstrations of DI focused on archives and research. Her instruction on facilitating classroom discourse focused on students’ engagement, thinking, and inquiry.

BS’s three sessions on facilitating discussions devoted one class each to the concepts of understanding, preparing, and enacting discussions. Across those classes, BS’ was half as likely to initiate episodes of practice as AS (34% of BS’ class was spent in episodes of practice, as opposed to 68% of AS’). In the first session, she modeled a discussion in much the same manner as AS and asked novices to debrief in small groups, being metacognitive about their experience as learners in the discussion and creating a poster outlining how they saw “discourse as a critical way to engage in the disciplinary thinking of history.” Although she referred to “disciplinary thinking,” BS did not offer an explicit definition of the term. TCs’ posters celebrated the way that discourse “furthers the question and allows [students] to think further.” One group used an extended analogy
to a tree where “the trunk of it is discourse…The branches are the challenging of ideas…and the fruits are knowledge.” At the end of class, BS said, “[Discussion] is one of the closest ways to approximate the give and take that's necessary in doing that discipline. And this goes back to how you define history. It’s not static. And it necessarily needs that exchange.” The TCs’ posters and BS’ summary focused on creating knowledge through discussion, but did not center inquiry on the methods of historians. There was scant reference to evidence, reliability, or corroboration. In an interview, BS reflected, “I think some of them came away with a sense of ‘why discourse’ but not everybody had a clear sense of ‘why discourse as a way of disciplinary thinking in history.’” By her own account, her enacted PCK led did not lead TCs towards DI.

In her second session, BS did not return to the discipline of history, focusing instead on planning for discussions. She curated a packet of readings about discussion and asked novices to whittle down the many recommendations to a list of criteria for successful facilitation. By the end of the session, the class had reached consensus around a list of four criteria: “One…very thorough prep-work to make sure the kids understand [the content]. Two…clear ground rules for the discussion. Three…the teacher as facilitator…reflecting what you said and then steering the conversation in the direction that it needs to go…[Four] A chance to reflect on the learning and the process.” Three of those four actions occur outside, before or after, the frame of discussion. Elaborating on the act of facilitation, BS said:

Deceptively passive. I think that's key…[facilitating] looks hands off, but so much intentional thoughtful work has to happen before. So, it’s not that you…are just like, ‘Hey, kids, let's talk about Thomas Jefferson,’ and all of a sudden, they say these brilliant things…Even though it looks like you're doing nothing, you’ve actually done so much to ensure that that conversation goes the way it does.
During discourse teachers might amplify student ideas or offer some guidance, but, for BS, the essential pedagogy of discussion is the hard work that occurs *before* the students start talking. During the discussion, students’ ideas and discourse take center stage. Their ownership of their own thinking, rather than their use of historians’ technique, was the marker of success, as BS underscored in response to a TCs’ comment. The TC said, “I just think it's really key that we build an effective, authentic environment for discourse to occur so that when our students leave and enter democracy as global citizens, they can recreate that environment in the situations that they encounter, so they understand what is necessary for discourse to be effective.” BS said, “That's really powerful. If they know how to engage in the classroom that like, maybe there's a chance for them in the real world.” The link between the classroom discussion, inquiry and citizenship is emblematic of a DCI perspective.

Unlike AS, BS did not ask TCs to practice enacting the lessons. Instead, BS allocated class time for TCs to plan collaboratively in the final session on discussion, saying, “I talk all the time about discourse and collaboration…I believe that [is essential] for us all as learners and for your students.” BS’s message to her TCs and the structure of her course prioritized giving learners space to collaborate. In decentering the teacher, BS also decentered the content to a degree. Discussion was about the exchange of ideas, not a process of reaching or honing predetermined disciplinary concepts. Her enacted PCK was broader and less based in specific cognitive and literary tasks than AS. AS named the DI historical reading heuristics sourcing, corroboration, contextualization, and close reading 48 times and her TCs mentioned those same concepts 40 times in two classes.
BS, however, referred to these DI concepts only 4 times and her TCs made 27 comments using DI terminology in three classes. Of course, TEs’ enacted PCK is not synonymous with TCs’ learning. The next two sections of this paper offer comparative case studies of TCs in AS and BS’ classes that explore how the TEs’ PCK made its way into TCs’ thinking and instruction.

**Comparative Case Study 1: Aligned PCK**

Alice and Becca entered their methods class eager to get students talking about history. White women in their early 20s who had recently graduated college, Alice and Becca were primed to learn from AS and BS, respectively. Alice said she spent much of college in history classes studying “very niche stuff…I love school, like, a lot. But then I was obviously faced with graduating and being like cool, you know about the relationship between Jose Martinez’s poetry and the Cuban Revolution, like what the fuck are you going to do with that?” She eventually came to picture herself “at a school where I could wear jeans and a t-shirt to class but have some dope conversation about like, should we fly a Confederate flag or not. I really saw everything being very discussion-based and we’d get into these texts.” Similarly, Becca studied history because “It’s interesting. I think it’s okay to like something because it’s interesting,” and wanted to teach history because “history is useful for just contextualizing why things are the way they are. It’s useful to be a person in the world who understands why the world is the way it is.” She imagined a classroom where “you can have kids do simulations, you can have kids do their own research, you can have kids talk to each other, you can have kids read, you can lecture…All of these different ways to teach the same content.” Alice and Becca’s
enthusiasm for history, discussion, and students suggested that, from the outset, their teachers’ PCK was well-aligned with their methods instructors’.

In interviews at the end of their methods course, Alice and Becca were clear that they had internalized their instructors’ enacted PCK about classroom discussion, including the difference between AS’ emphasis on DI and BS’ on DCI. Alice described AS’ course by saying, “[AS] wants to teach disciplinary literacy. That is her thing…her aims are literally like, we're doing historical thinking, we are doing it with no exceptions, we are holding our students to high expectations.” And she was confident that AS’ emphasis on active facilitation and DI had influenced her own teaching saying, “things that I’ve learned 100% are contextualization and sourcing,” and “I can crush a document-based lesson…I can do a discussion with one text and I can do discussion with two texts…I like my teacher moves and I like knowing that things that I was doing anyways were working. Like, ‘Oh, when I say this, I’m actually orienting students to the text or orienting students to each other and solidifying content.’” To Alice, AS’ enacted PCK supplemented her incoming vision for teaching, what she “was doing anyways.” At the end of her methods course, Alice appeared to recognize and share AS’ PCK for DI discussions of text.

In her interview, Becca explained how BS’ class had helped her develop a PCK centered on DCI. Becca summarized BS’ course by saying, “The theme that is repeated across her course is getting students to learn how to talk to each other…Definitely a goal of hers is to teach us how to teach students to communicate with one another. And then I think another goal is evaluating what the goal is of a history class specifically is: …What are students supposed to learn by learning history, no matter what the content is?” Becca
recognized that BS valued discussion and the discipline of history, but saw the pedagogy and the content knowledge as two distinct goals: discussion and history, but not necessarily historical discussion. At the end of the course, Becca explained her understanding that her goal for teaching history:

[Is] to have students build their understanding of the past, to be able to use that understanding of the past to understand the present, and also to just more generally think critically. I think I would still be satisfied even if my students don't learn anything about the past and even if they don't understand the present any better, if they are now able to think about a question from multiple angles and be able to articulate what they believe.

This statement moves further towards DCI than BS did in class. Becca explicitly positioned history as a means for acting in the present, subordinating the discipline to its civic utility to the point of questioning whether students needed to learn about past or present. In a similar statement, Becca said she had student work with texts because “using these sources [makes] your argument stronger. You have to think more critically about each source, as opposed to like, ‘I know that my teacher has a correct answer, and I'm trying to figure out what the correct answer is.’” Becca recognized that textual analysis is rigorous in ways that will empower students’ argumentation, but disconnected it from the tasks of understanding the past or investigating reliability. Reflecting on BS’ attempt to deepen the DI vision of history, Becca said, “[The historiography classes were] interesting. I was a history major, and my capstone was a historiography project. But I don’t know if it was helpful to teaching…If I gave my students 100 years worth of sources on one topic…they would conflate the perspective of what others thought about the topic with what actually happened…I don't think that ninth grade is the time to make
that happen.” Becca understood the DI perspective, but did not integrate it into her PCK for classroom discussion.

In their discussion videos, Alice and Becca implemented what they had learned in their methods class. Alice shared one video, which focused on the central question, “Why was Chinese immigration restricted in 1882?” Becca shared two videos that featured whole class discussions of the questions “Did trade cause religion or did religion cause trade along the Silk Road?” and “How similar were the Qin and Han dynasties?” Both TCs were proficient in all three of SDI’s teacher moves and their students offered evidenced-based elaborated explanations (Figure 3.3). Both TCs’ students showed emergent ability to critique one another’s ideas, infrequently attempting to do so. The primary differentiator between Alice and Becca, according to SDI, was that Becca linked students’ comments more often and her students were more likely to co-construct ideas.

*Figure 3.3: Average SDI Scores for Alice (1 video) and Becca (2 videos)*

While both TCs demonstrated similar pedagogical skillsets, they deployed them towards different disciplinary ends. Alice used her discussion to prompt students to
question the reliability of the texts she provided, modeling sourcing to prime students for the task. When her students seemed accept a flier’s claim that Chinese immigrants were taking American jobs without considering that the flier was written by white labor union members, Alice asked drew attention to the flier’s description of immigrants as “animal-like.” Some students were quick to pick up the racism of the phrase, leading to a back and forth about whether the document was of any use. Even though she brought her students into that DI historical problem space, when she reflected on the discussion in a memo for class, Alice was critical of the extent to which she prompted students to explore sourcing:

I failed to introduce the “can we trust this?” narrative to this document before we discussed it, because I was not focused on the actual content of the document when I was sourcing, but more so on what type of document it was, and what that can tell us about the sentiments of some people at the time…Although in the moment, I saw [students’ quoting the flier] as a good use of text-based evidence to explain an economic line of reasoning…I really should have pressed students to be critical of the fact that we don’t actually know if this was true.

Alice’s facilitation and reflection embodied an developing, if not entirely mastered, body of DI PCK aligned with AS. She actively prompted students to articulate skepticism of the text in dialogue with one another and evaluated the success of the discussion based on the extent to which students articulated the underlying epistemic challenge.

Becca’s discussions were characterized by open inquiry and argumentation that did not question the reliability of texts. In one, after 15 minutes comparing texts about Buddhist and Christian influences on the Silk Road, two students disagreed about whether religion drove an increase in trade or vice versa. A third student synthesized the discussion and the documents:

I agree with what they both said. I think [the two documents] both show examples of how religion really can have an impact on trade because in the first one you see that it says that Buddhist values…helped to increase the trade between India and
China, that’s just one example of how Buddhism’s religion helped increase and stabilize the trade system…Whilst on the other side, they showed the opposite where Christianity was decreasing and destabilizing it…In the perspective of a person at this time, religion is such an important thing as opposed to how society is today. So, it just goes to show that religion has an overall umbrella impact on how life was during that time like how trade.

His reading was sophisticated. He situated his comment in relationship to his peers’, deftly summarized two texts, and generalized to make a grounded claim about the historical period. This was historical inquiry, and his elaborated reasoning outstripped any individual comment made in Alice’s video. But his comment, and those of his peers, did not demonstrate any skepticism of the texts’ claims. In her reflection, Becca focused on the extent to which the discourse drew out students’ reasoning. Reviewing her video, she was happy that, “I really don't give kids any answers. My strategy is always questions, or coming back to the text to get kids to do the thinking themselves,” but was frustrated to see “What you see me doing here is leading the conversation as though the kids are sitting in rows, and I'm just calling on people. And so, the kids are not actually talking to each other, and they don’t really debate each other, because I interrupt them after every comment.” Her criterion for her own success was creating student-to-student discourse. Imagining the class she hoped to lead in the future, Becca saw “kids engaging in an intellectual conversation about history…engaging with each other. And I would want to see my role as making kids think harder and better. Not telling them what to think and not interfering in their thinking, but having set up a lesson that was strong enough so that kids felt empowered to speak on the subject and form their own ideas about it.” Becca’s PCK mirrored BS’ image of “deceptively passive” facilitation. She hoped to increase students’ opportunity for argumentation, but did not articulate a desire to
increase their use of historical methods. By prioritizing student inquiry over historical thinking, Becca’s expressed PCK leans towards the DCI concepts of BS’ enacted PCK.

**Case Study 2: Unaligned PCK**

Andi, an Asian American woman who had recently graduated college and Ben, a Black man who spent seven years doing community work post-graduation, decided to become teachers because they wanted to work with children. Engaging with history was a secondary concern. Andi described her history classes in high school and college, saying, “I remember teachers going up to the board, teaching lecture-style…And then they would give us a worksheet to do and it would be pretty easy. It was just like more content based…who was the president at this time? Blah blah blah.” Although she had some positive experiences with American studies courses occasionally “using historical cases to understand our world now” in college, when she decided to teach, “I didn't really think much about like history...I just really wanted to work with youth. That was the ultimate motivator.” Ben also saw the classroom as a way to reach kids, rather than to help kids reach history. He said, “I wanted to teach because I always wanted to work with the youth…I’ve done things in the community. I’ve even worked in correctional facilities that had youth detained…A time came when I was like, man, what’s the best way to possibly get in front of youth in a large group setting?…Education. So why not become a schoolteacher?” Ben ultimately took a job at his high school alma mater, partially because some of his mentors, like his principal and football coach, still worked at the school. Describing his work, he said:

I have the advisory class. That class is the ideal class. Because that's a class where we really sit down, and we go over socio-emotional things and it’s really a class about life. Guiding the youth in life, teaching them...things that they could
actually apply to their life…not historical facts that they might just forget as soon as they finish taking the test.

Ben was almost entirely oriented towards preparing students for social participation, to the point that history almost appeared as an afterthought. He made no reference to his own history education in our interview. Ben and Andi’s initial PCK sidelined social studies to the point that they seemed aligned with neither DI nor DCI.

Further complicating the picture, both TCs were placed in non-mainstreamed classrooms. Ben taught in a self-contained IEP classroom and was pursuing certification in special education as well as social studies. Andi taught in a sheltered ELL classroom, but had not requested that setting and was not pursuing ELL licensure. Both described their students as struggling with historical texts. Andi said, “My students are ESOL students. They have a hard time reading…and answering questions that have to do with contextualization and drawing conclusions.” Ben said, “A lot of my students have difficulty retaining information. A lot of them have difficulty writing their thoughts out on a paper or writing an effective thesis statement.” From their motivation for teaching to their content knowledge to their perception of their students, Andi and Ben were less aligned with their methods instructors than Alice and Becca were.

Perhaps because of the differences in their initial PCK, Andi and Ben understood their methods courses differently than Alice and Becca. Andi described the course as focusing on “developing historical thinking skills, not just for studying history, but so that it can be applied to many different disciplines as well, but also in students’ daily lives as well. For example, when they're looking at an advertisement and stuff and being able to discern like, ‘Oh, where's this coming from? Can I trust this source?’” Andi’s
description includes the central DI concept of questioning a source’s reliability, but
justifies its importance by referring to the capacity to transfer this kind of thinking to
other disciplines and students’ lived experiences, description more closely matching DCI
than DI. Ben said that BS taught his cohort,

How to be an effective historian…Once you could grasp that concept, you can
actually dig in and dive into history…being able to argue against certain points or
certain facts…And she wants us to impart that onto our students as well too. So
they could really feel like “Man, I’m not just in here taking a history class just so I
can get out of high school, but I'm actually taking a history class that I'm engaged
in.”

Ben talked about history in terms of argumentation and interest. His description of “an
effective historian” as engaging in inquiry sat between DI and DCI and lacked definitive
elaboration.

Andi and Ben both ended their methods course excited about their new
perspectives on history, but unsure of their ability to facilitate discussions. Andi reported,
“What I've really taken away most from [AS’] class is the practice of modeling [historical
thinking] to students. I think, especially in an ESOL class…the students need modeling.
They need to be able to see thinking out loud…for them to be able to make those
connections.” Reflecting on her challenges, however, Andi said, “The biggest thing for
me [to improve] is discussion. Because, I don't know why, but my students just don't like
talking at all. They get really silent and stuff and it gets really awkward.” When
discussion was difficult, Andi was willing to sacrifice the pedagogy of discussion to
ensure that her students accessed historical content, a significant revision of AS’ PCK.

Ben, in turn, transformed BS’ PCK. He spoke at length about his enthusiasm for the days
in methods class where he engaged in historical inquiry, particularly their visit to a historical archive. Summarizing his experience, he said:

I wish that was something that we could do…giving [students] that experience. I think that will make history a lot more exciting for them as opposed to just sitting in a classroom watching videos every day and just hearing us talk and them talking to each other. You know, giving them that chance to engage in being a historian and looking at actual history, things like not even presented to the public…get that ability to dive into history and dive into certain facts and do their own research.

Unlike BS’ insistence that discourse was part of the discipline of history, Ben separated students “talking to each other” from “being a historian.” Ben explained that he was approaching the goal of getting students to dive into history when his curriculum reached “things that they were actually interested in. For instance…What I did for the World War I session was allow them to select some videos that explained how Hitler really came up from World War I through World War II even…how he got his mustache…the kids were going crazy off of that.” When it came time for Ben to distill his firsthand encounter with history into pedagogy, he focused on the emotional experience of finding history interesting, rather than any particular instructional technique or disciplinary process.

Seeking compelling trivia ultimately recapitulated the pedagogy of “watching videos…and hearing us talk” he had initially wanted to avoid. Ben gained DI content knowledge, but did not integrate it into his PCK for discussion. While he was pleased with his progress in making history more engaging, he noted, “The only thing that I had a struggle on so far was the Socratic seminar. Although we were able to get through it, it is something that I had to do about two or three times in order to get it right.” Both Ben and Andi struggled to form PCK that integrated the discipline of history with classroom discussion.
Their discussion videos showed the extent to which pedagogical and content knowledge remained separate. Andi shared three videos, each of which primarily consisted of her modeling historical thinking skills as she read through a primary source interspersed with brief rounds of directive questioning. Although many of her questions were formally open and debatable, she rarely allowed consecutive student talk turns. The following exchange, as Andi introduced the first document in a lesson on the attack on Fort Sumner at the start of the Civil War, is typical:

Andi: What state is the Freemont Journal from?

Student 1: Ohio.

Andi: Do we know if Ohio is from the North or the South?

Student 2: It’s in the North…

Andi: Because it’s from the North, how will they talk about the attack?

Student 3: They’ll say it’s bad.

Occasionally her attempts to extend student’s comment yielded elaborated explanations, but her students scored at a 1, the lowest possible score, in co-construction and critique in each video, meaning there was virtually no substantive student-to-student talk (Figure 3.4). At the same time, she was developing the concept of sourcing, drawing attention to the author’s identity and using it to predict bias. She demonstrated an emergent understanding of DI and historical thinking, but had not integrated it into a student-centered pedagogy.

Ben, on the other hand, showed a greater skillset for encouraging student talk, but less focus on DI. On average, Ben’s two videos scored better than Andi’s, although this average was influenced by the fact that Ben’s graded assignment was substantially
different from his other video. He explained that BS had rejected his initial submission and given him additional support for in conducting a seminar. He indicated that his second video, grappling with a single text (a summary of the Treaty of Versailles), was more typical of his teaching. In it, he alternated between asking his students closed questions in the whole class setting and prompting them to answer semi-open comprehension questions as they read collaboratively in small groups. His teaching was different than Andi’s teacher-centric instruction in three keys ways. First, Ben did not model. Second, because he spent much of the period circulating as students worked in small groups, his students engaged in long discussions as they tried to interpret a challenging text. When Ben asked groups guiding questions, students often built on one another’s ideas in ways that would have been scored as “co-constructing” had they occurred in the whole group setting. Finally, Ben successfully facilitated a brief deliberative exchange by picking up on disagreements that had broken out in the small groups when students read that the Treaty of Versailles required German demilitarization. His class had the following exchange:

Ben: How could having a smaller army affect Germany?

S1: With a smaller army you can’t defend yourself.

Ben: So this is what you’re saying, if you have a big army you can take over other countries, but if you had a smaller army, you could get taken over. S2, what were you saying over here?….

S2: You could get ambushed by another military.

Ben: What was you arguing about over here? S3, I didn’t hear from you yet.

S3: I was talking about how Germany can’t go anywhere further than down, since they already lost the war.
Ben: I like what you said with that. S4, what did you combat S3 with?

S4: Of course, they lost WWI, but that doesn’t mean they’re going to lose WWII…

S2: I have a question, why did Hitler join WWII?

This exchange rapidly brings four students voices into the whole group discussion as Ben works to elicit multiple responses, revoice them for clarity, and, at the end, position students’ ideas deliberatively against one another. Although it only lasted a few turns, Ben demonstrated a capacity for initiating and sustaining discussion, and, by referring to the work students had done in small groups, made it clear that he valued students’ discursive contributions in multiple settings. At the same time, the discussion is not text-based, Ben does not press for elaboration, and the last two student contributions make substantial historical errors. Germany being defeated did not mean that it had no army to demobilize, and it is an anachronism to suggest that Germany might have known that it had another chance for victory in the Second World War, 26 years before it began. Ben’s students did not engage in DI, but may have had an introductory experience with DCI.

*Figure 3.4: Andi (Average of 3 videos) and Ben SDI Scores for Both Videos*
Andi was largely discontent with her videos, feeling that although she was clear in “explaining my thinking” they did not include enough discussion. Focusing on one moment when she asked if resistance to the Louisiana Purchase stemmed from the details of the deal itself or general political resistance to Jefferson’s presidency, she imagined how she might have gone further.

[A student] said “both.” And from there, I asked if other students also thought both, or if they had other ideas. Students did not respond, and I felt like it kind of led it to a dead-end…Then it got more teacher-centric… I could have asked [the student] to expand her reasoning more, or I think I should have asked students for a poll, like, “Who thinks that they just don’t like the Louisiana Purchase because they hate Jefferson?”…From then, if people disagreed, I can expose the discussion structure and have students refer back to the text for their reasoning.

In retrospect, she imagined a number of discursive moves that could have generated more student talk and admonished herself for taking over the discussion. In her interview, after watching her video, she remarked that her teacher-centered style was a product of her methods course and did not fit her own instructional vision:

I have really focused a lot on like teaching history…developing historical thinking skills…and teasing out the nuances of an event in history…That’s the direction my year has gone. The part of about making personal connections to the history and using that to inform our own understanding of our world now and of my students themselves, I think I’ve strayed away from that goal. I think moving forward, I would like to somehow mesh those two together.

Andi held onto a DCI vision for social studies, despite being unable to enact it. Ben was more pleased with his work, noting that he was “checking in on these groups, circulating…I try not to give them things where they have to sit and analyze for 25 minutes because if I did that, then I’d never get through a lesson.” When pushed to name how he might improve his lesson, Ben said, “I really can't really think of nothing right there. I think that was one of the good clips, honestly.” Ben’s enactment and reflection demonstrated

152
investment in his students’ thinking and a desire for them to enjoy historical content, but his experiences with disciplinary history had not made the leap from methods class to the field, leaving him giving students reading comprehension tasks with closed questions.

Discussion

This study is a portrait of the pathway from TEs’ PCK to novice knowledge and practice. It suggests that TEs’ tools can transmit fine-grained distinctions in PCK, but that novices’ learning in methods courses is particular and personal. The incoming beliefs and knowledge of each individual learner appear to mediate how TEs’ PCK manifests in novices’ enactment and reflection. While incoming alignment between TE and TC may have predicted a greater amount of learning, even unaligned TCs appeared to develop in the direction indicated by their instructor. Better understanding the relationship between TEs’ PCK and instruction and TCs’ PCK can help open new avenues for research and practice in social studies teacher education.

Instructional Influences

Teacher education has long been caricatured as a patchwork of idiosyncratic instructors toiling without oversight, communication, or perhaps even effect (Cochran-Smith et al., 2016; Grossman & McDonald, 2008; Levine, 2006). Against this backdrop, the similarities in AS and BS’ PCK are surprising. These TEs, purposively selected to represent institutional and instructional divergence, taught quite similarly. They centered discussion facilitation for disciplinary thinking, and utilized many of the same
pedagogical tools, including model discussion, classroom videos, and assignments requiring novices to enact the practice. Their similarities might be the coincidence of identical strangers, evidence of a widespread paradigm for teacher education, or an example of two professionals sticking with similar techniques because they work.

AS and BS would be right to see evidence of their success. Their TCs appear to grow in precisely the direction their TEs hoped. The mere fact that all four TCs considered their methods courses helpful and embraced the importance of disciplinary history and discussion counters the strawman of “those terrible methods courses, which that waste a student’s time” (Conant, 1963 p. 137). Even better, all the TCs actually led discussions. “Ask” was the highest scoring SDI category for all four novices, showing that they had mastered the sine qua non of classroom discussions by introducing open questions. Reflecting on their discussions, Alice, Andi, and Becca identified shortcomings in their facilitation and suggested possible improvements that aligned with both the SDI coding and their TEs’ instruction, showcasing an important element of adaptive expertise. If the norm in social studies classrooms is a near total lack of discussion (Nystrand et al., 2003; Reisman, 2012; Saye & SSIRC, 2013), these novices appear to be “well-started beginners” (Hollon, Roth, & Anderson, 1991), better to develop as discussion leaders positioned than some of their more experienced colleagues.

AS and BS might be further heartened by the divergence between their cohorts, which suggests that TEs’ influenced their students in consistent ways. AS taught that historians must scrutinize evidence. BS’ pedagogy emphasized open inquiry. It is a fine distinction, but, over the course of multiple weeks of class, the difference in their enacted PCK accumulated. In their interviews, AS’ TCs leaned towards DI and BS’ embraced
DCI. These lens manifested despite the differences in each pair of TCs’ skillsets, backgrounds, and motivations. At the end of the course, Alice and Andi were acutely aware of historical thinking and mentored and monitored their students’ thinking about sources. Becca and Ben were more attuned to their students’ discursive contributions, consistently focusing on critique and co-construct. Although Ben and Andi lagged behind Becca and Alice, they all became more fluent practitioners of discussion in the modes privileged by their TEs.

At the same time, it must be noted that this is a very small sample, focusing on four novices from two classes as they enact a single pedagogy. While discussion was important to AS and BS, it was not the entirety of what they taught, just as this study’s participants were not the entirety of who they taught. Having participants provide their own videos of instruction further reduces the reliability of this study, as the clips they provided were decontextualized, often directly connected to assessments for class, and likely not representative of their broader teaching. Even with those caveats in mind, the indications of TC growth, using a practice that teachers often avoid in a field where instructional influence is elusive, are promising.

Developmental Trajectories

Their development notwithstanding, the TCs in this study remained novices and their discussion facilitation often fell short of their instructors’ and their own standards. Andi and Ben struggled to sustain historical discussions, and Alice and Becca were critical of their ability to transfer ownership of the discourse to students while still holding them accountable for rigorous inquiry. This study cannot predict what will come next for these TCs. At this point, Andi appears less prepared to immediately engage her
students than Ben, but she appears to hold a more robust understanding of historical thinking. Social studies researchers have not articulated a developmental trajectory for novices that might predict whether Ben or Andi is more likely to mature into the more successful discussion facilitator. There are no consensus frameworks to resolve tensions between being ready for the first day of school versus being ready for the career and there is precious little empirical longitudinal research showing how novices translate their social studies methods coursework into their career (exceptions include Conklin, 2012; Martell, 2019). Further, because scholars are unsure of how to define social studies PCK (Cuenca, 2021; Powell, 2018), this work’s destination is as unclear as its pathway. The lack of research articulating the developmental trajectory of social studies PCK leaves TEs and TCs adrift. Neither can say for certain what ought to be known, in what order, or for what purpose.

While a developmental trajectory for PCK would be an invaluable instructional aid, it would also likely be generalized and normative, flouting the particularistic and situated ways in which the TCs in this study learned. In each case, TCs’ incoming identities and PCK appeared to be a significant factor mediating their growth. If TEs determined the direction novices grew, TCs’ preconceptions seemed to influence how much they grew and how closely they mirrored their instructors. Alice and Becca were initially aligned with their TEs and developed facilitation styles similar to their TEs’, although Alice still wanted to increase the amount of reading comprehension and Becca was unconvinced about incorporating historiography. Andi learned about DI history but retained her desire to teach DCI. Ben increased the amount of student talk in his classroom, but ended the year unsure of how to bring more disciplinary concepts of
history into play. Evaluating each TCs’ readiness to teach requires negotiating not just the appropriate relationship between DI and DCI for teaching social studies, but for each social studies teacher. The premise of incorporating practice into teacher education has been to develop TCs’ knowledge and decision-making frameworks (Forzani, 2014; Kavanagh, Conrad, & Dagogo-Jack, 2020), a mission that inherently acknowledges the need for teachers to take ownership over what they learn. As TCs careers will occur in unique classroom contexts, it is difficult to distinguish between incomplete learning, the apprenticeship of observation, and nascent recontextualization bridging the two-worlds of university and field (Nolen et al., 2015). There is a fine line between acknowledging the nuances and capitulating to complexity, conceding the task of articulating strong instructional principles and allowing teacher education to recede once again into the “particularistic and unsystematic” approach that has defined social studies teacher education research (Adler, 1991, p. 291).

**Teacher Educators’ PCK**

All the uncertainties of these findings return us to the work of teacher education. While researchers wonder what a TCs’ developmental trajectory might be, how social studies PCK ought to be defined, and where the happy medium between generality and specificity might lie, TEs like AS and BS are writing lesson plans. The results of this study remind us that the work of teacher education occurs in their enactment. AS changed how her TCs thought about history by modeling and coaching. BS demonstrated her commitment to student discourse by allowing her own TCs space to struggle, explore, and discuss. At times, these enactments may have diverged from the TEs’ own beliefs. BS noted her concern that TCs did not pick up the connection between disciplinary
history and classroom discourse. Although it is difficult to demarcate precisely how BS internally balances DI and DCI, her enacted pedagogy presented discourse and history in separate lessons and her TCs interpreted her instruction as an endorsement of DCI. From this data point alone, it is clear that more fine-grained analysis of TE pedagogy is needed.

Further comparative research we might be able to better position AS and BS within the landscape of teacher education, not only to ask whether their teaching is typical but also to see how other TEs address the complexities of this work. For instance, with more evidence from DI-oriented TEs we could investigate whether the complexity of this vision of historical discourse is more likely to overwhelm novices or predict greater growth over the course of a career. Similarly, causal research designs (e.g., Hill, Mancenido, & Loeb, 2021) might be able to identify specific pedagogies that facilitated the exchange between the instructors and their novices. For instance, AS asked novices to rehearse discussions while BS had TCs co-plan. Both pedagogies were attempts to help novices cross the gap between the worlds of the university in the classroom. A design that saw TCs from the same cohort receiving either the opportunity to rehearse or to co-plan might begin a discussion about the affordances of each strategy. Such research would join and expand the literature base exploring how TEs’ pedagogical choices influence the transition to enactment (e.g., Kavanagh & Danielson, 2020), and challenge the existing norms that allow TEs to stay within their own classrooms (Cochran-Smith et al., 2015; Vanassche & Kelchtermans, 2015).

As TEs move forward with their practice and research, they will encounter PCK as a framework structuring their institutions and framing the intricacies of their work. This study suggests they ought to interrogate whether and how that framework is
supporting the development of their novices. Within the social studies, PCK has been challenged along the lines of its content. Scholars demand that it be more inclusive either by specifying concepts like race and social justice that ought to be explicitly defined (Chandler, 2015; Dyches & Boyd, 2017) or by embracing a broader DCI-like perspective that decenters the disciplines (Cuenca, 2021; Powell, 2017; Thornton & Barton, 2010). This study joins research suggesting that investigations of PCK that do not delve deeply into enactment are likely to bear scant fruit (Settlage, 2013). The novices in this study are influenced by what AS and BS do, not by what they think. To the extent that PCK helps describe the way that teaching emerges at the juncture of pedagogy and content, then it remains helpful. If, however, scholars and practitioners find that this construct, which is already ill-defined in social studies, drifts towards the intellectual, then it may be time to reconceptualize the aim of teacher education in a way that explicitly prioritizes enacted knowledge in both TEs and TCs.
References


161


Koehler, M., & Mishra, P. (2009). What is technological pedagogical content knowledge (TPACK)? *Contemporary issues in technology and teacher education, 9*(1), 60-70.


Conclusion

The Imagined Classroom

The primary conceptual contribution of this dissertation is the development of the “imagined classroom.” The imagined classroom is a projection of teaching and learning discursively co-constructed by teachers and TEs. This mental model of education reflects each participants’ experience with classrooms and is shaped by their ongoing collaboration. The construct of the imagined classroom describes the work of teacher education in sociocultural terms, framing TCs’ learning as the result of a collaborative imaginative enterprise. Paper 1, “Constructing Imaginary Classrooms,” uses this language to describe teacher education pedagogy and explores how the different methods instructors used representations of practice to direct TCs’ attention and imagination. Paper 3, “Developing Novices’ PCK,” illustrates how this imaginative process is not unicausally determined by the TE. TCs’ imagination of teaching is influenced by their personal experiences with and preconceptions about teaching. Interactions with peers, instructors, and field placements all appear to contribute to the discursive construction of imagined classrooms, a process which is explored in Paper 2, “Imagining the ‘Urban’ Student.” The imagined classroom, therefore, posits TCs’ conception of teaching as malleable and socially constructed. Within this frame, TEs’ primary responsibility is not transmitting information or practices to TCs, but shaping their imagination. Teacher education needs a framework like the imagined classroom to describe the complex relationships between TCs’ prior knowledge, field experience, teacher education, and future work as teachers. The structures of a typical teacher education program frustrate
any linear model of learning. In many cases, each individual TCs’ field work is invisible to TEs and to their peers and no one knows a TCs’ future instructional setting. Lacking communal access to the work of teaching that might give eacher education concrete grounding, a shared projection of teaching is the only mechanism by which a TE and a group of TCs might collaboratively think about teaching.

This study demonstrates the utility of the imagined classroom as a way to conceptualize the interaction between TEs and TCs. It allowed me to conduct the kind of comparative research that is too rare in teacher education (Cochran-Smith et al., 2016) and opened the door for exploring the different kinds of thinking that TCs were engaged in during episodes of practice. In Paper 1, I observed that practice was a substantial element of all six TEs’ pedagogy, but that their use of practice guided TCs’ imagination in different ways. In particular, each TE prompted TCs to understand the work of teacher decision-making in different terms, with some emphasizing the importance of situated improvisation and others electing to taxonomize either important teacher moves or aims. In Paper 2, I found that imagining instruction had implications for how TCs’ thought about students, that TEs were the primary drivers of classroom discourse, and that there was a tendency to focus on students’ thinking more than their individual identity. The final paper found that TCs’ imagination of the classroom was mediated by both their prior conceptions and their TEs, and also showed that differences in TE enactment appeared to correlate with differences in TC thinking and enactment. All three depictions of methods classes found that teacher education and TEs matter, a conclusion that is not a given in the field (Goldhaber, 2019).
Theoretical Implications

The portraits of imagined classrooms across these three papers creates an opportunity to reframe two persistent divisions in teacher education research. In the last decade, much of the writing in teacher education has focused on the “turn to practice” (Zeichner, 2012) and the question of whether teacher education ought to center enacted teacher practices. Boosters of the turn to practice argue that enactment in teacher education can move beyond normative behaviorist prescription (Forzani, 2014; Kavanagh, 2021). From a sociocultural perspective, they argue that representing, decomposing, and approximating realistic classroom practice can help novices develop towards thoughtful adaptive practice (Grossman, 2018; Kavanagh, Conrad, & Dagogo-Jack, 2020). Critics remain unconvinc. They fear that centering practice will lead to rote, reductive, and unconsidered pedagogy (Kennedy, 2016; Zeichner, 2012), and worry that it is likely to deepen existing inequalities both by teaching decontextualized “best practices” (Philip, 2019; Souto-Manning & Martell, 2019) and by sustaining a neoliberal education system (Philip et al., 2018). The results of these papers suggest that a conversation about whether teacher education ought to center practice is not reflective of the realities on the ground. The TEs I observed were already using practice and their use of practice was heterogenous. At times, practice could be normative and simple, as when BE had TCs drill a short series of vocabulary moves. At times, practice could be complex and open to the dilemmas of teaching, as in AS’ rehearsals of discussion facilitation. These different uses of practice make different contributions to TCs’ imagined classrooms. It is time to pivot away from a discourse that homogenizes practice and
evaluates it as either “good” or “bad” and towards a research agenda that explores the variations in how practice is used by TEs and how it contributes to TCs’ learning.

Breaking down a uniform conception of “practice” may also provide an opportunity to reconcile practice-based teacher education (PBTE) and social justice-oriented teacher education. Contrary to the fears of scholars who have worried that centering practice will foreclose explorations of power and justice (e.g., Dinkelman & Cuenca, 2021; Zeichner & Conklin, 2016), many opportunities to engage these issues arose in episodes of practice. Just teaching vocabulary, including discussions about the word “urban” in BS’ class, “creatures” in AS’, and “rica” in CS’, provided numerous instances where teachers’ moves had direct implications for students’ academic and justice-oriented learning. Paper 1 shows how episodes of practice could be used to connect aims and moves, a critical step for marrying some of PBTE’s emphasis on enactment with justice-oriented instructions’ priority on principle. Paper 2 highlights both the challenges and possibilities in this work. The TEs’ tendency to avoid naming specific student identities, might suggest that the opportunities to highlight social justice principles in the context of practice were not frequently being utilized. At the same time, the paper also included examples of TEs centering individual students, which might be grounding for future TE practice. The final paper saw both social studies TEs preparing TCs to engage in student-centered discussions of history. They modeled discussions of slavery in the United States, argued that classroom discussion was preparation for citizenship, and encouraged TCs to ask students questions like “Why did the United States ban Chinese immigration” and “Who was most to blame for the transatlantic slave
trade?” The paper shows that TEs influenced TCs’ thinking about and capacity to enact classroom discussions. Although there were differing points of emphasis and varying degrees of explicit talk about race, justice, and power, both social studies courses saw TEs attempting to engage social justice concepts at the level of enactment. Taken together, the three papers find issues of power and justice permeating episodes of practice. And these intersections were neither haphazard nor unexpected. In many cases, they were reflective of TEs intentional choices to introduce particular representations of teaching. If TEs can reliably spark these conversations, they can prepare to engage TCs in considering how the aims and principles of social justice-oriented teaching might emerge in practical moves that PBTE tends to illustrate. Paper 1 already begins to explore TEs’ blending of moves and aims, Paper 2 provides evidence that TEs wield a lot of power over discourse in methods classes, and Paper 3 suggests that TEs’ directions may influence TC practice. One next step for this research is utilizing these insights and frameworks to encourage and analyze socially just PBTE. There is already research exploring potential intersections between PBTE and social justice-oriented teacher education (e.g., Dutro & Cartun, 2016; Kavanagh & Danielson, 2019; Schiera, 2021), but the empirical evidence base requires expansion. The conceptual framework of the imagined classroom may be useful for future research in this area.

**Practical Implications**

Beyond theoretical work conceptualizing teacher education, the findings in this dissertation suggest at least three practical recommendations for TEs. First, TEs ought to consider increasing their use of reflection-in-action. Reflection-in-action appears to be a
useful way to provoke novices to imagine teaching as complex, improvisational, and responsive. While there is likely a happy medium between providing novices advice and preparing them to embrace uncertainty (Metz, Kavanagh, & Hauser, 2020), several of the methods courses I studied had no instances of reflection-in-action and no instances of exploring instructional dilemmas. One way to begin increasing the opportunities for novices to engage in mediated struggle is to reconsider the use of modeling and performance. Modeling and performance are already being used to introduce practice in most methods courses, but they are tightly controlled such that the TE, during a model, or the TC, during a performance, is likely to enact a vision of a “best” practice. Without changing the timing or conceptual structures of most courses, these practices could be tweaked to give novices greater opportunity to experience reflection-in-action.

TEs might also find it beneficial to increase their use of representations of individual students, particular students who are in TCs’ field placements. When AE prompted TCs to attend to a students’ thinking or socio-emotional experience in a video it opened unusually deep and contextualized pathways for imagining students. Centering individual students might counter the trend, documented in Paper 2, to discuss students in the abstract and provide grounded opportunities for discussions of students’ social identities. TEs might extend these discussions by prompting TCs to incorporate representations of students from their placements. When AE and BS required TCs to bring in videos and transcripts from their placement classes, the ensuing conversations capitalized on TCs’ existing tendency to personalize while providing the entire class a shared resource to reflect upon. Here again, there might be low-hanging fruit. Most TEs already incorporate videos into their instruction. In some cases, they might be able to
open more robust thinking about student experience simply by directing TCs’ attention to specific individuals. In this way, TCs’ imagined classrooms might be tethered to concrete realities in their placements and, perhaps, better prepare them to teach similar students in the future.

Finally, TEs ought to explicitly engage TCs at the intersection of PBTE and social-justice work. This might occur in both reflection-in-action and reflection-on-action, but would require TEs to provoke TCs to name the connection between teacher moves and justice aims within episodes of practice. Prior research has shown that justice-oriented instruction divorced from moves tends not to manifest in novices’ practice (Kavanagh & Danielson, 2019). The more that TEs can build a bridge between considering and enacting justice, the better prepared their TCs are likely to be. As discussed above, the existing practices of TEs are already surfacing ample opportunities to engage with issues of power, but their tendency to avoid naming individual characteristics of students, such as race, class, and gender, likely dilutes the message reaching TCs. A more explicit connection, which might also include curating different representations of practice, is likely necessary to capitalize on the possible intersection of PBTE and socially just teacher education.

Limitations and Positionality

Like all research, this study’s design and analysis impose limitations. The observations reported here come from only six methods courses. Such a small number of courses cannot describe the breadth of teacher education. Further, the participating TEs were selected because their institutions shared similar urban setting and expressed clear pedagogical philosophies. They were not intended to be a representative sampling of TEs,
which necessarily precludes widespread generalization from these data. In fact, teacher education has generally been poorly aligned at the institutional level (Buchman & Floden, 1992), so the clarity of each participating institution’s pedagogical claims inherently signify that they are atypical. And while the institutional pedagogical philosophies were varied, the three institutions in this study do not comprise a total or representative span all the possible pedagogical approaches to teacher education. The findings in this study might have been very different if I had selected different programs or TEs. A program that self-identified as practicing social-justice oriented teacher education (e.g., Quartz, Priselac, & Franke, 2009) would have probably been more likely to include direct discussion of students’ racialized identities. Similarly, selecting for a program with a residential model (e.g., Hammerness & Craig, 2016) might have altered the portrait of the imagined classroom as occurring outside of the physical classroom. Unavoidably, the choice of where to look informed what I saw.

My study focused on portions of methods courses that utilized episodes of practice. I made this sampling decision because episodes of practice are overt, premeditated, and often contain explicit connections to TCs’ future practice. As such, they may be the most visible moments where the imagined classroom is under construction. However, they are in no way the only way for TCs to discuss and imagine the classroom. Focusing on discrete elements of instruction is inherently decontextualizing. The TEs in the study were acutely aware of how their course material is enmeshed within their institutional and instructional contexts. None of the TEs shouldered the burden of preparing novices alone, all the TCs had multiple courses all of which contributed to their imagination of teaching and students.
Like most researchers of teacher education, my perception of the exchange between TEs and TCs is informed by my experiences on both sides of the methods classroom. A dozen years ago, I resembled many of the TCs in the classes described in this dissertation. White, fresh out of college, entering an unfamiliar school system and city, and preparing to teach a subject that I had not majored in, I experienced many of the challenges facing the TCs in the study. Today, I sit closer to TEs in the study, working as a TA and an instructor in a methods course preparing TCs to teach social studies in Philadelphia’s secondary schools. As a White teacher and teacher educator I am immersed in the very structures of power that we might hope urban teacher education will challenge. My understanding of the importance of addressing racial inequality, evaluation of the efficacy with which TEs combat racism, and inferences of the rationale behind TEs’ pedagogical decisions regarding race are all informed by my positionality. Despite my attempts to be clearheaded, I likely have an empathy for White TEs that may undermine some of my capacity to be incisive.

My positionality in this research is further informed by my deep familiarity with two of the pedagogical approaches utilized by participants in this study. I taught in a large urban charter management organization (CMO) for six years that utilized similar language, beliefs, and practices as Institution B. My transition into doctoral studies and teacher education brought me to the University of Pennsylvania, which has become a hub for PBTE. There, I joined the Core Practice Consortium, a key contributor of PBTE research, and have incorporated PBTE concepts into my teaching and research (e.g., Grossman, 2018; Reisman et al., 2019). My immersion in PBTE means that I observe the teaching at Institution A, which espouses a PBTE philosophy, as an insider. The only
institutional philosophy to which I am an outsider is the progressive approach of Institution C. My experiences with CMOs and PBTE bias me in favor of practice in teacher education. The apprenticeship of observation is powerful in both teaching (Lortie, 1975) and teacher education (Zeichner, 2005), and practice was a central element of how I have learned to teach and to support teachers.

Reconsidering the role of whiteness

This dissertation did not begin as a study of whiteness in teacher education, and yet the mores and structures of teacher education are bound up in whiteness (Sleeter, 2017). The influence of whiteness was visible in each methods course. Beyond the demographic fact that most of the TCs and all the TEs were White, the discussions of teaching and learning that I documented often touched upon questions of race, power, and the social role of education. And yet, whiteness was not explicitly named within the methods classrooms or my analysis. Paper 2, comes closest to discussing these issues by naming the lack of explicit discourse around race, but whiteness is not foregrounded in the theoretical framework or the discussion.

Further comment on the absence of explicit discussion of whiteness is needed. The whiteness of teacher education ill-prepares White TCs for their future students and may serve to exclude teachers of color from the profession. If White TCs reliably enter teacher education with deficit views of students of color (Milner, 2008) and are disproportionately likely to teach students of color (Ingersoll et al., 2021), then teacher education that does not explicitly and consistently confront whiteness is likely to contribute to the adverse experiences of students of color in schools (Carter Andrews et
al., 2019). Further, teacher education that avoids or minimizes an analysis of race is likely
to be unhospitable to TCs of color (Kohli et al., 2021), further exacerbating the
challenges of sustaining the professional careers of teachers of color who have been
shown to improve students’ learning and lives (Redding, 2019; Shirrell, Bristol, & Britton,
2021). Not talking about race, as Paper 2 documented, undercuts the possibility of
responsive teaching, may sustain deficit-mindsets in a new cohort of teachers, and
undermine the professional retention of teachers of color.

Given that analysis, we might wonder why the TEs in this study so rarely
addressed whiteness directly in episodes of practice. Some of this absence is likely due to
the sampling and analytical design of this study. Because I prioritized classes focused on
enacted practice, I did not observe sessions that might be more likely to delve into
whiteness, such as BS’ session on “teacher identity and classroom culture.” I also missed
some of the ways that TEs’ structured their course sessions to develop over the span of
multiple weeks, such as how AE followed a session focused on a white male student’s
struggles comprehending a Seamus Heaney poem (which I observed) with a session
analyzing a Black female students’ successful interpretation of a text by Toni Morrison
(which I did not observe). Even within a single day of class, my focus on episodes of
practice may have led me to miss other kinds of talk, particularly because prior research
has shown that discussions of social justice teacher education are often not carried into
practice (Kavanagh & Danielson, 2019). Finally, because I coded for explicit references
to students’ race in Paper 2, my analysis only attended to a limited element of the
influence of race and power. As a result, discussions such as those around Lincoln’s use
of “creatures” or an Asian American TCs’ comment that her students mistook her for being Latina were not coded as discussions of students’ race. Similarly, the fact that all the social studies TEs chose to model historical discussions on topics related to slavery was not included in the analysis for Paper 2, although they served to initiate discussions of race and whiteness in American history.

Yet, it does not seem likely that the lack of explicit discussion about whiteness in the methods courses is entirely a result of my sampling and analysis. The existing teacher education literature offers at least three potential lenses to interpret the lack of discourse. The most critical lens might frame these findings in terms of the perpetuation of white racial knowledge (Leonardo, 2009). Within this framework, White TEs and TCs are not ignorant of race, but are suffused with knowledge that works to preserve their privilege and power. Drawing in part from critical race concepts such as the permanence of racism and interest convergence, this lens would interpret the color-muteness of the methods classrooms as preserving a set of normative assumptions and behaviors that reify whiteness and are resistant to being dislodged. Deficit-mindsets about children of color are not simply inaccurate diagnoses about what students might need to learn, but expressions of White supremacy that will perpetuate the marginalization of people of colors’ knowledge, agency, and learning.

A second lens to understand the findings of this dissertation comes from the literature on racial stress (Michael, 2015; Stevenson, 2014). A racial stress analysis would suggest that discussing race and whiteness likely provokes anxiety for the TEs and TCs in this study. That anxiety may be related to fears of saying the “wrong” thing and
being perceived as racist, uncertainty about how to effectively mitigate racist thinking, and concern for preserving their own self-perception as “good” White people. Viewing this behavior as an expression of anxiety would invite a series of psychosocial responses intended to bolster TEs and TCs’ racial socialization competency and decrease their fear of racialized encounters (Anderson & Stevenson, 2019). This approach effectively seeks to decouples White educators’ sense of self from their investment in whiteness in a way that a white racial knowledge lens might not credit.

A third analysis might suggest that the lack of discussion about whiteness may be a pedagogical problem. Given Kavanagh and Danielson’s (2019) findings about the division between how TEs engaged in practice and how they engaged in discussion of social justice, it may be that TEs are unsure of how to engage TCs in reconsidering whiteness within the context of practice. There is a body of literature on challenging whiteness in teacher education (e.g., Enumah, 2021; Picower, 2009), but few of the studies focus on methods classes (exceptions include Smith et al., 2021) and fewer still emerge in episodes of practice (exceptions include Stroupe et al., 2021). The body of research suggests that pedagogies of practice that challenge whiteness remain an area in need of exploration. These frameworks for understanding manifestations are not mutually exclusive, but prior research has suggested that practitioners’ interpretations of racialized moments can dictate their possible responses (Reisman, Enumah, & Jay, 2020). Further research utilizing multiple frameworks is needed to understand how whiteness arises within the methods course and how TEs might respond to the role of whiteness in the imagining classrooms.

Towards future research
Looking towards the future, I see three broad areas for future research: investigating the role of context in creating imaged classrooms, understanding the contributions of various TE pedagogical tools, and mapping the relationship between the imagined classroom in teacher education and in the field.

As discussed above, the findings of this study are rooted in a specific instructional context within particular institutions. But teachers’ imagined classrooms are not only formed during episodes of practice. Prior research on TCs’ motivations (e.g., Hawley & Crowe, 2016) and developing professional identities (e.g., Henry; 2016; Izadinia, 2015; Markus & Nurius, 1987) demonstrate that novices shape their conception of teaching in response to a constellation of influences including TCs’ experiences as students, student teaching field placements, and all their other coursework. Looking for influences on TCs’ imagined classrooms that come from beyond the methods course from a psychosocial perspective. This would require repositioning data collection to be more attuned to TC thinking, perhaps by more substantially relying on interviews, think-alouds, and video stimulated recalls (Ericsson & Simon, 1993; Lyle, 2003). Focusing on TCs’ personal negotiations is also an opening to address whiteness. With an attention to white racial knowledge and racial anxiety, I might have asked TEs and TCs about their emotional experiences when racialized topics emerged in class and prompted them to either imagine pedagogical strategies for sustaining critical discourses or respond to existing ones (such as those documented in Enumah, 2021). It would have also been helpful to have racial biographies from the TEs in order to position their self-perception in relationship to their comportment in class. Collecting a broader array of data and centering whiteness might
have provided a better opportunity to understand some of the patterns occurring in methods courses.

A better understanding of the psychosocial elements of TCs development might also open new lenses for research on the role that teacher education institutions play as part of TCs’ context for developing a professional identity. Rural and urban programs might provide very different prompts for TCs to reflect upon. Adjunct instructors who spend part of their times teaching in K-12 schools likely have different imagined classrooms than tenured professors who have not worked closely with students in decades. Undergraduate and graduate students likely draw on different life experiences as they conceive of the work of teaching. The work of imagining classrooms takes place in manifold variations. Institutional and instructional designs are attempts to participate in this construction in more beneficial way. Understanding how that plays out for different TCs as they prepare to teach different students is a necessary first step to mapping the work of teacher education as it is already occurring and drawing on the wisdom of practice that is already being instantiated.

A second research agenda would look carefully at the pedagogical tools of TEs. This would likely involve both causal research and deeper exploration of TE decision-making. TE decision-making is already well-represented in the teacher education research (Cochran-Smith, 2016; Vanassche & Kelchtermans, 2015), so this element of future research would primarily take the form of honing and repositioning this literature in terms of the imagined classroom. Causal research, however, is severely underrepresented within teacher education (Hill, Mancenido, & Loeb, 2021). TEs engage in their work deliberately. They attempt to influence TCs’ imagined classrooms in
particular ways. Much work would need to be done to design studies with outcome measures that accurately reflect TEs’ intentions, but it would be an important step towards explaining how teacher education matters (Darling-Hammond, 2000). Reflecting that intentionality through the use of experimental and quasi-experimental research might be a substantial contribution to teacher education’s long sought-for language of practice (Grossman, Hammerness, & McDonald, 2009). PBTE research may be the most developed instantiation of this idea of enacted TE practice (e.g., Grossman, 2018), but the questions at the heart of this agenda overflow any particular pedagogical boundaries. All TEs enact strategies in their courses in hopes of informing TCs’ imagined classrooms, which means that any of their classes might be sites for future research on these questions.

Finally, but perhaps most substantively, it will be important to engage in longitudinal study that connects teacher education to the classroom. Paper 3 was an early attempt to engage a connection between enactment and teacher education, but that will need to be followed over the course of a career. There is no reason to believe that a teachers’ imagination of the classroom is set when they graduate their teacher education program. Understanding the changes in their pedagogy over the course of their career as a revision to the imagined classroom provides an opening to investigate the long passage from novice into expert.

This dissertation aimed to introduce the concept of the imagined classroom. Hopefully it has broadened the possibilities of future research into TE practice and TC learning. I look forward to bringing these ideas into the practice and using practice to inform future iterations of these concepts.
References


