Handbook of Research on Critical Thinking Strategies in Pre-Service Learning Environments

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British Cataloguing in Publication Data
A Cataloguing in Publication record for this book is available from the British Library.

All work contributed to this book is new, previously-unpublished material. The views expressed in this book are those of the authors, but not necessarily of the publisher.

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Chapter 11
Supporting Teacher Candidates' Development of Critical Thinking Skills Through Dialogue and Reflection

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ABSTRACT

This chapter employs a dialogic, sociocultural perspective to describe ways teacher educators can support teacher candidates as they develop the critical thinking skills needed to make the transition from student to teacher in contemporary classrooms in the United States. Data from a longitudinal qualitative study are used to examine the utility of problem-posing seminars and subsequent reflection as tools that can help English teacher candidates embrace the tension they encounter as competing ideologies both complicate and nurture their efforts to enact a student-centered framework for teaching. Specifically, participants' reflections on their efforts to employ dialogic approaches to teaching are explored in the context of standardized curricula and classroom settings. Data suggest that making dialogue and reflection key facets of teacher education programs creates conditions for critical thinking and creativity to flourish.

INTRODUCTION

Rapidly evolving demands related to participation in a democratic society are transforming all aspects of the personal, civic, and economic lives of students in the 21st century. Economic rationales for education reforms are changing the landscape of teaching and learning (Boggs, Stewart, & Jansky, 2018) as classrooms become increasingly standardized (Cuban, 2009; Dierking & Fox, 2012; Ravitch, 2013; Stewart & Boggs, 2016). Changes in the workplace make the capacity for critical thought and creative thinking a fundamental attribute for success (Resnick, 2017). Paying careful attention to these changes and thinking about what they mean for students and teachers in classrooms is, as Leu and Kinzer (2000) argued, a vital element of preparing children for their futures. In his discussion of the importance of

developing students' abilities to engage in creative thinking, Resnick (2017) noted that "two-thirds of today's grade-school students will end up doing work that hasn't been invented yet" (p. 4). But, Resnick maintained, creative thinking is a crucial attribute for success in all areas of life—not just in the workplace. Students living in 21st century society will succeed in all aspects of life "to the extent that they are able to access the best information in the shortest time to identify and solve the most problems and communicate this information to others" (Leu & Kinzer, 2000, p. 113). All of these fundamental elements of success in contemporary life require the capacity for critical thought, and teachers play crucial roles in helping students learn to think critically.

Classrooms are unique social and cultural spaces (Gallimore and Tharp, 1990) where students are prepared for participation in society. Teachers must have the ability to engage in critical thought in order to work through the challenges they encounter as they prepare students for success in and beyond the classroom. Critical thinking, however, is a literate practice that must be developed and nurtured. Teacher educators, then, must have a means of supporting teacher candidates (TCs) as they develop the ability to think critically during the transition from student to teacher. This chapter draws upon the experiences of TCs who engaged in structured, collaborative problem-solving activities during student teaching to discuss a framework that teacher educators can adapt to suit their own contexts and implement to support the development of TCs' critical thinking abilities.

THE TRANSITION FROM STUDENT TO TEACHER

Preparing TCs to make the transition from student to teacher in contemporary classrooms is a complex endeavor. As TCs begin working in classrooms and applying the concepts they study in university coursework, they must develop the creative and critical thinking abilities to bring the theoretical world of the university setting into dialogue with the practical world of their placement classrooms. The disparate and distinct settings of the university classroom and the student teaching field experience can be a significant source of tension for TCs. During the student teaching semester, the gap that can exist between theory and practice often takes shape in what researchers commonly refer to as the *two-worlds pitfall* (Anagnostopoulos, Smith, & Basmadjian, 2007; Feiman-Nemser & Buchman, 1985). TCs must make sense of the contradictions between the standardized instructional strategies often modeled by cooperating teachers (CTs) and the student-centered theories they have studied in their university courses (Smagorinsky, Jakubiak, & Moore, 2008). In their work examining the factors that contribute to the development of the concepts that guide teachers' instruction, Smagorinsky, Rhym, and Moore (2013) found that the two distinct settings of university preparation programs and field placements can present TCs with "competing and contradictory views about how they should go about their work" (p. 148). Managing the tension created by opposing perspectives requires TCs to think both critically and creatively, and teacher educators have a responsibly to support TCs as they develop the ability to think critically and bring competing ideologies into productive dialogue with one another. By offering experiences for TCs to engage in dialogue that flattens hierarchies (Fecho, 2011) and welcomes multiple perspectives, teacher educators can create a context for learning within the student teaching semester that supports the development of critical thinking. Engaging in structured dialogue designed to guide TCs through challenges can help them develop the critical thinking skills needed to navigate the constraints they face when seeking to enact student-centered frameworks for teaching in classrooms that are being standardized by contemporary education reforms.

Grounded in a dialogic perspective (Bakhtin, 1981), this chapter draws upon data from a longitudinal qualitative study of problem-posing seminars (Stewart, 2018) in which TCs engaged in scaffolded, collaborative discussions of the challenges they encountered during student teaching when they sought to enact the tenets of *dialogic pedagogy* (Stewart, 2010; Fecho, 2011: Nystrand, 2006). *Dialogic pedagogy* is an approach to teaching that values questioning, examines context, explores multiple perspectives, challenges hierarchical structures, and views learning as a generative act. Data from this study present an opportunity to learn from and amplify the voices of TCs who have learned to teach under the tension of competing ideologies. As Kincheloe (1990) argued, the words and lived experiences of students provide teacher researchers with "invaluable insights into students' cognitive levels, their pedagogical intuitions, their political dispositions, and the themes they consider urgent" (p. 22). Examining and highlighting the experiences of the TC who participated in this study indexes ways in which teacher educators can support TCs' abilities engage in critical thinking and generate creative solutions to the challenges they encounter while learning to teach in contemporary classrooms. In line with the larger theme of this book, this chapter provides teacher educators with a framework for nurturing the development of pre-service teachers' critical thinking abilities.

NAVIGATING CHALLENGES THROUGH CRITICAL THINKING

The development of critical thinking skills during teacher preparation programs can provide TCs with tools needed to mediate the competing demands they encounter in contemporary student teaching placements. Uzuntiryaki-Kondakci and Çapa-Aydin (2013) defined critical thinking as students using "prior knowledge to solve a problem and making decisions and evaluations" (p. 667). This sort of thinking also requires the metacognitive ability to evaluate one's choices, courses of action, and contexts. To bring the construct of critical thinking into focus, imagine a scenario where someone finds that his or her preferred approach to a task has been eliminated as a possibility. If you've ever driven into a construction zone unexpectedly and found your planned route closed off by road work, you have felt the frustration that occurs when realize you must find a new route to your destination. Now, imagine you are on your way to a job interview. Time is of the essence. Time lost in a detour might make you late for this meeting that could decide your future. Faced with this dilemma, you must engage in critical and creative thinking to solve the problem. Without the ability to think critically and creatively, you won't be able to use a map or, more likely, your smart phone to try to find an alternative route that will still allow you to arrive at your meeting on time. Critical thinking skills make it possible to access your prior knowledge of how to use a map (or phone) to evaluate your immediate context (e.g. route options, time constraints) and make decisions about how to proceed. Creative thinking will make it possible for you to think about how blending multiple options might save you a few minutes and get to your destination on time without getting lost.

Experienced teachers must engage in similar mental gymnastics each day in their classrooms. The process is even more complex for TCs who are only beginning to learn how to reconcile competing approaches to instruction. For example, while there is a significant body of research demonstrating that "isolated grammar instruction is at best futile and at worst harmful" (Smagorinsky, 2008, p. 160), it remains a common practice in English classrooms. In the majority of English classrooms in the United States, teachers are required to teach grammar using a standardized packet of decontextualized grammar worksheets. If a teacher wishes to put research into practice and teach grammar in a specific context, he

or she must engage in critical thought about how to navigate the tension between what her or she believes will be effective based on the research and a school's requirement to used standardized worksheets.

As Uzuntiryaki-Kondakci and Çapa-Aydin (2013) argued, an essential element of critical thinking is the ability to consider the complexities of a particular context in order to make informed decisions about how to proceed when faced with problems to be solved. In the case of the English teacher who wants draw upon his or her prior knowledge about effective approaches to grammar instruction, it becomes important to consider the local context. The teacher must be able to draw conclusions about how much freedom he or she has to deviate from curricular mandates. In the case of a TC, guidance and approval from a CT is essential. The TC's mentor teacher has to be open to alternative approaches to the scripted, decontextualized materials that are a staple instruction in contemporary English classrooms in the United States. The pressures to conform and follow scripted curricula facing the teachers who host TCs in contemporary classrooms can often make it difficult for TCs to receive such guidance.

Challenges of Preparing TCs in Contemporary Schools

Since the publication of *A Nation at Risk* in 1983 and the passage of No Child Left Behind legislation in 2002, teachers have consistently reported increasing pressures to focus on instructional activities that prepare students for high stakes tests (Berliner & Biddle, 1995; Cuban, 2009; Stewart, 2012). Race to the Top legislation, passed in 2009, provided increased financial motivation for schools to adopt standardized curricula, such as the Common Core State Standards, which were adopted by 43 states and the District of Columbia "under coercive circumstances" that included calls for Tittle I aid to be withheld from states that did not adopt the standards (Slater & Griggs, 2015, p. 445). These standardized curricula (Au, 2011; Goldstein; 2014) inhibit teachers' efforts to design and implement instruction that is differentiated to respond to the needs and interests of students (Stewart, 2012). Standardized classrooms in which teacher autonomy is curtailed (Dierking & Fox, 2012; Fecho, Mallozzi, & Schultz, 2007; Ravitch, 2013; Stewart & Boggs, 2016) can be particularly problematic contexts for TCs who are attempting to apply the student-centered pedagogical approaches they study during teacher preparation programs (Barnes & Smagorinsky, 2016; Smagorinsky, Jakubiak & Moore, 2008).

Instead of encouraging practices that will support individual learning, reforms flowing from Race to the Top legislation, have resulted in "a frenzied race to improve test scores" (Leonardatos & Zahedi, 2014, p. 19). These "standardized tests are not only used to evaluate teacher competency, but they also control teachers' daily routines because of their need or desire to prepare students for these tests" (Bourke, Lidstone, & Ryan, 2015, p. 89). While anyone who cares about education will surely agree that it is crucial to continue to find ways to improve the instruction provided in schools for students each day, reform efforts that spring from a myopic focus on testing and "quality control of teachers and principals based on students test scores" (Leonardatos & Zahedi, 2014, p. 17) are creating significant challenges for CTs and the TCs they are mentoring.

A CT mentoring a TC who wants to deviate from scripted, decontextualized grammar instruction must weigh the request against his or her own beliefs about effective grammar instruction, the school's curricula, *and* the pressure that CT feels to ensure that the students will succeed on standardized tests. When CTs believe that the deviating from a prescribed curriculum will create exposure to administrative sanction or reduce instructional time allotted for other test preparation instruction, they are unlikely to support the TC's request (Stewart, 2018). Test driven reforms have "produced fear and obedience" (Ravitch, 2010. p. 16) among teachers, which can be a source of reluctance for CTs to guide TCs in

thinking about alternative approaches to instruction. Learning to teach is, as Smagorinsky, Rhym, & Moore (2013) noted, a twisting path that that is guided by highly contested social concepts that make the destination itself unstable and shifting. Supporting TCs as they travel this path must include opportunities for dialogue and reflection that can allow TCs to examine their experiences, goals, and competing philosophical approaches to instruction. Such dialogue and reflection can help TCs develop the critical thinking skills needed to work at the metacognitive level and evaluate particular school contexts, consider ways to mediate the tension between competing ideologies, make informed instructional decisions, and assess their choices.

Theoretical Framework

Bakhtin's (1981) theory of language provides a framework for exploring tension and bringing competing ideologies into dialogue with one another. In particular, Bakhtin's argument that "the living utterance, having taken meaning and shape at a particular historical moment in a socially specific environment, cannot fail to brush up against thousands of living dialogic threads" (p. 276) provides a useful touchstone when considering how competing ideologies can inform one another, instead of being seen as mutually exclusive. Bakhtin's image of the fabric of language supports efforts to understand the ways in which utterances—even those that support conflicting beliefs—are crucial elements in meaning making. An utterance "cannot fail to become an active participant in social dialogue" (p. 276) when brought into live speech where individuals can consider the ways culture, context, and experience shape meaning. Thus, from a Bakhtinian perspective, all utterances inform one another as they are "harmonizing with some elements in [an] environment and striking dissonance with others" (p. 277). Developing an awareness of harmony and dissonance supports one's ability to see divergent perspectives as valuable while also creating an opportunity for individuals to pause and critically examine his or her own perspectives and practices.

Attending to the ways in which competing ideologies inform one another is a crucial step in nurturing the development of TCs' critical thinking skills because it calls attention to the value of divergent perspectives and the nuances of the contexts in which they are learning to teach. The problem-posing framework employed in this study creates a context for learning through dialogue that intentionally harnesses the power of noticing both harmony and dissonance to generate solutions to the challenges TCs encounter as work to bridge the gap that can often develop between theory and practice. The flattening of hierarchies that occurs in such dialogue supports the development of healthy tension as TCs take the lead in pointing to sources of challenges and offering potential solutions those challenges.

Tension-Filled Environments

Contemporary classrooms are tension-filled environments. Centripetal (unifying) forces (Bakhtin, 1981) pulling towards a unified center seeking to codify language, culture, concepts, and practices create one key source of tension. In schools, this tension flows from standardized reforms and curricula that inhibit teachers' efforts to plan and enact instruction that meets students' unique needs (Stewart, 2010). The centrifugal (stratifying) forces created by the diversity of cultural contexts, professional knowledge, and practical experience that teachers bring into the classroom with them each day are a second key force, which creates tension pulling away from a unified center. Teachers' beliefs about effective instruction, professional experiences, and varying comfort levels with deviating from curricular mandates exert a

centrifugal (stratifying) force that produces multiplicity and brings tension to the centripetal (unifying) forces in the classroom.

The tension between the centripetal and centrifugal forces in a classroom "can be likened to an outdoor tug-of-war-game (Fecho, Mallozzi, & Shultz, 2007, p. 39). When the tension is healthy, both sides are exerting enough force on the rope to "run the game in perpetuity" (p. 39). The flag marking the middle of the rope shifts back and forth, instead of one side dominating the other. This back-and-forth can illuminate both the affordances and constraints of each perspective, which can allow each side to inform and mutually shape one another. This mutual shaping, however, cannot occur without the capacity to engage in the critical thought needed to weigh the merits of the concepts and practices that either side brings to the game—or the teaching context. Critical thinking enables individuals to analyze situations, make decisions, and evaluations (Uzuntiryaki-Kondakci & Çapa-Aydin, 2013). The ability to engage in critical thought supports dialogue *with* and learning *from* divergent perspectives.

Reflection

Reflection can be a useful tool for supporting TCs as they develop the ability to think critically. Engaging in reflection enables individuals to "explore their experiences in order to lead to new understandings and appreciations" (Boud, Keogh, & Walker, 1985, p. 19). However, encouraging and even requiring TCs to engage in reflection about their experiences in the classroom during student teaching does not guarantee that they will realize the benefits of reflecting on their practice. Nor does not ensure that TCs will be able to attend the affordances of philosophical and practical approaches that create dissonance. As novices concerned with basic needs, such as preparing lesson plans or managing a classroom, dedicating time and thought to reflection may seem to be an "esoteric and useless diversion from mastering the technical skills and content of teaching which they regard as essential" so early in their lives as teachers (Hatton & Smith, 1995, p. 36). However, utilizing "a developmental approach, where the early concerns of students for survival skills can be addressed" (p. 37) at both the practical and philosophical level can ameliorate TCs concerns about the value of focusing time and energy on reflection. Thus, structured dialogue in seminar meetings and reflection focused specifically on the problems a TC is encountering and ways in which the TC has sought to address those problems can demonstrate the utility of reflection and create conditions for TCs to "monitor their own thinking, assess whether they reach their goals, and evaluate their efforts, use of time, and effectiveness of their decisions" (Uzuntiryaki-Kondakci and Çapa-Aydin, 2013, p. 667).

Context of the Study and Methods

The study included participants (N=20) from three cohorts of TCs who were pre-service teachers in the final semester of an English Education MA program at a research university in the Southeastern United States. The program provided a specific focus on enacting the tenets of dialogic pedagogy (Fecho, 2011; Nystrand & Gamoran, 1991; Stewart, 2010). The methods of teaching courses taken by the TCs during the program were grounded in this pedagogical stance, which places students at the center of planning and instruction. To live out this pedagogical approach, TCs must develop the ability to think critically and work through the challenges presented by standardized school contexts. The student teaching semester provided a context for learning as the TCs had the opportunity to enact dialogic approaches to teaching

in a practical setting and attend to the challenges they encountered with the support of university faculty, their peers, and CTs.

This chapter focuses on the stories of four individual participants. These stories—or cases—were selected for discussion because they were emblematic of the challenges shared by their peers across all three cohorts. Analyzing individual cases and attending to commonalities across cases allows researchers to examine practical problems that arise in particular contexts (Merriam, 1998). As Smagorinsky (2018) has argued, there is in value in looking "more deeply than broadly into the nature of things" (p. 288). Focusing on the experiences of four participants makes it possible to provide an in-depth discussion of the unique experiences the TCs had as they experienced, read, and made meaning from their student teaching contexts. This practice certainly does not lend itself to the production of results that can generalized to larger populations, which most often occurs through statistical means. Attempting to do so would be inconsistent with theoretical framework for this study, which is designed to examine the processes of dialogue, reflection, and meaning making. Such processes "are far too individual to generate results that can be generalized to large populations" (Stewart, 2011, p. 293). Instead, the experiences of four participants that were representative of the larger data set are presented to provide a rich discussion of the ways in which participants' reflections index the development of the critical thinking skills required to navigate the tension created by their efforts to teach from a dialogic stance in contemporary student teaching placements. From this discussion, readers can make "conceptual inferences" (Reissman, 2008, p. 113) that can inform their efforts to support the development of critical thinking skills in the TCs they work with in their own unique contexts.

Data Generation

Participants engaged in problem-posing seminars in weekly course meetings during the student teaching semester. These problem-posing seminars (Meyer & Sawyer, 2006; Stewart, 2018) were positioned as key sites of effective guidance (Facione, 2000) where TCs worked together to engage in critical thinking and develop self-efficacy as they sought to enact solutions to the challenges they encountered during student teaching. Collaborative discussion amongst the participants and written reflections recounting their efforts to enact the solutions flowing from those discussions provided a mechanism for indexing TCs' abilities to engage in critical thinking about how to best support student learning in their unique student teaching contexts.

During each seminar, one participant shared a problem he or she had encountered using a standard protocol (see Appendix) and the rest of the participants offered potential solutions to the challenge that was inhibiting the efforts of the TC leading the seminar to plan and enact dialogic lessons in his or her field placement. Each seminar was audio-recorded and one member of the research team took field notes during each problem-posing session. Members of the research team transcribed each session and recorded memos during transcription. These memos created maps of the sessions that assisted efforts to contextualize the dialogue and identify preliminary themes (Stewart, 2011). In the weeks following each seminar leader's session, he or she wrote a reflection discussing efforts to put the group's suggestions into practice. These reflections provided a tool to guide participants' thinking as they considered the effectiveness of the suggestions they chose to implement while also providing an opportunity for participants to reflect upon and discuss how the experience informed their plans for future instruction.

Data Analysis

Building upon a previous research report from this study (Stewart, 2018), which discussed the data from the transcripts of the problem-posing sessions generated in the first two cohorts, this chapter examines and reports on the reflections written by the participants from all three cohorts to understand how these problem-posing sessions and reflections contributed to the participants' development of critical thinking skills. The participants' written reflections were analyzed using Thematic Analysis (Maxwell, 2005). Prior to coding each reflection, each participant's problem-posing protocol and the memo mapping each transcript was reviewed to provide context for the analysis of each reflection.

Thematic coding of the reflections focused on key trends related to the construct of critical thinking using Uzuntiryaki-Kondakci and Çapa-Aydin's (2013) essential characteristics of critical thinking and Bakhtin's (1981) concepts of centripetal and centrifugal forces, which brought the tension between divergent perspectives into focus. Data were coded to index instances of participants considering their specific teaching contexts, monitoring their own efforts to work towards their instructional goals, and evaluating the effectiveness of their efforts. The data were further sifted into three thematic categories related to elements of principled practice (Applebee, 1986) that align with dialogic teaching: a) *developing relationships with students to inform instructional practices*; b) *increasing the focus on feedback and reducing the focus on grades*; c) *intentionally designing instruction to include scaffolds that create connections between content and students' lived experiences*.

FINDINGS

The problems posed by the participants across all three cohorts addressed a range of topics that included managing classrooms, engaging students in class discussions, motivation, and elements of content-specific instruction (e.g. literary analysis, grammar, and writing instruction). To look deeply instead of broadly into the participants' experiences, this findings discussion is focused on one major area of concern presented by participants from all three cohorts: content-specific instructional design. While the following stories focus on English Language Arts-specific instruction, the process of posing problems and generating solutions can be applied to any content area because it is focused on generating solutions to the challenges lived out by the participants in their specific teaching contexts.

Across the data set, it was evident that the problem-posing sessions and subsequent reflections provided a mechanism for nurturing the participants' critical thinking abilities by bringing the complexities of particular contexts, including the ideologies and experiences informing the members of those contexts, into dialogue with one another. The problem-posing process and reflection enabled the TCs to examine the challenges they encountered, explore the sources of tension creating those challenges, and consider multiple perspectives as they sought to mediate those challenges. The following sections discuss the experiences of four participants to dramatize the ways in which the problem-posing framework supports the development of TCs critical thinking abilities by embracing dissonance and tension. Each of these stories offers insight into the ways teacher educators can support TCs' abilities to engage in critical thinking and overcome the challenges they encounter as they learn to teach in contemporary schools.

Teresa: Confinement and Standardization

Teresa (all names are pseudonyms) began her problem-posing session by describing her concern about the high levels of anxiety her students were exhibiting related the grades. She shared that she was "over achiever in high school" who "who wanted to do well" on every assignment. Teresa could identify with the stress her students were feeling, particularly when it came to the grades they were receiving on the timed-writing practice essays that were the main form of writing instruction in her CT's classroom. Teresa told the group that she believed that anxiety was one of the reasons why the essays her students were producing were lacking in detail and higher-level connections to the texts they were reading. She described noticing the familiar fears and doubts she had experienced herself as she talked with her students about their writing.

Teresa's reflection noted that prior to her problem-posing session she "had been feeling really confined by certain assignments when teaching the Honors English 10 class and a little overwhelmed by the pressure of fully preparing [the students] and adhering to [her cooperating teacher's] schedule." One important source of this feeling of "confinement" was the level of anxiety the students had about the required timed writing assignments. These essays were standardized prompts for essays analyzing a particular text that prepared students for the high-stakes writing assessment at the end of the semester. Teresa asked the group for advice about how to reduce the anxiety the students were encountering. During her seminar, the group encouraged Teresa to ask her CT if she could alter the practices around these essays and implement a processed-based, feedback-centered approach to writing. The group's suggestion helped Teresa increase her knowledge of her particular context by ascertaining her CT's comfort level with deviating from her typical practices.

After some discussion with her CT, Teresa was able to apply her context-specific knowledge about her CT's comfort level with deviating from the current practice and make some incremental changes. While her CT did not allow her to move away from timed-writing test preparation activities, Teresa was allowed to alter the format for grading and giving feedback on these essays, thus creating some balance in the tension between her CT's preferred approach and her own. She implemented a new practice that included handing the essays back with feedback but without a grade. Based on written feedback and individual conferences with Teresa, the students revised their essays. The practice Teresa implemented fell into two of the coding categories: *Reducing the focus on grades* and *developing relationships with students*. The changes she made to her practice were helpful for some of what Teresa called the "highest-anxiety" students. For example, her reflection recounts her discussion with one student who said, "No teacher has ever just come up and helped me with my anxiety like you did." Her efforts yielded progress, but not all of the students' fears were fully allayed by the absence of a grade. Teresa's reflection noted that her new approach was not a silver bullet because anxiety was still an issue, and students' essays were still discussing the texts at a superficial level.

Examining Teresa's ability to evaluate her instructional decisions and considering the ways reflection helped her achieve her goals (or not) brings the value of these reflections as a tool for the development of critical thinking into focus. Through reflection, Teresa was able to evaluate her own actions (Uzuntiryaki-Kondakci & Çapa-Aydin, 2013) and consider how they supported growth among some, but not all, students. Reflection created a mechanism for her to consider the context of her teaching, take stock of the progress students made towards her instructional goals, and interrogate her practice in order to evaluate effectiveness of her decisions. The students' revised essays did not produce the improvement in moving beyond summary to analysis that Teresa and her CT were hoping to see.

The problem-posing process and reflection helped Teresa refine her practice. She decided to enact an activity she called "honesty hour" in a subsequent class period, which she described in the latter portion of her reflection. This activity consisted of passing out notecards on which students would anonymously write how much of the text they had read independently (as assigned) prior to writing their essays. From these notecards, Teresa learned that most students had read less than half of the text, and they had relied on plot summaries (e.g. SparkNotes) to inform their writing. She responded by dramatically altering her approach to the next text the students were required to read in preparation for the next timed writing assignment.

Across the courses Teresa took in the program prior to student teaching, instructors cautioned against relying on independent reading outside of class as the main means of having students engage with texts. Variations amongst students' reading abilities and demands on students' time (e.g. jobs; taking care of siblings; extra-curricular activities) were among the rationales provided for employing a mix of in-class and out-of-class reading. Teresa's peers reminded her of this suggestion during her problem-posing seminar. In line with these suggestions, Teresa structured the subsequent unit to include in-class reading where she could assist the students in making personal connections to the text in an effort to reduce the focus on simple plot recall and scaffold students' abilities to explore themes in the text. Teresa's reflection discussed these alterations to her instructional practice, and she noted that students made "some really cool connections between the scenes [in the play] and even to themes" in the text. She was pleased to see that her efforts to make connections between the text overt during reading activities paid off in the next round of essays. Dialogue with her peers, her CT, and focused reflection on her practice enabled Teresa to engage in critical thinking about her instructional context and practices that resulted in progress towards her larger instructional goals.

Shannon: The Value of Competing Perspectives

In spite of the TCs' efforts to begin their planning processes with a focus on making connections to students' lives, the struggle to find ways to successfully engage students each day was a common thread across the data set. Like Teresa, Shannon was struggling to get her students to sustain their focus during writing activities and produce writing that met the standard of quality she and her CT were hoping to see. Preparing for the dialogue in her problem-posing seminar created a mechanism for Shannon to reflect upon and evaluate the instructional practices she had employed so far in the semester. She opened her problem-posing session by describing the variety of approaches she had already implemented to address her students' lack of enthusiasm for writing, such as writing for shorter and longer periods of time and offering clear reminders of the ways she was using essential questions to try to bring writing topics into dialogue with students' lives.

Unlike Teresa's students, the students in Shannon classroom were not motivated by a desire to get an "A" on their papers. She described an "attitude amongst the group that they will 'get the grade they get' no matter what they do" as she presented her problem to the group. Shannon and Teresa were both working in contexts where students were required to compose an essay each week in preparation for a standardized writing test. With so much focus on test preparation, it is not surprising to see students who are enculturated to see writing as something that is produced just to be graded. Shannon believed this to be particularly counter-productive because the majority of her students were, unlike Teresa's students, not motivated by grades at all. With this group, grades were not a carrot or a stick. They were just something assigned by a teacher. Shannon's class was emblematic of the struggles of many of the participants face

related to employing instructional approaches that could motivate students: a fatalistic view of grades as disconnected from any concrete reason to engage. Shannon was not having any success in her efforts to address this issue, which was why she chose to bring this problem to the group.

Shannon's reflection focused on evaluating her efforts to implement the suggestions she received from the group related to attempting to alter the students' perceptions of grades and providing a concrete scaffold for the weekly essays. The first portion of her reflection most clearly connected with the theme of *increasing the focus on feedback and reducing the focus on grades*. Based on suggestions from her peers, Shannon had introduced a new "slush" grading system that allowed her to assign points based on the ideas included in a draft, instead of focusing as much on mechanics. This system allowed her to assign "a grade" for an essay that fell in the formative assessment category because it could be revised for a new grade—thus staying true to the spirit of formative assessment being on-going. This also reduced the focus on grades in her dialogue with the students because she presented these grades as things that could, indeed, be changed instead of simply assigned. In her reflection, she noted that the students were "very motivated by feedback" so she increased the amount of feedback she was giving on each essay. Shannon's reflection made it clear that shifting the focus from grading to feedback provided some small gains in engagement, but these gains were not sufficient. The students were still producing writing that lacked sufficient detail.

The process of reflecting on the effectiveness the "slush" grading system made it clear to Shannon that she needed to make further alterations to her practice. As part of this reflection, though, she had to consider the realities of her instructional context. Her CT was not open to reducing the number of timed-writing essays that the students would write and taking a more processed-based approach that would involve more drafts of fewer essays. There was no way to take the different-essay-each-week test preparation out of the equation, so she had to find ways to create more sustained engagement as students wrote their weekly essays. Generating a solution to this conundrum required critical thought. It was clear in Shannon's reflection that part of this process included continuing to think about how to integrate suggestions that she received during her problem-posing session that she did not initially implement.

During her session, the group had asked clarifying questions to get a sense of how she was assigning the timed-writing prompts. It became clear that Shannon was not providing sufficient scaffolding for the tasks. In line with her CT's practice, she was simply giving the students the prompts and instructing them to start writing. One of her peers had offered Shannon a suggestion for providing additional scaffolding to support students as they wrote in response to the weekly essay prompts. This suggestion included giving students additional questions and ideas to respond to as they wrote—essentially breaking the prompt down further to give students a larger menu of things to consider while writing. It is important to note that this was a suggestion that her CT was willing to allow Shannon to adopt. Shannon, however, was not eager to give it a try.

In her reflection, Shannon wrote, "I actually hate this suggestion but understand it to be important scaffolding for students who need it." Her reluctance to implement this suggestion was related to a desire to not make things too simplistic. She wrote that she "didn't need a lot of scaffolding to start writing open prompts as a highschooler." This admission in her reflection was key indicator of Shannon employing two fundamental elements of critical thinking: metacognition and self-regulation. Shannon was able to recognize that her own preferences as a learner would limit her ability to support students if she only taught in ways that she preferred as a student. Reflection upon her preferences and her practice functioned as a tool that supported Shannon's ability to engage in self-regulation and incorporate instructional strategies that would support students with different learning preferences.

Shannon's ability to recognize and address the implications of her own preferences was a marker of bringing two competing ideologies or instructional approaches into dialogue with one another. Her own preferences as a student made such detailed scaffolding seem counter-productive, cumbersome, and unnecessary as someone who "love[s] creative writing with all of [her] heart." Here, Shannon's own learning preferences risked becoming a centripetal force that did not allow her to account for the centrifugal forces of individual student's diverse preferences and needs. In the closing section of her reflection, Shannon noted that she had found this experience helpful because it helped her start "thinking about ideas for these problems in new ways." Through reflection, Shannon was able to engage in metacognition and self-regulation. She was able to recognize that not all students share her love of writing or ability to write with similar ease. After some discussion with her CT, Shannon began providing more scaffolding. While she had to continue assigning the weekly time-writing essays, Shannon was able provide additional scaffolding as she did so. She found that providing heavier scaffolding helped her support, motivate, and engage students who struggled to find things to say in their essays. The result was incremental improvement in the quality of student writing. She noted that this process helped her motivate students who "had written 'everything they could think of'" and encourage them to keep thinking and writing. Thus, Shannon was able to draw upon the suggestions of her peers and her reflection upon her practice to mediate the tensions that were inhibiting her progress towards her instructional goals. Reflection enabled her to consider the realities of her context and find solutions that her CT would endorse. More importantly, perhaps, reflection made it possible for Shannon to see how her own perspectives and preferences were inhibiting her abilities to respond to the needs of individual students.

Lisa: Recognizing Areas for Growth

Lisa began her problem-posing session by sharing her desire to teach grammar in a context that would be meaningful to the students in her classroom. She wanted to put the practice of using student writing as tool for grammar instruction (Smagorinsky, 2008), which she had studied during her coursework, into practice. This approach resonated with her desire to place the students at the center of her planning and instruction. It was clear from the start of Lisa's session that she was working a context where she had the support of her CT. Unlike the experiences of many of her peers, Lisa's CT was supportive of instructional approaches that deviated from standardized instruction (Stewart, 2018). Her CT was open to alternatives to scripted grammar lessons even though it meant spending more time on grammar instruction than she had in previous semesters. However, Lisa was frustrated because the students appeared to be "extremely disinterested in writing" even when she offered writing prompts that were designed to be concretely connected to students' personal lives by making specific connections between the content and students' lives outside of school. Engagement in writing instruction was a common challenge across the data set as both Teresa and Shannon's stories demonstrated.

Pausing to note the challenges she was facing in her student teaching classroom and the act of bringing those challenges to the group supported the development of Lisa's critical thinking skills. This structure provided a mechanism for Lisa to work at a metacognitive level, evaluate her practice, and seek solutions. Lisa believed that designing creative activities would be a particularly important means of addressing this issue, and her CT was open to teaching in creative ways that allowed Lisa to design writing prompts that asked students to things like identifying a hero in their own lives while reading texts with thematic connections to heroes. However, in the opening section of her reflection Lisa allowed that "building

creative activities has always been a task that has troubled me" in the past. She was eager to receive input from her peers in her problem-posing session.

Lisa lamented that her students often simply turned in nothing when given a writing prompt as she shared her challenge with the group. In one example she offered to give a sense of the quality and quantity of work students were producing, Lisa noted that only nine of nineteen students had turned in a paper in response to a prompt that asked students to discuss what makes someone a hero and who is a someone in their lives that they consider a hero. The prompt was connected to a graphic novel the students were reading as whole class that focused on the concept of heroes. As one of her artifacts, Lisa shared "one of the longer entries" that was turned in. This paper was only three sentences even though she had asked students to write at least half a page. Chief among her frustrations was that her planned grammar lessons depended upon students producing texts that could be used to explore grammatical concepts. Much of the discussion around Lisa's challenge included suggestions from the group that encouraged her to think about the amount of scaffolding she was providing for students when assigning a piece of writing, which indexed the theme of *intentionally designing instruction to include scaffolds that create connections between content and students' experiences*.

Lisa's reflection focused on her realization that she had, like Shannon, been providing very little in terms of scaffolding when she assigned a piece of writing. She recognized that she was giving "minimal instruction and simply putting prompts on the board." During the problem-posing, Carrie suggested providing exemplar texts for each prompt. Reflecting upon Carrie's advice helped Lisa realize that she "needs to start providing more specific instruction as well as provide a personally written example as a method of scaffolding" for the students. Lisa's reflection indexes her development of the ability to critically examine her practice and consider ways that altering her practice would help her achieve her instructional goals.

Lisa's need for support in the area of creative approaches was also addressed in her session, and the impact of the suggestions from her peers was evident in her reflection. Nancy encouraged Lisa to create a prompt where students would write from the perspective of one of the characters in the graphic novel—a fan-fiction style writing assignment that would allow students to select a character they are interested in and create an alternative story. Lisa blended the advice she received from Carrie and Nancy. She created a detailed prompt and shared an example she had written. Lisa reflected that this approach supported her efforts to increase the quality of the students' writing:

When I looked over their writing, I saw that there was not only a larger quantity of sentences per answer, but the quality of student writing improved greatly. Students were finally getting into what they were writing. I also created my own version of what the students were writing as another method of scaffolding. I think that by combing these two processes I was able to improve the quality of student writing.

The problem-posing and reflection processes supported Lisa's ability to develop the skills needed to monitor her own practice and evaluate her efforts to support students as they work towards the instructional goals she sets for them.

Lisa's story indexes the affordances of healthy tension between her philosophical approach to teaching and learning and the context of her placement classroom. Grammar and writing instruction are crucial elements for preparing students to success in and beyond standardized classrooms, yet Lisa had the freedom to work toward preparing the students in ways that aligned with her preferred instructional

methods, which were anything but standardized. In many ways, Lisa's struggles are emblematic of a best-case scenario for a TC. She was working with a CT who was open to her ideas, which allowed Lisa to work toward curricular goals in ways that supported student learning though engagement. She also had the support of a community of practice that supported her development of the critical thinking skills necessary to evaluate and improve her practice. Like that of the other participants, Lisa's incremental success represents progress towards effective practice. She had found ways to improve her craft by further developing the ability to think critically and evaluate her practice.

Tina: Development Even in Harmonious Contexts

As the challenges Lisa encountered illustrate, a harmonious student teaching context does not guarantee an easy road to accomplishing instructional goals. Difficulty in helping students see the relevance and value of the content was a challenge for all of the participants, even in the case of Tina who also had a supportive CT with a compatible philosophical approach to teaching and learning. Tina began her problem-posing session by sharing her frustration with the large number of students who were at risk of failing one of her classes. She noted that these students would consistently "interact kindly with her" and would "share their opinions and thoughts in class" on most days. However, ten out of the nineteen students in the class were failing because they routinely failed to turn in writing assignments. As she posed her problem to the group, Tina noted that they "never seem upset about their grades" and the majority of the students regularly declined opportunities to make up work that was supposed to be been completed in class for homework.

As an artifact for her problem-posing session, she shared what one student wrote when given the opportunity finish classwork at home. The student took the opportunity to turn something in, but did not respond to the prompt assigned. Instead the student wrote:

I will never do homework or schoolwork because I feel like it's all a waste of my time. Also, I don't like people telling me what to do and when to do it. Teenagers don't look at school as a learning center either, they look at it as hell and a prison, brick on the outside with concrete walls on the inside. No windows to look out of, annoying people, work always being thrown in your face. School isn't for me and there is A LOT of stuff I'd rather be doing than sitting in this dumb classroom.

Tina was understandably distressed by this student's response. Not because it was such an overt critique of schools and her classroom by association. In her session and her reflection, Tina noted that she viewed such honesty in the students' writing as an indicator of the positive relationships she had built with them. In line with the programmatic concept of flattening hierarchies, Tina saw this kind of dialogue as productive. Yet it was still distressing because it seemed to capture what she saw as the sentiments of many of the students she was working with. The quality of the student's writing (there are some well-turned, if stinging phrases, in it after all), and the validity of the student's perspective would be an interesting exploration in itself. The ways that schools are leading students away from themselves Jensen (2004) is a topic of great importance that this chapter can't address adequately. However, it is a concept that dialogic approaches to teaching seek to address. Thus, this student's response caused Tina to feel like her efforts to teach in ways that respond to students' needs were failing.

In her reflection, Tina voiced her sense that something needed to change as she wrote:

Sadly enough, a big part of this problem-posing seminar was realizing that certain students want to fail, plan on failing, and will fail. I had students that had the greatest attitudes in the world, would engage with me in discussion constantly, were loving and kind, and would tell me wholeheartedly that they wanted to fail this class, take it in the summer, and receive their GED next year instead of taking English 12. I had students that were counting down the days until their 18th birthday so that they could drop out all together and pursue welding full time. Interestingly enough, those were some of my favorite students. They were not grade motivated at all, and that might have frustrated me, but it meant that I just had to work harder to make the material interesting enough for them to pay attention and want to engage with the class.

She was in tune with the need to do something differently from the start of her session. She was hungry for suggestions about how to improve her practice to try to better serve these students. Tina had implored the group to help her figure out how to "encourage her students to care about their grades" as the main framing question for her session.

In her reflection, Tina noted that she received useful suggestions from the group, such as creating individual "contracts" for each student that would help them know what they were missing and outline a clear set of expectations for making up that work. The heart of this suggestion was to take the focus off of the grades themselves and create a scenario where she could engage in a meaningful dialogue with each student about his or her progress that would capitalize on the work she had already done to build relationships with them. Her goal was to help them see that she cared about them as individuals, which, she hoped, would motivate them and help find a reason to engage. Her work towards this goal connected with the thematic categories of *developing relationships with students to inform instructional practices*; and implementing instructional practices that *create connections between content and students' experiences*.

Tina recognized that the challenges she was encountering were at least in part related to her approach to grading policies. In her reflection, she wrote:

As a student teacher, I was pretty lenient on late work. This is in part because I did not realize how much of an issue it would be prior to teaching, so I did not spend enough time addressing it; it was in part because my CT was lenient, and I adopted many of his practices when I first started; it was in part because I found myself growing abnormally attached to the kids and becoming a pushover. I can be honest about this flaw in my teaching, and my CT and I discussed it at length.

There are two important concepts that stand out in this passage from Tina's reflection.

First, the reflection demonstrates Tina's development of the ability to evaluate the effectiveness of the policies and practices she had been implementing. She was able to recognize "a flaw" in her practice, which was to have an overly lax stance on deadlines yet a focus on grades as a chief means of account- ability. Tina was able to think at a meta-cognitive level and consider the things that were guiding her decisions: Her desire to empathize with her students and the practices modeled by her CT were keeping her from setting clear expectations and doing more than assigning a zero in the gradebook to instantiate those expectations. Tina noted that after her problem-posing session and her initial reflection upon the dialogue in that session she began "physically going to my students' study halls and lunches, giving them a copy of the assignment, a pencil, sitting down with them, and asking them to do it *right now... Get this done.*" As she recounted in her reflection, this practice yielded results:

They knew that it took a lot of effort out of my time to find them and ask them to do the work, and they seemed to appreciate the time I put into them. This was my most successful practice of getting my un-motivated and chronically absent students to turn in work. I always did it good-naturedly; we laughed a lot throughout this practice.

Instead of relying on the stick of the gradebook, Tina began employing the power of the relationships she developed with her students to connect with them personally. She began to meet with them individually in school when she knew they had the time to do the work. She had evaluated the effectiveness of her previous practice, realized it was not yielding the desired results, and altered her approach in a way that was consistent with her larger philosophy of teaching.

A second important concept that Tina's reflection brought to the fore is that it is not always dissonance that causes problems in our practice. Harmony can be a source of trouble as well. Tina's CT's laid-back approach to deadlines and use of the gradebook as the key source of accountability was harmonizing with Tina's initial practice. Without a different perspective on how to address this problem, Tina was not being exposed to alternative approaches. The suggestions offered by her peers provided alternative ideas on how to proceed. Engaging in reflection related to those suggestions and her practice created a mechanism for Tina to engage in dialogue with alternative perspectives so that she might engage in the metacognitive activities required to monitor her practice and make adjustments that would help address the problems she was encountering.

Across the data set, participants' reflections discussed the effectiveness of the problem-posing framework. As discussed earlier, Shannon's experiences helped her begin to look at her challenges in new ways. Similarly, Lisa noted that the "cohort really helped [her] begin to think of creative methods" to support her goals of improving student writing and engagement. The discussion in Lisa's problem-posing session stimulated her continued thought about ways to continue to grow. Teresa noted that the "cohort really knocked [the] discussion out of the park." The suggestions Teresa received from the group helped her implement new instructional approaches, which she believed yielded results. The incremental improvements each of the participants saw increased their confidence and senses of self-efficacy. Uzuntiryaki-Kondakci and Çapa-Aydin (2013) argued that individuals with high self-efficacy are more likely to utilize critical thinking to overcome a problem" than those with a low sense of self-efficacy (p. 667). Bandura (1982) reported that "self-efficacious individuals will intensify and, if necessary, try to change the environment (p. 141).

In contemporary school contexts that can often cause teachers to feel powerless and out of control of their environment (Fecho, 2011), teachers who have high self-efficacy and critical thinking skills can become advocates for changes that can alter instructional contexts to serve the diverse needs of students in standardized classrooms. These kinds of teachers can begin to find ways to work within the standardized structures of contemporary schools that lead students away from themselves (Jensen, 2004) and alter those contexts in ways that help students develop the skills they need to succeed in all areas of their personal, civic, and economic lives.

IMPLICATIONS

Each of the participants in this study found ways to address the challenges they encountered and begin to alter their practices to make progress towards their philosophical and instructional goals. It would be unrealistic to expect and disingenuous to suggest that these problem-posing sessions and reflections brought the participants to a neat and tidy arrival at the pot of gold at the end of the learning to teach rainbow. The process of learning to teach is, after all, a twisting path (Smagorinsky, Rhym, & Moore, 2013) that is more of a journey than a destination. Student teaching is but the first step in learning to apply concepts studied during university teacher preparation programs to working in the field. Research consistently suggests "that it takes time to develop and refine teaching practice that is highly effective" (Van Zandt Allen, 2013, p. 77). However, the participants' reflections suggest that scaffolded, collaborative discussion and focused written reflections provide a mechanism for TCs to develop the critical thinking skills needed to mediate the problems they encounter during student teaching and make incremental progress towards working through them to refine their practice.

The discussions during the problem-posing seminars and the subsequent reflections created conditions for TCs to wrest new meaning from both the harmony and dissonance they encountered during student teaching that created tension as they worked to enact student-centered approaches to teaching in contemporary, standardized school contexts. Participants who encountered resistance from their CTs to practices that deviated from scripted instruction were able to receive the support needed to make sense of their local contexts and figure out how to alter their practice in ways that would meet the needs of their local school context without abandoning their own closely-held beliefs about effective teaching. Of similar importance, participants whose school contexts allowed more freedom and whose CTs worked from similar philosophical perspectives also received support as they encountered persistent problems with engagement that their current philosophical approaches and practices were not solving.

The participants' experiences underscore the importance of being open to learning from both harmony and dissonance. Representative of the experiences of participants across the data set, Teresa's story highlights the ways competing ideologies and school reforms can create problems for teachers. The encroachment of standardized curricula and high-stakes test that push teachers towards focusing on rote learning and away from the higher-order creative thinking skills that will prepare students for participation in rapidly changing aspects of their social, work, and civic lives in the 21st century can be a ready source of dissonance.

Harmony among philosophical and practical approaches can be just as problematic. Among others in the data set, Tina and Lisa's stories demonstrate the danger posed by a lack of diversity of voices and ideas about how to best serve students' needs. Elements of principled practice (Applebee, 1986) that have become ossified "best practices" to be implemented without regard to their utility to best serve the students in each classroom must be critically examined. As Fecho (2004) argued, "there can be no best practice" (p. 4). As teachers, "our practice is in constant flux because the world in which we teach is also in constant flux" (p .4). Teachers cannot, however, respond to the changes in their environments without developing the ability to think critically about their instructional contexts and practices.

The ability to think critically can be nurtured and developed in teacher education programs by dialogue within a community of practice that provides novice teachers with opportunities to attend to both harmony and dissonance. Scaffolded, collaborative dialogue can help TCs develop the ability to notice, discuss, and critically examine both the challenges they are encountering and elements of principled practice (Applebee, 1986) that they believe best serve their students. By implementing a problem-posing framework, teacher educators help TCs develop the ability to think critically through self-monitoring, which is essential to critical reflection (Hatton & Smith, 1995). Critically evaluating one's craft requires engagement in reflective practice, which is a fundamental part of being an effective practitioner in any field Schön (1987). Ensuring novice teachers begin their careers with experience in engaging in reflection is one important way teacher educators can support critical thinking and prepare them to navigate future challenges. By engaging in focused reflection during student teaching, TCs can form habits that will help them examine their own practice, implement changes to their practice, and evaluate the effectiveness of those changes in the future.

Suggestions for Teacher Education

This study was conducted in an English education program that self-consciously prepares students to engage in dialogic teaching practices in spite of the challenges they present to teachers working in standardized schools. A guiding principle of the program is helping TCs develop the ability to think critically and reconcile competing ideologies in order to best serve the needs of their students. That means that the standards and high-stakes tests they serve cannot be ignored, which certainly complicates the process of learning to teach from a dialogic stance. To ameliorate this complication, the problem-posing seminars and the reflections functioned as concrete activities that were designed to help the TCs develop pedagogical tools that align with their theoretical orientations and their local contexts. The activities, however, are not content-specific, and they can be applied in programs with a wide range of philosophical orientations.

Regardless of the content area or philosophical orientation of a teacher education program, such activities are an important part of ensuring that one's theoretical orientation does not "fade in the immediate rush and tumble of the school day" (Smagorinsky, Ryhm, & Moore, 2013, p. 179). By creating opportunities for TCs to notice, embrace, and engage in dialogue about the challenges they encounter as they are learning to teach in any content area, teacher educators can create opportunities for TCs to develop the critical thinking abilities that will sustain their philosophical approaches to teaching and give them the confidence to call them into question. Doing so, however, requires making collaborative problem solving and reflection a regular feature of teacher education courses.

Creating conditions for TCs to engage in these activities during their field experiences can be supported in coursework prior to the student teaching semester. Educational foundations courses that ask students to craft a philosophy of teaching can help them begin to develop an awareness of what they see as the fundamental elements of their practice. In early field experience courses, students can observe practicing teachers and take note of the ways the instructional practices implemented by those teachers align (or not) with their own beliefs about effective teaching. Those points of alignment or departure can serve as fodder for written reflections and/or in-class dialogue that can be an incubator for critical thought about the students' evolving philosophies of teaching. With this groundwork in place, the final methods course or seminar that runs concurrently with student teaching can become a place for TCs to identify and share their own struggles with the larger group. Teacher educators might consider using

the protocol (see Appendix) from this study as a framework to create a tool that meets the needs of their own programs. It is, after all, just one example of principled practice that should not be reified, which can support problem-posing, dialogue, and reflection. There are many ways teacher educators could alter this process to provide TCs in their courses with opportunities to explore their own experiences and develop critical thinking skills that will allow them to teach in ways that are responsive to the ever-evolving needs of the students in their own classrooms.

ACKNOWLEDGMENT

REFERENCES

Anagnostopoulos, D., Smith, E. R., & Basmadjian, K. G. (2007). Bridging the university-school divide: Horizontal expertise and the "two-worlds pitfall.". *Journal of Teacher Education*, *58*(2), 138–152. doi:10.1177/0022487106297841

Applebee, A. N. (1986). Musings…: Principled practice. *Research in the Teaching of English*, *20*(1), 5–7.

Au, W. (2011). *Critical curriculum studies: Education, consciousness, and the politics of knowing*. New York: Routledge.

Bakhtin, M. M. (1981). Discourse in the novel (C. Emerson & M. Holquist, Trans.). In HolquistM. (Ed.), *The dialogic imagination: Four essays by M. M. Bakhtin* (pp. 259–422). Austin, TX: University of Texas Press.

Bandura, A. (1982). Self-efficacy mechanism in human agency. *The American Psychologist*, *37*(2), 122–147. doi:10.1037/0003-066X.37.2.122

Barnes, M. E., & Smagorinsky, P. (2016). What English/language arts teacher candidates learn during coursework and practica: A study of three teacher education programs. *Journal of Teacher Education*, *67*(4), 338–355. doi:10.1177/0022487116653661

Berliner, D. C., & Biddle, B. J. (1995). *The manufactured crisis: Myths, fraud, and the attack on America's public schools*. New York, NY: Addison-Wesley.

Boggs, G. L., Stewart, T. T., & Janksy, T. A. (2018). Economic relevance and planning for literacy instruction: Reconciling competing ideologies. *Journal of Adolescent & Adult Literacy*, *61*(5), 553–565. doi:10.1002/jaal.671

Boud, D., Keogh, R., & Walker, D. (1985). Promoting reflection in learning: A model. In *Reflection: Turning experience into learning*. East Brunswick, NJ: Nichols. doi:10.4324/9781315059051

Bourke, T., Lidstone, J., & Ryan, M. (2015). Schooling teachers: Professionalism or disciplinary power? *Educational Philosophy and Theory*, *47*(1), 84–100. doi:10.1080/00131857.2013.839374

Cuban, L. (2009). *Hugging the middle: How teachers teach in an era of testing and accountability*. New York, NY: Teachers College Press.

Dierking, R. C., & Fox, R. F. (2012). "Changing the way I teach": Building teacher knowledge, confidence, and autonomy. *Journal of Teacher Education*, *69*(2), 129–144. doi:10.1177/0022487112462893

Facione, P. A. (2000). The disposition toward critical thinking: Its character, measurement, and relationship to critical thinking skill. *lnformal Logic, 20*(1), 61-84.

Fecho, B. (2004). *"Is this English?": Race, language, and culture in the classroom*. New York, NY: Teachers College Press.

Fecho, B. (2011). *Teaching for the students: Habits of heart, mind, and practice in the engaged classroom*. New York, NY: Teachers College Press.

Fecho, B., Mallozzi, C. A., & Schultz, K. (2007). Policy and adolescent literacy. In B. Guzzetti (Ed.), Literacy for the new millennium: Vol. 3. Adolescent literacy (pp. 37-52). Westport, CT: Praeger.

Feiman-Nemser, S., & Buchmann, M. (1985). Pitfalls of experience in teacher preparation. *Teachers College Record*, *87*(1), 53–65.

Gallimore, R., & Tharp, R. G. (1990). Teaching mind and society: A theory of education in schooling. In L. Moll (Ed.), *Vygotsky and education: Instructional implications and applications of sociohistorical psychology* (pp. 175–205). Cambridge, UK: Cambridge University Press. doi:10.1017/CBO9781139173674.009

Goldstein, D. (2014). *The teacher wars: A history of America's most embattled profession*. New York, NY: Doubleday.

Hatton, N., & Smith, D. (1995). Reflection in teacher education: Towards definition and implementation. *Teaching and Teacher Education*, *11*(1), 33–49. doi:10.1016/0742-051X(94)00012-U

Jensen, D. (2004). *Walking on water: Reading, writing, and revolution*. White River Junction, VT: Chelsea Green.

Kincheloe, J. (1990). *Teachers as researchers: Qualitative inquiry as a path to empowerment*. New York, NY: Falmer.

Leonardatos, H., & Zahedi, K. (2014). Accountability and "Racing to the Top" in New York State: A report from the frontlines. *Teachers College Record*, *116*, 1–23. PMID:26120219

Leu, D. J. Jr, & Kinzer, C. K. (2000). The convergence of literacy instruction with networked technologies for information and communication. *Reading Research Quarterly*, *35*(1), 108–127. doi:10.1598/RRQ.35.1.8

Maxwell, J. A. (2005). *Qualitative research design: An interactive approach* (2nd ed.). Thousand Oaks, CA: Sage.

Merriam, S. B. (1998). *Case study research in education: A qualitative approach*. San Francisco, CA: Jossey-Bass.

Meyer, T., & Sawyer, M. (2006). Cultivating an inquiry stance in English education: Rethinking the student teaching seminar. *English Education*, *39*(1), 46–71.

Nystrand, M. (2006). Research on the role of classroom discourse as it affects reading comprehension. *Research in the Teaching of English*, *40*(4), 392–412.

Nystrand, M., & Gamoran, A. (1991). Instructional discourse, student engagement, and literature achievement. *Research in the Teaching of English*, *25*(3), 261–290.

Ravitch, D. (2010). *The death and life of the great American school system: How testing and choice are undermining education*. New York, NY: Basic Books.

Reissman, C. K. (2008). *Narrative methods for the human sciences*. Thousand Oaks, CA: Sage.

Resnick, M. (2017). *Lifelong kindergarten: Cultivating creativity through projects, passion, peers, and play*. Cambridge, MA: MIT Press.

Schön, D. A. (1987). *Educating the reflective practitioner*. San Francisco, CA: Jossey-Bass.

Slater, G. B., & Griggs, B. G. (2015). Standardization and subjections: An autonomist critique of neo-liberal school reform. *Review of Education, Pedagogy & Cultural Studies*, *37*(5), 438–459. doi:10.1080/10714413.2015.1091259

Smagorinsky, P. (2008). *Teaching English by design: How to create and carry out instructional units*. Portsmouth, NH: Heinemann.

Smagorinsky, P., Jakubiak, C., & Moore, C. (2008). Student teaching in the contact zone: Learning to teach amid multiple interests in a vocational English class. *Journal of Teacher Education*, *59*(5), 442–454. doi:10.1177/0022487108324329

Smagorinsky, P., Ryhm, D., & Moore, C. P. (2013). Competing centers of gravity: A beginning teacher's socialization process within conflictual settings. *English Education*, *45*(2), 147–183.

Smargorinsky, P. (2018). Literacy in teacher education: "It's the context, stupid. *Journal of Literacy Research*, *50*(3), 281–303. doi:10.1177/1086296X18784692

Stewart, T. T. (2010). A dialogic pedagogy: Looking to Mikhail Bakhtin for alternatives to standards period teaching practices. *Critical Education*, *1*(6), 1–20.

Stewart, T. T. (2011). Transactional analysis: Conceptualizing a framework for illuminating human experience. *International Journal of Qualitative Methods*, *10*(3), 282–295. doi:10.1177/160940691101000307

Stewart, T. T. (2012). English teachers, administrators, and dialogue: Transcending the asymmetry of power in the discourse of educational policy. *English Education*, *44*(4), 375–393.

Stewart, T. T. (2018). Dialogue, inquiry, changing roles, and the dialogical self. In F. Meijers & H. Hermans (Eds.), *The dialogical self in education. Cultural psychology of education* (Vol. 5, pp. 35–47). Cham, Switzerland: Springer. doi:10.1007/978-3-319-62861-5_3

Stewart, T. T., & Boggs, G. L. (2016). Emerging dialogic structures in education reform: An analysis of urban teachers' online compositions. *Dialogic Pedagogy: An International Online Journal*, *4*, 142–161.

Uzuntiryaki-Kondakci, E., & Çapa-Aydin, Y. (2013). Predicting critical thinking skills of university students through metacognitive self-regulation skills and chemistry self-efficacy. *Educational Sciences: Theory and Practice*, *13*(1), 666–670.

Van Zandt Allen, L. (2013). The impact of induction support on teacher development, teacher retention, and the teacher quality issue. *Teacher Education Quarterly*, *40*(3), 75–92.

ADDITIONAL READING

Britzman, D. P. (2003). *Practice makes practice: A critical study of learning to teach* (Rev. ed.). Albany: State University of New York Press.

Fecho, B., & Botzakis, S. (2007). Feasts of becoming: Imagining a literacy classroom based on dialogic beliefs. *Journal of Adolescent & Adult Literacy*, *50*(7), 548–558. doi:10.1598/JAAL.50.7.4

Hargreaves, A. (2003). *Teaching in the knowledge society: Education in the age of insecurity*. New York, NY: Teachers College Press.

Lipman, P. (2011). *The new political economy of urban education: Neoliberalism, race, and the Right to the City*. New York, NY: Routledge.

Lortie, D. (1975). *Schoolteacher: A sociological study*. London, UK: University of Chicago Press.

Nichols, S. L., & Berliner, D. C. (2007). *Collateral damage: How high stakes testing corrupts America's schools*. Cambridge, MA: Harvard.

Pitzer, H. (2015). Urban teachers engaging in critical talk: Navigating deficit discourse and neoliberal logics. *Journal of Educational Controversy*, *9*(1), 1–16.

Smagorinsky, P. (2015). Speaking out in the public sphere: Why, what, where, and how teachers can enter the fray. *English Journal*, *104*(3), 91–96. PMID:27132343

KEY TERMS AND DEFINITIONS

Centrifugal Forces: Forces that push outward from the center, call ideas into question, and welcome divergent perspectives and ideas.

Centripetal Forces: Forces that pull inward towards a codified center, reify concepts, and seek to silence divergent perspectives and ideas.

Cooperating Teacher (CT): A mentor teacher who hosts a university student during the student teaching semester.

Dialogic Pedagogy: Dialogic pedagogy is an approach to teaching grounded in the work of Russian literary theorist Mikhail Bakhtin that values questioning, examines context, explores multiple perspectives, challenges hierarchical structures, and views learning as a generative act.

No Child Left Behind (NCLB): Legislation passed in 2001 that supported standards-based education reform and expanded the role of the federal government in education by increasing annual testing and created significant changes in education funding models.

Race-to-the-Top (RTT): Legislation passed in 2009 to replace NCLB. Continued to expand the role of the federal government in education and increase changes to education funding models, which included increased privatization of schools.

Standardized Classrooms: This term is used to describe classrooms in which teachers are pressured to employ scripted curricula and pacing guides to prepare students for success on standardized tests, which began to dominate the landscape of U. S. schools as a result of No Child Left Behind and Race-to-the Top legislation.

Teacher Candidate (TC): A university student who is student teaching during his or her final semester of a teacher education program.

APPENDIX

Problem-Posing Protocol

1. Using the template below, the presenter will pose his or her problem for discussion and open the dialogue by sharing the *Framing Questions* and a relevant artifact* (5-7 minutes). *Note: If the artifact is something that can't be easily shared in document form (e.g. a conversation with a parent or student), craft a summary of the experience or conversation.
2. The group will ask any necessary clarifying questions & the presenter will respond briefly (5 minutes).
3. The group uses the framing questions as a structure for helping to identify possible solutions to the problem that has been posed. The presenter takes notes but does not participate in the discussion (20-25 minutes).
4. The presenter summarizes & comments on what he or she heard during the discussion—focusing on key issues and strategies for moving forward (3-5 minutes).
5. The presenter will write a 2-3 page reflection that highlights ways the group has contributed to his or her understanding of the issue. This reflection will describe the presenter's attempts to implement some of these ideas in the weeks following the session. Were they effective? Why? Why not? What did you learn from this process?

Problem Posing Protocol Template

Presenter: _____

Focus Issue:

Explanation: Briefly (3-4 paragraphs) describe the issue that has been troubling you. You might also include some information about how you've attempted to address this issue already.

Context:

Describe the class (e.g. English 9), what you have been reading/studying, and the students in this class (remember to preserve confidentiality). Also include some demographic data about the school and the students in this class.

Framing Questions:

Examples:

*   How can I support my students as I ask them to step out of their comfort zones?
*   How can I get my honors students, who are mostly white, to discuss issues of race as we read *To Kill a Mockingbird*?

Artifact:

Include at least one artifact (e.g. summary of a failed discussion; de-identified student work; classroom diagram; sample assignments).