Working Toward Coherence: Intertwining Practice, Social Justice, and Novice Teacher Development in a Teacher Education Curriculum

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Connecting Theory to Practice

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Abstract

This essay addresses a curricular design for teacher education that endeavors to meaningfully combine practice-based teacher education (PBTE), social justice, and novice teacher development. We describe the curriculum for a one-year teacher education program, embedded in a chronically stressed school district, in which these strands of PBTE, social justice-oriented teaching, and novice teacher development were woven together. The intertwined strands are illustrated with three design choices: a gradual increase of responsibility in fieldwork, focus on specific instructional activities and rehearsal cycles, and close study of dilemmas in teaching. While we highlight certain challenges encountered in implementation, we conclude that novice teachers will be well-started by a coherent curriculum which (1) gradually and strategically increases responsibility as novice teachers develop, (2) emphasizes skillful, responsive use of teaching practices informed by social justice, and (3) grounds the context and purpose of teaching practices in social justice outcomes.

Keywords

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Introduction

The field of teacher education has long grappled with disconnection in the quest to develop an effective curriculum that will support the preparation of new teachers. Teacher educators encounter a divide between the vision and practices taught in university-based courses and the kinds of teaching experiences candidates have in their field-based practica (Cochran-Smith, 2008; Dutro & Cartun, 2016; Krichevsky, 2021). We struggle with distance between courses addressing ways of teaching content ('methods') and those addressing the context of schooling ('foundations') (Bain & Moje, 2012; Beck, 2020; Hammerness, 2006; Souto-Manning & Martell, 2019). We wrestle with applying a one-size-fits-all approach to preparing teachers for all teaching contexts, when in fact teachers' work is highly dependent on student population, subject matter expectations, available instructional resources, and other variables (Dutro & Cartun, 2016; Garcia et al., 2010). Such curricular disconnects result in candidates' disjointed learning experiences, which vacillate between theoretical and applied, and variable preparation of new teachers for their first years in the classroom.

Practice-based teacher education (PBTE) has emerged as a coherent conceptual basis around which an effective teacher education curriculum might be built. Scholars in PBTE describe the utility of *practice* as a curricular concept – one that centers the real work that teachers do, intellectually and actively, in the specific context of a classroom, to help students reach ambitious learning goals (Forzani, 2014). PBTE conceives of teaching practice as being highly contextualized, relational, and involving teachers' knowledge, skill, and judgement, and it situates teaching practice centrally across university- and field-based experiences (Grossman et al., 2019). Practice-based pedagogies enable novices to engage in authentic teaching opportunities, regardless of setting, in a supported, scaffolded manner (Brownell et al., 2019). PBTE certainly holds promise for addressing the longstanding curricular disconnections described above and bringing coherence to the curriculum (Dutro & Cartun, 2016); however, questions remain. Though research indicates the effectiveness of PBTE approaches in building novices' capacity for responsive (rather than mechanical) teaching (Mancenido et al., 2023), whether PBTE supports novices' capacity to teach equitably across diverse students with wide ranging strengths and needs in vastly different instructional contexts remains a topic of lively conversation (e.g., Philip et al., 2019). Further, while practice-based pedagogies may be conceived as a "continuum" to support novice teacher learning (Brownell et al., 2019), how that continuum relates to individual novices' overall development of practice – in other words, the relationship to a broader "continuum of teacher learning" as proposed by Feiman-Nemser (2001) – remains unclear.

In what follows, we embrace practice-based teacher education as a central, powerful curricular concept while also suggesting that PBTE cannot do it all, nor should we expect it to. The field's long-standing concerns about 1) preparing teachers to recognize and act on inequities in education through use of resources and practices to empower students who have been historically underserved in schools (Stacey et al., 2025) and 2) respecting a developmental trajectory for

teacher learning from novice to expert (Deans for Impact, 2016) exist alongside, but not necessarily within, the PBTE framework. In light of this, we describe a curricular design for a one-year Master of Arts in Teaching (MAT) program that brought together the threads of PBTE, social justice teacher education, and novice teacher development. Our design focused on developing teachers who would build competence with high-leverage teaching practices, use those teaching practices responsively to build on the strengths of our partner district's students, and ultimately affect equitable educational outcomes for their students. The question we asked to guide our design work was and is: *How might we organize a practice-based teacher education curriculum that centers social justice and attends to novice teacher development?*

Our Project and Context

Our work on a curricular design for a one-year, school-embedded MAT program began with the notion of committing to a single district, which would enable candidates' daily study, practice, and refinement of ideas from their coursework in the very classrooms in which they worked. Historically across our institution's teacher education programs, district partnerships tend to be episodic, based primarily on availability of and past experiences with cooperating teachers, so the idea of working intensively with one partner district differed from business as usual. Several of us had significant experiences working with previous candidates in the local district that became our partner for the MAT program. Our experiences suggested that the district was committed to improving the experiences of its students, staff, and community and open to innovations that supported this commitment. The district had a single middle school and a single high school located adjacent to each other, so all candidates could be immersed in one of the two buildings and also take courses on site. The student population was large enough that there were multiple sections of most courses at all grade levels, so our candidates would have the opportunity to work with a variety of in-service teachers, regardless of a candidate's certification area.

Our partner district serves a city of approximately 40,000 residents; the residents are majority White with significant African American, multiracial, and Hispanic populations, particularly among the school-aged population. A quarter of the school-aged residents of the city live below the poverty line, and the median income in the city is lower than that of the county, state, or country. The opioid epidemic has affected the city significantly. The district serves roughly 4,000 P-12 students in 10 school buildings. Almost 90% of the students in the district qualify for free or reduced lunch. Ten percent of the students are multilingual learners and 16% of the students are identified as homeless. Approximately 20% of the students receive special education services while 5% are identified as gifted and talented. The high school graduation rate hovers around 75% and roughly a quarter of its graduates pursue post-secondary education.

The district employs approximately 300 teachers who have on average 8 years of teaching experience, compared with a national average of 14.5 years (Taie & Lewis, 2022). 10% of the teachers are on emergency teacher certifications, compared to 3% nationally (National Center for

Education Statistics, 2022). Teacher turnover is high, with roughly 25% of teachers leaving the school district each school year, compared with a national average of 18% of teachers leaving their prior school each school year (National Center for Education Statistics, 2024). In the district, another 25% of teachers each year are first-year certified teachers or teachers earning certification while employed as full-time teachers. Nationally, 7% of teachers have less than 3 years of teaching experience and 3% are earning certification while employed as full-time teachers (National Center for Education Statistics, 2023). As is the case nationally, 2 out of every 3 teachers in the district are women and 9 out of every 10 teachers in the district are White.

The district grappled with several chronic challenges, which we wanted to address through our program design and curriculum: underrepresentation of teachers of color, turnover among teachers, underpreparation of candidates for success in the district, and underachievement of students attending the district's schools. We met several times with school administrators and classroom teachers to describe our ideas and connect with their hopes and concerns. Ultimately, we sought a design which could be effective in supporting two outcomes:

1. All educators (including from the university, the partner schools, and the MAT candidates and graduates) recognize and build on the strengths of our partner district's students.
2. MAT graduates are prepared to work, excel, and remain in so-called "high needs" schools and are effective in achieving equitable educational outcomes for their students.

With these outcomes in mind, we note that preparation and support of educators, while necessary, is insufficient to address our partner district's challenges. We recognize that the chronic defunding of low-income communities, pressures enacted by high-stakes testing and so-called 'accountability' movements, neoliberal discourses popularized in the media, and many other external pressures create and recreate pressures on the district – and call for other kinds of changes, resources, and supports.

Eventually, we entered the district as partners and brought teacher candidates with us. We teacher educators are four White women and one Black man. All five hold terminal degrees. Four taught in districts similar to our partner district. The teacher candidates were predominantly White men and women, with women overrepresented in the group. They were earning secondary teacher certification in world languages, social studies, and English language arts.

Conceptual Framework: Three Strands

As noted above, we as teacher educators recognized recurring disconnections in our daily work: division between university-based coursework and fieldwork in P-12 classrooms, separation between methods and foundations, and lack of attention to the specific teaching contexts in which novice teachers would continue their careers. In effect, these are problems of coherence: "alignment of ideas and learning opportunities" (Grossman et al., 2008, p. 274). We sought to ensure that conceptually and structurally, our program was logical and meaningful for all

stakeholders, including the MAT candidates, the teacher educators and P-12 mentor teachers who supported them, and the students in our partner schools.

Hammerness (2006) juxtaposes coherence with "fragmentation" that has historically plagued university-based teacher education, with its numerous, disparate courses, requirements, checklists, and rubrics, noting that teacher educators often hold coherence as a universally desirable goal. Hammerness cautions against rigidity in seeking coherence, noting that it should be a malleable goal as programs continually revise and adjust. Likewise, Richmond et al. (2019) articulate coherence as a process which various stakeholders "craft and negotiate" around a shared mission. In this sense, coherence "is not a problem to be solved...but a reality to be continuously assessed and negotiated" (p. 188). Following these notions of coherence-as-process, we frame our curriculum design work as coherence-building, a process that began with two years of planning, continued through a year of implementation, and further continues as we presently reflect and revise.

Feiman-Nemser (2001) describes a need for "conceptual coherence" to guide the work of teacher education: "Everything depends on the quality of the ideas that give the program direction and purpose" (p. 1023). Conceptual coherence can benefit all parties involved, including university- and field-based teacher educators who have a shared vision to guide their pedagogical choices (Hammerness, 2006) and teacher candidates who perceive a clear connection between the ideas they learn in university-based classes and the practices they engage with in P-12 school-based field experiences (Grossman et al., 2008). However, "achieving a collective vision is not sufficient," according to Floden et al. (2021, p. 7), who further explain that the field's long fascination with coherence has fallen short because of the very types of disconnects we identified above: division between university-based coursework and fieldwork in P-12 classrooms, separation between methods and foundations, and lack of attention to the particularities of teaching contexts. Buchmann and Floden (1992) caution against coherence as a synonym for consistency, reminding teacher educators that consistency can stifle learning by denying learners the opportunity to grapple with complexity and inconsistency. On the other hand, "coherence allows for many kinds of connectedness, encompassing logic but also including associations of ideas and feelings, intimations of resemblance, conflicts and tensions, previsagements and imaginative leaps" (p. 7). In negotiating coherence, we began by conceptually identifying a "vision" with three curricular strands: practice, social justice, and novice teacher development. We wanted to prepare candidates to practice skillful, responsive teaching within our partner district's schools while attending closely to their development as learners-of-teaching with vastly different backgrounds and experiences related to teaching and schooling. Our curricular work involved braiding these three strands together pedagogically throughout the teacher education program – and *into* the disconnects that inhibit coherence.

Strand 1: Practice

A curricular focus on teaching practice is not a new idea; "practice" has occupied a good deal of time and space in teacher education over the years (Zeichner, 2012). The current emphasis on PBTE is notably marked by the 2010 publication of the NCATE Blue Ribbon Panel Report, which argued for "turning the education of teachers 'upside-down'" (National Council for Accreditation of Teacher Education, 2010, p. 2) so that opportunities for clinical practice are its focus, and subsequently by the AACTE Clinical Practice Commission Report (American Association of Colleges for Teacher Education, 2018), which elaborated on the centrality of clinical practice, "high-leverage practices," and school-based partnerships to novices' learning to teach. And yet, the same AACTE report indicates programmatic efforts to center practice vary widely and wildly as the field grapples with what practice entails and how novices can work on it productively (p. 7). Here, we describe avenues in the practice-based literature that were key in our efforts, especially to address disconnects between foundations and methods and divisions between coursework and fieldwork.

First, PBTE has sought to redefine the content of the teacher education curriculum. Scholars of teaching and teacher education have argued that, given a definition of teaching "as an interactive, clinical practice, one that requires not just knowledge but craft and skill" (Grossman & McDonald, 2008, p. 189), our focus should be on developing novices' competence with what teachers actually do – their actions, underpinned by knowledge and leveraged with judgment. Some scholars have defined this in terms of core practices (Grossman et al., 2009). This focus on core practices endeavors to build teachers' knowledge *for* teaching within their actual performance *of* teaching in specific ways that promote P-12 students' productive learning of content in classrooms (McDonald et al., 2013).

Core practices were first described by Grossman et al. (2009) as those that occur with high frequency in teaching, can be enacted across various curricula and approaches, are learnable by novices and allow them to learn more about students and teaching as they are enacted, maintain the integrity and complexity of teaching, and are research-based with potential to improve student achievement (p. 277). Janssen et al. (2015) note that core practices "are not isolated components but are parts of a broader hierarchical modular system" (p. 141). Defining the "system" in terms of core practices is an effort to comprehensively specify what novices must learn in order to be competent beginning teachers. TeachingWorks' (2025) set of 19 high-leverage practices, which specify an evidence- and practice-based "system," were foundational for our thinking about how to equip novices to teach and to ensure their competence in the particular context of our partner district.

Second, the PBTE literature addresses pedagogies for teacher education in two categories: investigation and enactment. Pedagogies of investigation develop conceptual understanding of teaching but not necessarily teaching skills (Meuwissen & Thomas, 2016). These approaches

might be used to illuminate learning theories, common stages of child development, or student thinking about content; they may be used to examine classroom interactions or features of teaching strategies (Ball & Cohen, 1999) but stop short of novices' active involvement in these. In contrast, pedagogies of enactment emphasize engagement in the active work of teaching. Pedagogies of enactment highlight the complexity of teaching and involve "orchestration of understanding, skill, relationship, and identity to accomplish particular activities with others in specific environments" (Grossman, 2018, p. 4). Both categories have roles in a practice-based teacher education curriculum – and in our curricular design. The work of Grossman et al. (2009) demonstrates how investigation and enactment can be used in tandem to support novice teacher development within a cycle of representations of practice, decomposition of practice, and approximations of practice (Grossman, 2018).

Practice-based pedagogies must address not just how to conduct routines, but teachers' responsiveness to specific contexts and learners. In her 2018 American Educational Research Association (AERA) presidential address, Deborah Ball describes a segment of classroom discourse in which a student of color responds to the teacher's (Ball's) elicitation of her ideas about a mathematics problem during a whole group discussion. Ball offers various possible responses a teacher might enact. For example, the teacher's decisions might point toward responding to the student's visible affect (e.g., Is she uninterested? Ready to participate?), the content of her response (e.g., Was she precise and correct in her logic?), and her positioning among her peers (e.g., What is her credibility among her peers? Does the teacher preserve that credibility, and how?). In her detailed recounting, Ball describes the possible response moves as 'discretionary spaces.'

According to Ball (AERA, 2018), each moment in which a teacher uses professional judgment has the potential to open or shut down opportunities for student engagement. The discretionary space is the moment in which a teacher may put into practice their vision of social justice. At once, the practice of eliciting student thinking about content (a high-leverage teaching practice) becomes far more complex and important for study; it becomes an opportunity for diverse perspectives to contribute knowledge to the whole. The need to capitalize on these moments, which are consequential to both teaching and student learning (Birmingham et al., 2017), points to our second strand, social justice teaching.

Strand 2: Social Justice Teaching

While terms have changed over time – including multicultural, diversity, inclusion, equity, and social justice education – teacher education has struggled to clearly define what preparing teachers might look like toward any of these terms, let alone to design and implement programs which do so with fidelity. These progressions are evidenced in our own work; we initially framed this strand as 'culturally-relevant pedagogy' and then 'equity.' We now call this strand 'social justice.' We define it in keeping with Cochran-Smith et al. (2015), who write that we must prepare candidates "who have the knowledge, skill, and disposition to enhance the learning of students historically

not well served by the system," and simultaneously support the candidates' learning "to recognize and challenge the intersecting systems of inequality in schools and society that reproduce inequity" (p. 70).

The structural disconnects between foundations and methods as well as between university-based coursework and P-12 clinical experiences present especially consistent, persistent challenges to social justice teacher education (Feiman-Nemser, 2001; Floden et al., 2021). Within the curriculum of most teacher preparation programs, novice teachers first take a series of 'foundations' courses, designed to provide conceptual knowledge about the profession and develop teacher identity. 'Methods' courses follow, which impart specific skills related to planning and implementing instruction, classroom management techniques, and developing and using assessment tools (Grossman et al., 2009). Because social justice teacher education tends to be siloed in a single foundations course (Kavanagh, 2017; McDonald & Zeichner, 2009), novice teachers are typically restricted to learning *about* social justice and diversity, rather than developing the skills necessary to create social justice-informed classrooms (McDonald, 2005). This approach produces disconnected knowledge (McDonald & Zeichner, 2009) wherein knowledge about teaching is separate from knowledge about students and the sociopolitical context.

With regard to the separation of university-based coursework and school-based clinical experiences, preservice teachers often receive the majority of conceptual instruction in university-based classrooms, while school-based clinical experiences are considered separately as spaces for preservice teachers to try out specific strategies that enact these concepts (Grossman, Hammerness, & McDonald, 2009). Ironically, clinical experiences can work against social justice teacher education. Novices seem to restrict their understanding of social justice to the specific diversity within a particular clinical experience classroom (McDonald, 2005), often defaulting to using social justice only as a lens in planning instruction (Kavanagh & Danielson, 2020). Evidence suggests that pairing field experiences with pedagogies of enactment can lead to social justice growth for novice teachers (Mills & Ballantyne, 2016, p. 272). Kavanagh and Danielson (2020) urge teacher educators to consider, "In what ways would novices' reflections on their instructional decision making differ if their preparation to attend to social justice was grounded in representation, decompositions, and approximations of the complex work of attending to justice *during instruction"* (p. 99)? To address this separation, they suggest foundations coursework focus on such representations of teaching as classroom videos and transcripts, lesson plans and curriculum materials, and samples of student work.

We engaged these questions and ideas to develop an approach intended to explicitly support candidates in developing social justice teaching practices, recognizing that we are entering into a stream of scholarly conversation aimed at reconciling social justice teaching with practice-based teaching. Two significant literature reviews (Hosseini et al., 2024; Mills & Ballantyne, 2016) have investigated approaches in social justice teacher education. In their review, Mills and Ballantyne found four categories of approaches: preservice teachers' conceptions of social justice and/or

diversity, changes in candidates' beliefs/dispositions, field and service-learning experiences, and programmatic innovations and changes to teacher education. Hosseini et al.'s review identified five categories of approaches: moving from an individual to a structural view of inequity, centralizing marginalized perspectives and knowledges, raising awareness of sociopolitical and community contexts, socially-just instructional practices, and elevation of lived experiences and knowledges. These two reviews of existing literature provide a starting place from which to consider how to integrate social justice teaching into a practice-based teacher preparation program.

Social Justice Core Practice Approaches

One approach to integrating social justice teaching into practice-based teacher education involves the identification of social justice core practices. This approach proposes that while core teaching practices are said to be created in the service of equity, without embedding justice into the core practices, they can become decontextualized and even serve to further inequity (Karr, 2022; Schiera et al., 2019).

To ensure that justice is focal in core practices, researchers such as Kavanagh (2017), Barton et al., (2020), and Schiera et al. (2024) propose core practices that specifically center justice. For example, building on the work of James Banks in the field of multicultural education, Kavanagh (2017) proposed six social justice core practices. Barton et al. (2020) studied the practices of middle school science classroom teachers and identified three empirically-grounded patterns-of-practice: recognition, refraction, and social transformation. Together, these patterns-of-practice together create a single justice-oriented core teaching practice. Finally, Schiera, Carl, and Marshall-Butler engaged 27 Philadelphia social justice educators in an in-depth Delphi study including multiple iterations of analysis, coding, and refinement, resulting in the identification of 13 social justice core practices groups into four patterns (Schiera et al., 2024). These patterns and practices emerged across professional distinctions such as grade and content level, demonstrating potential applicability across multiple teaching contexts.

A few practices stand out as connected or aligned across these three studies. For example, Kavanagh's (2017) *integrating content representing traditionally marginalized groups* seems aligned with Schiera et al.'s (2024) *design responsive curriculum*. Barton et al.'s (2020) *refraction* seems to parallel Kavanagh's (2017*) interrupting students' cultural patterns of participation and language use when it constricts students' opportunities to participat*e as well as Schiera et al.'s (2024) *center student voice/agency*. Finally, Schiera et al.'s (2024) pattern *"macrosocial contexts: enacting SJCPs as critical praxis"* (p. 170) seems to reinforce Barton et al.'s (2020) *social transformation*. Continued work in the field may yield more convergence on social justice core teaching practices. As an alternative, Schiera et al. (2024) note that "combining, remixing, and adapting" (p. 175) justice-oriented core practices with practices without an explicit justice focus may be another fruitful social justice core practice approach.

Merging Social Justice and Practice-Based Approaches

Beyond approaches to social justice teaching more broadly or the identification of specific justice-oriented core practices, some scholars have also proposed approaches to merge the two separate fields of practice-based teacher education and social justice teacher education. One such approach is to identify a unifying framework and then examine practice-based and social justice teacher education through that framework. Kavanagh and Danielson (2020) examined the two bodies of work through the constructs of pedagogies of investigation and pedagogies of enactment. They found that teacher educators defaulted to pedagogies of enactment when teaching content but pedagogies of investigation when focused on attending to social justice, documenting the trend toward separation between social justice and practice-based teaching. Further, teacher educators restricted pedagogies of enactment to planning rather than integrating it into instruction (Kavanagh & Danielson, 2020). Kavanagh and Danielson's work emphasizes the need to move social justice teaching out of the realm of 'things to know' and into the realm of 'things to do,' an echoing of Cochran-Smith et al.'s call to 'put equity at the center' (2015).

Additionally, two scholars propose revised or entirely new frameworks through which to unite social justice and practice-based teaching. Doherty (2022) proposes the SJ-PBTE (Socially Just Practice-Based Teacher Education) Framework, which integrates critical knowledge from social justice teacher education with the intention of applying it through practice. Those foundations leverage critical theories and pedagogies, politics of education, and history of schooling to develop critical consciousness (p. 37), while the practice-based approaches include learning high-leverage practices through pedagogies of engagement to inform Ball's discretionary spaces (p. 37). Karr (2022) proposes a modification to the Framework for Teacher Learning called the Critical Framework for Teacher Learning. This modification comes from pairing four new dimensions (noticing, naming, confronting, and transforming) each with the five original dimensions of the Framework for Teaching Learning paired into four complementary dimensions (dispositions, understandings, practices/tools, and vision). Similarly to Doherty, Karr also identifies Ball's discretionary spaces as a possible site of practice, identifying the possibility of representing, decomposing, and approximating discretionary spaces. Both Doherty and Karr propose frameworks designed to provide a singular focus for merging social justice and practice-based teacher education approaches.

Conclusion

In sum, there are a variety of approaches to investigating and identifying social justice approaches to teacher preparation. Building on the work done by Mills and Ballantyne (2016) and Hosseini et al. (2024) to identify the approaches to social justice that teachers take, two different approaches to uniting PBTE and social justice have emerged. One approach, represented by Kavanagh (2017), Barton et al., (2020), and Schiera et al. (2024), seeks to identify social justice core teaching practices that can then be taught through PBTE approaches. The second approach, demonstrated

here by Kavanagh and Danielson (2020), Karr (2022), and Doherty (2022), is to merge social justice and practice-based teacher approaches through a conceptual perspective. In keeping with these two approaches, we argue that without a practice-based pedagogy that moves through investigation and into enactment, social justice will continue to exist at the periphery of most teachers' practice.

Strand 3: Novice Teacher Development

Finally, to effectively leverage practice and social justice in a teacher education curriculum, we endeavored to place the learners – novice teachers – at its center. Over the years, the field of teacher education has offered various models to capture the nature of novice teacher learning. Korthagen (2004), for example, presented an "onion model" of levels of change. The model highlights environment and behavior as the outer layers of the "onion" that are observable by others, while the inner layers of competencies, beliefs, identity, and mission cannot be overtly observed. Changes in one layer may influence others, as practical classroom experiences can shape beliefs and vice versa. Following Korthagen, Rozelle and Wilson (2012) describe a kind of growth trajectory that can develop through P-12 classroom-based field experiences, as teacher candidates move from closely mimicking their P-12 mentors' lessons to thoughtfully reproducing the P-12 mentors' instructional patterns based on a developing vision of good teaching. Their findings illustrate how novice teachers' engagement in practices can be formative not just for developing skills but also teaching beliefs and teacher identity.

Based on the onion model, we expect that novice teachers' learning trajectories are neither linear nor steady, but overall growth occurs through supported engagement in practices, including relevant tools in the appropriate context (Jurow et al., 2012). Like all learners, novices have different starting points, with varied experiences, beliefs, and priorities, and will respond differently to ideas and practices taught during their preparation – but being intentional and selective about the experiences provided during teacher preparation can ensure some measure of novice teacher growth (Kawasaki et al., 2018).

We drew on the concept of "gradual release of responsibility" to capture both the increasing nature of the novice teacher's obligations and the changing nature of the support provided to that novice teacher. A P-12 instructional model grounded in gradual release of responsibility, Webb et al. (2019) note, should not be lockstep (e.g., "I do/We do/You do"), but used flexibly to respond to students' varied strengths and struggles. Similarly, a gradual release of responsibility applied to novice teacher learning supports novices to move forward with more independence with aspects of teaching that they are able to handle while also allowing them to observe or assist in new areas of teaching practice. Webb et al. further note that with a narrowly defined approach to P-12 gradual release of responsibility, "teachers can end up doing too much of the work for students, exercising control that disables and often disrupts students' own thinking and learning processes" (p. 82). So too does this apply to teacher education, where teacher educators (university- or school-based)

may be reluctant to give over instructional responsibility to a novice or unsure of how to do so in a suitably supportive fashion. A flexible approach to gradual release of responsibility, guided by teacher educators who engage in the observation, learning, assessment, and decision making that Webb et al. describe, can ensure that a novice teacher gets appropriate and supported access to opportunities to teach, and that these opportunities are extended over time. Of note is Collet's (2012) application of gradual release of responsibility to coaching interactions with novice teachers in clinical experiences, which flips the flow of responsibility to the novice teacher, terming it "gradual *increase* of responsibility." A supportive trajectory for novice teacher learning, then, provides a kind of floor – but not a ceiling – over time, ensuring that novices gain increasing responsibility for teaching that they are able to handle while moving forward with supported learning in other areas, with the goal of eventual independence. This aligns with Feiman-Nemser's (2001) call for teacher educators' focus not on cramming in as much as possible, but on developing an appropriate foundation that novices can build on as they continue to learn in and from teaching. The inclusion of novice teacher development as a strand required us to think deeply about the areas and ways in which novices would grow over time; thus, we were forced to use practice and social justice not as imprecise end goals, but as sites for ongoing learning (Hundley et al., 2018).

Operationalizing the Strands: Three Curricular Design Choices

The three strands just described – practice, social justice, and novice teacher development – provided the "conceptual coherence" (Feiman-Nemser, 2001) in our teacher education curriculum. Operationalizing them involved braiding them together within courses, tasks, and assignments and ensuring their ubiquity across the year-long program. Table 1 provides a graphic representation giving a broad overview of our approaches; however, a detailed narrative of this table is beyond the scope of this paper. In this section, we describe three curricular design choices that enabled us to accomplish this intertwining as we negotiated coherence.

Design Choice 1: Intertwining of Field and Course Work

Our first design choice was to intentionally intertwine fieldwork and coursework. We drew on the concept of "teacher residency" (Solomon, 2009) to develop a model for an intensive year-long placement that could immerse candidates in daily life at the school. This design choice echoes the findings of Daly (2022), emphasizing the importance of a year-long field experience in assisting novice teachers in learning how to teach, and Mills and Ballantyne (2016), who stress designing field experience such that genuine relationships have time to develop. We also resequenced the required university courses, focusing especially on situating "foundations" content across the length of the program to help our candidates explicitly connect their field experiences and methods courses to the social and political contexts that played out in their P-12 classrooms and in our partner district.

To create a "gradual increase of responsibility" for candidates' teaching, we developed a set of explicit fieldwork expectations. As noted previously, we sought to create a floor – but not a ceiling

– to ensure that the candidates had the full advantage of learning to teach in a year-long field placement. We mapped out experiences that would allow candidates to learn about and from their students, engage in meaningful tasks alongside their mentor teachers, and take on increasingly sophisticated instructional responsibilities over the course of the P-12 academic year (see Table 1). University teacher educators and P-12 mentor teachers gave individual guidance, based on their observations of candidates' readiness, to enable candidates to move forward with instructional responsibility beyond these expectations.

We sought to structure active engagement in the early days of field experience, which traditionally emphasize passive observation. In the fall, candidates worked in P-12 classrooms for three class periods a day, four days each week. Their responsibilities emphasized learning about their students in the context of the classroom as they engaged in teaching practice: they conducted the quick daily bell ringer, used monitoring and conferring (a routine for careful observation of and meaningful interaction with a student during independent work), and regularly reviewed students' work. The fieldwork expectations also pushed them toward greater instructional responsibility through regular co-planning with the mentor teacher and leading instruction for one class period per day, which increased to three periods over the course of the semester. In the spring, candidates moved to full-time student teaching, spending five full school days each week in the P-12 classroom. The work of conducting the bell ringer, monitoring and conferring, reviewing student work, and co-planning remained consistent tasks, and over the course of 16 weeks, they moved into lead teaching for all six class periods (see Table 1).

In terms of course work, all daytime classes were housed on the P-12 campus at which candidates were teaching (evening classes took place at the university). One key resequencing decision was to take two courses that typically appear early in a teacher preparation program, addressing foundations of schooling and diversity, and place them at the end of the program. Instead, we launched the program with two courses, one addressing curriculum and assessment and one focused on child and adolescent development, and later a classroom management course. These courses intentionally centered differentiation, diversity, and social and political context as applied to the areas of curriculum design, assessment, and child and adolescent development. Classroom management was approached through the lenses of student agency and voice, and candidates were continuously asked to look beyond particular behaviors and consider the ways in which their communication and implicit expectations affected each interaction with students. Thus, our candidates were able to study diversity as central to the work of teaching.

Table 1

Overview of One-Year MAT Program Design

	Summer (8 weeks)	Fall a (8 weeks)	Fall b (8 weeks)	Spring (16 weeks)
Domain	Planning for engagement with important content	Eliciting students' ideas	Supporting ongoing changes in students' thinking	Pressing students for evidence-based explanations
Focus Instructional Activity	Launching a lesson	Monitoring and conferring during independent practice	Using a thinking routine for content understanding	Leading a whole-class discussion (Socratic seminar format)
Embedded Techniques	Situating a lesson within a larger unit or lesson sequence Articulating a meaningful learning goal	Asking a 'grand question' to elicit initial responses Asking questions to probe students' responses and extend students' thinking Providing substantive commentary on students' work	Asking questions to elicit initial student thinking and support students in making connections Paraphrasing students' responses Checking for understanding	Establishing purpose for discussion Setting expectations for students' participation Asking questions to focus students to listen and respond to others and guide students' disciplinary reasoning Summarizing using intentional disciplinary conceptions to conclude a lesson
Field Experience (Gradual Increase of Responsibility)	Required elementary grades and co-curricular engagement	Up to three classes per day: • Bell-ringer • Monitoring and conferring • Reviewing lesson assessment or student work	Continue previous, and Up to three classes per day: • Co-planning • Leading instruction	All previous, scale up to six classes per day
Cross-Cutting Themes	Building respectful relationships with students Talking about a student with caregivers Learning about students' lived experiences as a resource for engagement Analyzing a teaching practice for the purpose of improving it			

We situated the foundations and diversity courses as capstone courses after the school year (and candidates' year-long placements) concluded. These two team-taught courses were used to help candidates make sense of what they had experienced in their program and fieldwork. Assignments, readings, and discussions were used to contextualize individual experiences of classroom events

within the broader context of U.S. public education as impacted by history, educational philosophy, legislative mandates, market-based pressures, and social inequality. Rather than giving the graduating candidates a sense of having answers to what are, in fact, unanswerable questions, we asked them to grapple with inherent dilemmas in modern education (discussed further in Design Choice 3 below).

Design Choice 2: Focus on Instructional Activities and Rehearsal Cycles

A second design choice involved meaningful engagement in high-leverage practices. We made these practices, which are defined as "fundamental capabilities" (TeachingWorks, 2025), functional for novices by connecting them with four well-defined instructional activities. We use the conception by Lampert et al. (2013) of instructional activities as "containers" for the practices, principles, and knowledge that new teachers need (p. 228), and which help to make core practices meaningful for novices (Janssen et al., 2015). Lampert et al. (2010) describe instructional activities as including both routine elements of teaching and elements that require teachers' in-the-moment judgment in response to students' thinking and actions. They argue that well-defined instructional activities can reduce "the cognitive and social load" (p. 135) on both teacher and students, thus managing the risk and effort involved in working toward ambitious learning goals. By gaining competence with the routine elements, a novice teacher is better able to attend closely to more complex instructional work that is enabled through the dynamics of the instructional activity.

We built out four key instructional activities to be studied over the course of the year: launching a lesson, monitoring and conferring (in which a candidate closely observed a student during independent work and offered responsive, content-focused prompting and questioning), teaching a 'thinking routine' (Harvard Graduate School of Education, 2016), and teaching a Socratic seminar. Our selection of these instructional activities represents a "top-down" approach to practice-based teacher education (Kavanagh et al., 2023); we had specific reasons for identifying and sequencing these instructional activities for our candidates and context. First, each instructional activity could provide enough structure to allow the candidate to rely on routine but also flexibility to enable the candidate to use it responsively to engage their particular students with content within the school and community context. Second, the instructional activities represented increasing teaching complexity, allowing the candidate to move from a fairly static, scripted starting point (launching a lesson) into more and more interactive instruction involving observing, questioning, listening, paraphrasing, and so forth (culminating in teaching a Socratic seminar).

To work on each instructional activity, candidates engaged in a practice-based rehearsal cycle involving the "interlacing" pedagogies of representation, decomposition, and approximation (Grosser-Clarkson & Neel, 2020). In a rehearsal cycle, novices are guided to move repeatedly between investigation and enactment (Lampert et al., 2013), allowing them to anticipate what might happen in their "real" teaching, try out changes that are responsive to students and emergent

problems of practice, and attend simultaneously to student behavior and instructional goals (Teacher Education by Design [TEDD], 2015).We began each rehearsal with guided observation of an enactment of the instructional activity (either a video or an instructor-modeled representation) to collaboratively break it down into constituent parts. Led by a teacher educator, this guided observation had a twofold purpose, per the nature of instructional activities: 1) to identify the routine aspects that gave shape to the instructional activity and 2) to highlight certain complex, non-routine elements that would require a teacher's in-the-moment decision making. Based on their analysis of routine and complex components, each candidate then used a graphic organizer to plan their own lesson with the instructional activity, followed by public rehearsal of their plans with their peers acting as "good students." A teacher educator interrupted during each rehearsal with feedback and questioning, allowing the candidate to refine their teaching on the spot, and other candidates to observe and learn from the teaching candidate's efforts. Following their rehearsal and additional revisions to the plan, each candidate moved to teaching the instructional activity with students in their field experience classroom.

Drawing upon the work of Ronfeldt and Grossman (2008), Ghousseini et al. (2014) argue that the iterative nature of the rehearsal cycle makes it ideal for developing not only skillful teaching along a trajectory of novice teacher development, but also professional identity as a social justice-focused educator. They assert that rehearsal cycles "can provide spaces for novice teachers to experiment with their potential equity-conscious selves, observing and evaluating themselves as particular kinds of teachers" (p. 2). In our case, we used rehearsals to enable candidates to attend to two key ideas: 1) understanding knowledge as partial and co-constructed through engagement with and by students, and 2) using pedagogical moves strategically to elicit and build upon the ideas of students who typically struggled to engage in the classroom.

Design Choice 3: Threading of Dilemmas

In dealing with the complexity and uncertainty of their daily work, teachers regularly encounter predicaments for which there is no easy answer, and which put them in the position of weighing imperfect options for dealing with those predicaments. These are what Lampert (1985) and others call "dilemmas" of teaching. A third curricular design choice involved threading candidates' study of dilemmas across the year as a means of enabling them to expect, embrace, and manage such dilemmas in their own teaching.

Lampert (1985) notes that dilemmas (as opposed to problems) in teaching are unsolvable; they do not have a clear cut "answer" because of numerous contradictory aims at play. Buchmann and Floden (1992) describe the "moral dilemmas" to which teachers respond, "by temporarily suspending some goods without, however, denying or abandoning them" (p. 12). Thus, managing a dilemma requires a teacher to accept the inevitability of conflict, recognize competing aims, and make a thoughtful choice to act – in a way that privileges certain aims over others or represents a compromise, because there is no "perfect" solution (Katz & Raths, 1992). By studying dilemmas

in teaching from the start of the program, we sought to equip candidates up front with a conceptual means of interpreting and dealing with the complex challenges we expected they would encounter in their fieldwork and careers.

We began by broadly introducing the concept of dilemmas as candidates read Lampert's (1985) classic piece in the summer term. They discussed the dilemmas they recognized in a hypothetical case study about a high school Spanish teacher, focusing especially on contextual factors – known and unknown – that might influence the dilemmas. They then posited possible means of managing the dilemmas. In the fall fieldwork seminars, we continued to develop the concept of teaching dilemmas, and especially those that occur in "urban" settings, as candidates engaged in a weekly book club around Anna Richert's 2012 book, *What Should I Do? Confronting Dilemmas of Teaching in Urban Schools.*

In the spring term, as candidates extended their classroom hours and assumed greater instructional responsibility, we continued to study dilemmas in weekly seminars. Candidates took turns leading part of each seminar to describe a current dilemma, discuss its nature, and get insight from teaching colleagues into possible means of managing it. These included, for example, the dilemma of how to make content relevant for their particular students while adhering to required academic standards and the dilemma of addressing students' in-class phone use while maintaining a positive, productive teacher-student relationship. Given the 'insider' knowledge that candidates had acquired by this time, we deliberately expanded considerations to include school, district, and state contexts that influenced the dilemma as well as candidates' perspectives on specific students and whole groups. This work culminated as candidates prepared a "dilemma memo" during their capstone courses on diversity and foundations of schooling. For this assignment, candidates wrote for the audience of a future cohort of MAT candidates. Each candidate described a dilemma in their teaching, analyzed it in terms of contextual and historical influences, and provided advice on possible ways of managing it ethically and responsively.

Discussion: Still Working Toward Coherence

We have articulated a curricular design for a one-year, school-embedded MAT program. Our intention was to prepare novices for employment as skillful, responsive teachers in the very school contexts in which they learned to teach. To do so, we needed to conceptualize our program differently than those with which we had prior experience. Instead of disconnection between foundations and methods, division between field and university, and a lack of attention to the specific teaching context in which we hoped candidates would continue their careers, we envisioned a different kind of program: one that conceptually and practically intertwined two prevalent strands of teacher education (PBTE and social justice) with a third that attended to our specific learners (novice teacher development). In effect, we designed a curriculum through three interwoven theoretical lenses. We have illustrated ways the three strands were made practical in the curriculum – through physically and conceptually intertwining fieldwork and coursework,

studying increasingly complex instructional activities, and examining teaching dilemmas with increasing depth and nuance. In so doing, we have endeavored to capture how those three strands could function to achieve a kind of coherence which opened students and teacher educators up to "discover[ing] and establish[ing] relations among various areas of sensibility, knowledge, and skill, yet where loose ends remain, inviting a reweaving of beliefs and ties to the unknown" (Buchmann & Floden, 1992, p. 21). And to paraphrase Grossman et al. (2008), we believe we made progress toward aligning ideas and opportunities in this teacher education curriculum.

As we noted at the outset, however, coherence is not an endpoint; coherence is a moving target. What seemed highly coherent in design played out differently in practice. When we reflect on one year of implementation of this curricular design, we acknowledge limitations brought about by finite time and resources, including but not limited to faculty loads that pulled our energies away from the MAT program to support other programs. We also acknowledge that despite our efforts to rid our design of the teacher education structures and traditions that we find so frustrating, we could not entirely remove them. We could not truly "own" the program, but were required, for example, to conduct observations using prescribed rubrics and to assess novice teachers' work on teaching a unit plan in a highly specified format. Even so, we can contribute lessons learned to ongoing conversations about the future of practice-based teacher education, while recognizing certain deficiencies in our implementation and raising questions as we continue to work toward coherence; in effect, we offer insights into the dilemmas we ourselves encountered in this endeavor.

Unfulfilled Partnership Opportunities

First, our focus on a single partner district was essential to the curricular design as the specific context for candidates' preparation for teaching. We were able to house the program on a single campus, and candidates were immediately involved with back-to-school professional development and welcoming activities for students. They met their students on the first day of school and quickly moved into daily classroom teaching. Alongside their mentor teachers, they participated in department planning meetings, school-wide staff meetings, and referral and evaluation meetings. In many ways, they were immersed in the daily life of the school and classroom just as we had hoped. And yet our partnership often felt like one with the district, while the P-12 teachers who were the most direct influence on candidates' daily experiences were simply resources within our curricular design. We had planned to offer professional development to the entire staff in our partner schools, but constraints on the district prevented this from occurring. We planned an approach for the mentor teachers to be able to earn credit for the support work and parallel teaching they were providing, believing that such credit would incentivize the prioritization of mentorship in the workload of already-busy professionals, but university constraints ultimately precluded that approach. We wonder: How might we have integrated P-12 mentor teachers in curricular planning and implementation and thus more fully enacted coherence? What opportunities did we miss to engage with mentor teachers around the three strands so that they could be operationalized in

productive ways for all teachers' learning? Our experience suggests opportunities for greater mentor teacher voice in determining individual candidates' gradual increase of responsibility, as well as mentor involvement in the selection, teaching, and debriefing of instructional activities that engage novice teachers in learning to practice teaching for social justice.

Limited Integration of Novice Teacher Development

Second, we have argued that we must be considerate of novice teachers' development across time, which enables us to look beyond fragmented measures of progress such as grades in specific courses or observation checklists to what really matters: novices' ability to teach skillfully and responsively. We planned for close attention to the gradual increase of responsibility, an individualized conception of novice teacher development, relying on careful, ongoing observation, support, and assessment by teacher educators. In implementation, we found it too time- and resource-intensive to fully realize. The way we operationalized novice teacher development was far less flexible than we had conceived it, and candidates tended to experience an increase of responsibility in a more lockstep manner than we intended. This leaves us wondering: Did we actually intertwine novice teacher development with the other two strands, or did we weave PBTE and social justice together while novice teacher development ran alongside? To our professional colleagues, we ask: How can we, as a field, better leverage novice teacher development to understand and support novices' progress in learning to teach relative to practice and social justice? We suggest the fruitfulness of establishing a developmental progression with particular instructional activities (for example, how does a beginner's use of monitoring and conferring differ from that of a skillful user?) so faculty and mentor judgements about a novice's growth are based in specific practice-based criteria.

Implementing Practice-Based Pedagogies: The Social Justice Gap

Finally, we were earnest in our efforts to attend simultaneously to PBTE and teaching for social justice. We did this structurally as we resequenced courses so that candidates encountered traditionally 'foundations'-related ideas throughout the program – that is, before, during, and following their study of instructional methods. We also did this pedagogically, particularly as we engaged candidates in ongoing study of dilemmas in their daily work. And yet this approach, emphasizing pedagogies of investigation, largely relied on candidates' recollections and analysis after the fact. It fell short of engaging candidates in the active work of teaching for social justice. We did use candidates' rehearsal of specific instructional activities to highlight Ball's 'discretionary spaces' (American Educational Research Association, 2018), but even here we did not fully follow through on emphasizing social justice when candidates moved from rehearsal to teaching those instructional activities with their middle and high school students. As a field, we must continue to ask: How can we more fully engage candidates with pedagogies of enactment that enable them to teach for social justice, not simply talk about social justice teaching?

About this last aspect – the intertwining of PBTE and social justice – we want to say more. The push toward naming so-called core practices in teacher preparation has been met by critique from those centering equity and social justice (Philip et al., 2019). While the full scope of the argument is beyond this paper, some social justice teacher educators argue that a focus on core practices can lead to shallow engagement with equity (Philip et al, 2019), position sociocultural and political context as things "to be 'used' or 'managed'" (Nash & Panther, 2019, para. 6), or sideline schools, children, and communities as problematic, reinforcing deficit narratives (Philip et al., 2019), thereby ignoring the societal and historical forces that created contemporary inequity.

These critiques lead some to conclude that PBTE and social justice teacher education cannot complement one another (Nash & Panther, 2019; Philip et al., 2019). Others argue core practices are already infused with social justice (Grossman et al., 2009; Kinloch, 2018) and teacher educators need to make social justice explicit within them. A third position, that core practices and social justice teacher education can yet be thoughtfully partnered (Cochran-Smith et al., 2015; Kavanagh & Danielson, 2020; Meuwissen & Thomas, 2016), responds to the critique that core practices can become overly-focused on procedure (Kavanagh, 2017; Kennedy, 2016; Zeichner, 2012) rather than purpose (Conklin & Hughes, 2016; see also Cochran-Smith et al., 2015; Kavanagh & Danielson, 2020; Kennedy, 2016; Meuwissen & Thomas, 2016).

As discussed in the Strand 2: Social Justice Teaching section above, we locate two approaches to integrating core practices with social justice teacher education. One approach, represented by Kavanaugh (2017), Calabrese Barton et al., (2020), and Schiera et al. (2024), seeks to identify social justice core teaching practices that can then be taught through PBTE approaches. The second approach, represented by Kavanagh and Danielson (2020), Karr (2022), and Doherty (2022) is to merge social justice and practice-based teacher approaches through a conceptual perspective. It is within this second approach that we locate our own work as we sought to conceptually integrate practice, social justice teaching, and novice teacher development alongside one another. We position our work in chorus with frameworks such as developing patterns of practice for equity (Cochran-Smith et al., 2015); "imagining how social learning theories can be *infused with* and *enveloped within*, critical learning theories" (Schiera, 2021, p. 467); developing conceptual tools such as the SJ-PBTE Framework (Doherty, 2022) and Critical Framework for Teacher Learning (Karr, 2022); and developing social justice instructional practices (Kavanagh & Danielson, 2020). With our curricular design, we are attempting to speak into the space created by these frameworks.

Conclusion

In presenting this teacher education curricular design, we draw a parallel with Hiebert and Morris' (2012) argument that simply focusing on improving the quality of educators has not been enough to improve classroom instruction. Teacher education, they argue, ought to focus on improving instructional methods. They describe developing artifacts such as annotated lesson plans that are approached as ongoing works in progress, including "knowledge of two kinds - *what* to do and

why/how to do it that way" (p. 95, emphasis added). Rather than a prescriptive path through a lesson plan, such artifacts would make visible a series of potential instructional moves and discretionary spaces, drawing teachers' attention to questions of purpose.

We envision our curricular design as a similar artifact for teacher education: a work in progress that addresses what to do along with why and how to do it that way. Our field must certainly ensure that novice teachers are academically well-prepared and dispositionally aligned with the aims of public education, particularly those focused on social justice. However, to prepare teachers who truly practice skillfully and responsively, we must attend to teacher education curriculum design. Novice teachers will be well-started by a coherent curriculum which (1) gradually and strategically increases responsibility as novice teachers develop, (2) emphasizes skillful, responsive use of teaching practices informed by social justice, and (3) grounds the context and purpose of teaching practices in social justice outcomes. Without such an approach, even selecting the 'right' teacher candidates is unlikely to impact persistent inequities in the educational system.

We have learned that working towards coherence is a worthy, and also an ongoing, iterative, and messy, project. Ours is not a final version, and we offer this artifact as the field continues to refine practice-based teacher education to develop skillful, responsive teachers.

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