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What is This?

Core Practices and Pedagogies of Teacher Education: A Call for a Common Language and Collective Activity

Morva McDonald[1], Elham Kazemi[1], and Sarah Schneider Kavanagh[1]

Abstract

Currently, the field of teacher education is undergoing a major shift—a turn away from a predominant focus on specifying the necessary knowledge for teaching toward specifying teaching practices that entail knowledge and doing. In this article, the authors suggest that current work on K-12 core teaching practices has the potential to shift teacher education toward the practice of teaching. However, the authors argue that to realize this vision we must reimagine not only the curriculum for learning to teach but also the pedagogy of teacher education. We present one example of what we mean by reimagined teacher education pedagogy by offering a framework through which to conceptualize the preparation of teachers organized around core practices. From our perspectives, this framework could be the backbone of a larger research and development agenda aimed at engaging teachers and teacher educators in systematic knowledge generation regarding ambitious teaching and teacher education pedagogy. We conclude with an invitation to the field to join with us in imagining approaches to generating and aggregating knowledge about teaching and the pedagogy of teacher education that will move not only our individual practice but also our collective practice forward.

Keywords

elementary teacher education, preservice education, secondary teacher education

Currently, the field of teacher education is undergoing a major shift—a turn away from a predominant focus on specifying the necessary knowledge for teaching toward specifying teaching practices that entail knowledge and doing (Cook & Brown, 1999; Grossman, Hammerness, & McDonald, 2009; Zeichner, 2012). The fundamental aim undergirding this turn is to better support teachers in learning how to use knowledge in action (Ball & Forzani, 2009, Cook & Brown, 1999; Grossman, Hammerness, et al., 2009; Lampert, 2010; Zeichner, 2012). This turn to practice has led some scholars in the field to organize the work and scholarship of teacher education around what they refer to as core practices of K-12 teaching. By highlighting specific, routine aspects of teaching that demand the exercise of professional judgment and the creation of meaningful intellectual and social community for teachers, teacher educators, and students, core practices may offer teacher educators[1] powerful tools for preparing teachers for the constant in-the-moment decision-making that the profession requires. This movement is stepping up to the challenge of better preparing novice teachers to raise the quality of disciplinary learning for students in U.S. schools and disrupt deficit perspectives of what students and teachers can accomplish. By raising the quality of disciplinary teaching, a central goal of this work is to improve the learning opportunities available to students of color, low-income students, and English language learners. The aim is to address the persistent inequities that overwhelmingly limit those students' opportunities to learn. Recently research and development projects in secondary English language arts, secondary science, and elementary mathematics have begun to put the concept of core practices into action in teacher education with the aim of improving educational opportunities for all students. These projects offer examples of teaching and learning that support high levels of student participation, value the knowledge and resources that students bring to the classroom, and that maintain high levels of academic rigor. These examples suggest teaching that could become more normative in U.S. schools (Core Practices Consortium, 2013).[2] This article examines the work of this emerging community of teacher educators, practitioners, and researchers to understand how their application of core practices may inform broader efforts to improve teaching and teacher education.

[1]University of Washington, Seattle, WA, USA

Corresponding Author:
Morva McDonald, University of Washington, Box 353600, 211 Miller Hall, Seattle, WA 98195, USA.
Email: morva@uw.edu

Historically, research on K-12 teaching and research on teacher education have developed independently of one another, often with research on teacher education lagging far behind (Grossman & McDonald, 2008). However, as the work to identify core practices in the disciplines suggests, forging a tighter relationship between research on teaching and the work of teacher education could help the field gain traction on a number of its perennial challenges. Bridging research and the practice of teacher education has the potential to help the field: (a) articulate a common language for specifying practice, which would facilitate the field's ability to engage in collective activity; (b) identify and specify common pedagogies in teacher education; and (c) address the perennial and persistent divides among university courses and between university course work and clinical experiences. An abundance of past reforms in teacher education (e.g., professional development schools and competency-based teacher education) act as cautionary tales for those of us engaged in leveraging core practices of teaching in the preparation of teachers. Lessons from these efforts suggest that the move toward core practices in teacher education risks becoming fad-like, resulting in a proliferation of approaches driven more by the trend than by a deep understanding of how people learn to enact ambitious professional practice. To avoid this path, we argue that the identification of K-12 core practices should be accompanied with the identification, development, and implementation of teacher education pedagogies aimed at preparing teachers with those practices. Without an investigation into the pedagogical approaches that teacher educators use to teach novices how to enact core practices, even those efforts that strike the best balance between complexity and accessibility will stall in implementation. As the terrain of teacher education turns toward practice, the field requires new conceptualizations of practice and new designs for teacher education that realize the equity goals we share in social-justice programs (Zeichner, 2012).

In the pages that follow, we argue that for the turn to core practices to improve teaching and realize our vision of a closer partnership between schools and colleges of education, we must reimagine not only the curriculum for learning to teach (Grossman, Hammerness, et al., 2009) but also the pedagogy of teacher education. We present one example of what we mean by reimagined teacher education pedagogy by offering a framework through which to conceptualize the preparation of teachers organized around core practices. From our perspectives, this framework could be the backbone of a larger research and development agenda aimed at engaging teachers and teacher educators in systematic knowledge generation regarding ambitious teaching[3] and teacher education pedagogy. We conclude with an invitation to the field to join with us in imagining approaches to generating and aggregating knowledge about teaching and the pedagogy of teacher education that will move not only our individual practice but also our collective practice forward.

Why Core Practices?

In the last half-century, the field of teacher education has cycled through several waves of pedagogical approaches to the preparation of teachers. Each wave has been closely tied to each era's predominant conceptual lens for understanding teaching and learning. In the 1960s and 1970s, when research on teaching was grounded in a behavioral model of learning, competency-based teacher education and the pedagogy of microteaching emerged. During these years, teacher educators engaged in a behavioral modification model of professional preparation by identifying discrete competencies for teaching and offering opportunities for novices to practice and repractice these discrete skills. In the 1980s, as the paradigm for research on teaching shifted from behavioral psychology to cognitive psychology, researchers shifted their focus from teachers' behaviors to teachers' thinking and knowledge. This move from behavior to cognition prompted the emergence of scholarship detailing the improvisational nature of teaching. In these years, we began to understand teaching not as a collection of behavioral competencies, but instead as a series of moment-to-moment judgments calling on knowledge about instructional goals, students, and the integrity of the discipline (Erickson, 1982; Lampert, 1985, Shulman, 1987). This shift in our understanding of teaching prompted a shift in teacher education pedagogy as case-based methods emerged, grounded in disciplinary learning. Case-based methods were designed to enable teachers to call on multiple domains of specialized knowledge through the analysis and interpretation of teachers' instructional decisions (Grossman, 2005).

The move toward core practices is an attempt to learn from the affordances and constraints of the last half-century of approaches to teacher education. While competency-based teacher education and case-based methods for teacher education were attempts to better prepare teachers for the complex work of teaching, in the end neither successfully attended to what Mary Kennedy (1999) calls *the problem of enactment*, or the gap between what novices can consider and what they are able to do. The move toward core practices is an attempt to weave together novices' development of meaningful knowledge for teaching with their capacity to actually enact ambitious teaching in particular disciplines in the classroom. The emerging community of teacher educators, practitioners, and researchers focused on core practices attend to the problem of enactment by specifying aspects of teaching practice that are essential to the work of teaching, and which novices can learn to enact in their early years. Their intent has been to support novices to develop a vision of high-quality teaching that is content-rich, rigorous, and meaningful to students, and which novices can enact in their classrooms.

The Learning to Teach In, From, and Through Practice Project (LTP; Lampert et al., 2013) has experimented with early designs for core practice focused teacher education.

Work from this project helps to illustrate how focusing on a set of core practices, grounded in a set of principles of ambitious teaching, potentially facilitates novice teachers' learning inside the complexity of teaching. This group of mathematics educators is motivated by the view that it is possible to better prepare novice teachers to disrupt long-standing practices of mathematics teaching, which have not honored or built on the brilliance of children, particularly in schools with large populations of marginalized students. Although teachers have to be responsive to the requirements of the school environment, our work in teacher education also entails a continual struggle to develop practices that challenge the structures that sort and label children, teachers, and schools. LTP selected *eliciting and responding to students' ideas* as one of a set of interrelated core practices because ample evidence substantiates that this practice supports K-12 students to develop their capacity to engage in central aspects of the discipline of mathematics: reasoning and justification. Teacher educators working in LTP engage novices in watching, planning, and teaching routine instructional activities, which serve as instructional episodes through which novices can enact a set of practices and principles of ambitious teaching. These activities are structured so that novice teachers learn how to use rich mathematics tasks that lend themselves to multiple solutions or mathematical strategies. Protocols for the instructional activities enable teachers to engage in the core practice of eliciting and responding to students by prompting novices to use elicitation sequences such as "How did you get that? Did anyone have a different idea? Let's hear you figured that out." Novice teachers learn to lead four different instructional activities, all of which allows them to learn how to elicit students' reasoning. The choice to focus on eliciting and responding opened the doors for the teacher educators in LTP to notice that while novice teachers were fairly readily taking up the practice of eliciting to student thinking and responding by asking more refined follow-up questions, such as "What did you do with the 1 that you took out?" they were not certain how to draw other students into the conversation or facilitate the conversation toward a particular mathematical goal. These observations led teacher educators in the project to identify another core practice of orienting students to one another and to the mathematics. Not only do teachers ask follow-up questions but skilled teachers also know what aspects of students' solution strategies to make more explicit and how to keep an eye on the instructional goal as they respond to students' contributions and orient them to one another's ideas. The goal in identifying and intentionally noticing and developing these practices as they are interwoven in any lesson is not to develop mechanistic teaching. This focus on practice fits within equity concerns that teachers attend to the assumptions we make about what students can and cannot do and who to call on and why.

The scholarly community that is driving the turn toward practice is primarily doing so by pushing for the development of core teaching practices around which teacher education and professional development can be organized. This community is also identifying and providing visions of how these practices take shape in the context of principled disciplinary teaching. One common mischaracterization of the core practice movement is that it is pushing for the identification of one set of practices for the field to adopt as a whole. However, this characterization does not align with the arguments being put forward by the scholars leading this work. These scholars seem less interested in prescribing one set of core practices and more interested in developing a common understanding of the concept of core practice so that the concept itself might become a field-wide tool for the organization and implementation of practice-based teacher education initiatives. These scholars are also interested in identifying and working on core practices enabling the creation of a community of practice around a particular vision of teaching. This community of practice intends to cultivate relationships among teachers who are oriented toward learning from practice, and who aim to learn about and attend to their students' needs with other teacher educators (e.g., university-, district-, and school-level individuals) who support teacher learning and development. While the field has not yet settled on a common understanding of the concept of a core practice, Grossman, Hammerness, et al. (2009) have set forth a preliminarily list of criteria that all core practices might share:

- Practices that occur with high frequency in teaching,
- Practices that novices can enact in classrooms across different curricula or instructional approaches,
- Practices that novices can actually begin to master,
- Practices that allow novices to learn more about students and about teaching,
- Practices that preserve the integrity and complexity of teaching, and
- Practices that are research-based and have the potential to improve student achievement.

This criteria for identifying core practices challenges scholars to avoid a reductionist approach in which core practices become nothing more than the simple selection of specific moves or a list of best practices comparable with the *Seven Habits of Highly Effective People* or to name effective teaching techniques like Lemov's (2010) popular *Teach Like a Champion*. Attention to student achievement is not meant to be limited to test scores. Instead, we seek measures and examples that demonstrate students being invested in worthwhile disciplinary work and developing positive dispositions. Examples of core practices that meet these criteria include the practices of eliciting and responding to students' ideas, setting and maintaining expectations, or leading particular types of discussions as they come to life in particular content areas (Lampert et al., 2013; Ball & Forzani, 2009; Grossman, 2013). With these criteria in mind, what becomes important is not a consensus on a final set of universal

teaching practices, but instead a continual dialogue within the field and among scholars over how to conceptualize aspects of practice that support practitioner learning of high-quality instruction. What is also needed is a continual examination not just of mechanistic implementation of a set of practices but the meanings that are imbued within certain enactments and the kinds of learning environments that can be designed for students and teachers to thrive. Such a dialog requires researchers and practitioners to be mutually engaged to wrestle with the choices they have made and the ways in which those choices influence teacher learning and development. From this perspective, variation in core practices within and across content areas offers rich opportunities for the field to grapple with ways of parsing practice that support teachers' learning. While we are wary of prescribing a set of core practices for the field as a whole, we are also not arguing that we should let a thousand flowers bloom—a familiar approach within teacher education. Instead, we believe that the field would benefit from coming to an agreement on a set of criteria for identifying, naming, and selecting core practices. How, for example, can we make more explicit the visions of teaching and learning environments that such choices reveal? How are commitments to equity and social justice engaged and made visible through core practices? If we intend for the move toward core practices to impact the field at large, then we must develop a process for determining what counts as a core practice. Grossman, Hammerness, et al.'s (2009) criteria appears to be an appropriate, if unrefined, starting place.

In addition, we argue that for core practices to have a foothold in teacher education, we must simultaneously develop a common language for describing the practice of teacher education, as well as identify a set of related teacher education pedagogies. Without a common language and a set of identified pedagogies, teacher educators are left on their own to figure out how to prepare teachers to teach the core practices, and more importantly the field itself misses an important opportunity to generate knowledge on the range of ways in which we can support teachers' learning.

Teacher Education: The Need for a Common Language and Identified Pedagogies

Preparing teachers to enact core practices with K-12 students requires a sea change in the scholarship and practice of teacher education. In our view, this change requires scholars and practitioners (often one and the same) to collaborate in the development of a common language for describing (a) how teachers learn to practice and (b) the pedagogies teacher educators enact to support teachers in learning to practice. Below we offer a framework for organizing the scholarship and practice of teacher education in an effort to support the field's capacity to aggregate knowledge about pedagogical practice in teacher education. Without a common

framework, the field is limited in three major ways. First, we are limited in our ability to investigate how much and in what ways the core practices themselves need to change as the context of their implementation changes. Second, we are limited in our ability to develop teacher education pedagogies that support teachers in learning to enact core practices. And third, the lack of a common language limits our ability to engage in research aimed at understanding the impact of core practices and supporting pedagogies on K-12 student learning.

If we continue to develop and identify core practices for K-12 teaching without simultaneously considering how we will prepare teachers to enact those practices, implementation will fall short of leveraging the majority of teacher educators in the 2000 plus institutions to engage this work. Our argument is not that one needs to develop a lock step prescription for how to prepare teachers to enact core practices, but rather that as a field we would benefit from a simple framework, applicable across contexts, that would allow us to learn with and from one another. Our hope is that this framework would also enable us to build tools and resources that teacher educators (broadly defined) could access to make decisions about how best to teach the candidates or teachers in their contexts. In the following section, we describe our framework for learning to enact core practices. We start by discussing the theory of professional learning on which the framework rests and then describe the framework itself.

Learning Cycle

Teacher education programs are often organized in ways that align with acquisition models of learning in which teacher educators deliver information about teaching to teacher candidates through courses at a university or other non-K-12 setting. The onus is then on the teacher candidates to carry that learning with them as they enter the field. We understand that many teacher educators strive to interrupt this model of learning, but because of the lack of a conceptualization of how professionals learn, they must do so on their own within the confines of their own limited resources.

By developing a cycle for learning to enact core practices that is strongly grounded in a situated perspective on learning, our framework is intended to push against the tendency in teacher education to default to an acquisition model of learning. Our cycle for learning to enact core practices is grounded in a theoretical perspective that sees learning as collective activity that is mediated by individual and institutional histories as well as conceptual and material tools (Rogoff, 1997; Wenger, 1998). We view professional learning as a process of becoming a teacher with concomitant knowledge, beliefs, and skills. Learning is a process that occurs over time in interaction with the particular settings in which and students with whom teachers learn to teach
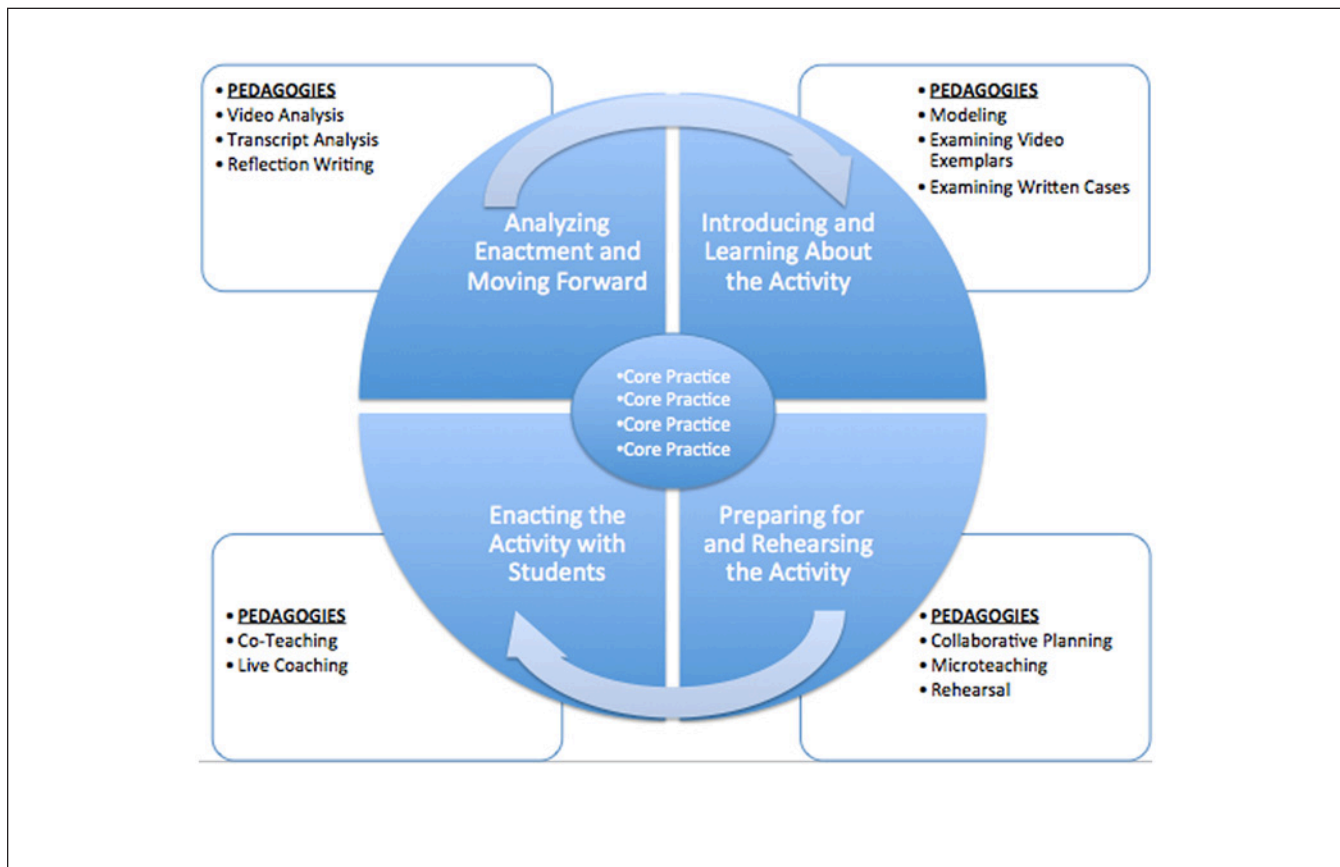
Figure 1. Cycle for collectively learning to engage in an authentic and ambitious instructional activity.

(Cochran-Smith, 2004; Ensor, 2001; Oakes, Lipton, Anderson, & Stillman, 2012).

Developed out of this perspective on learning as well as from a variety of teacher educators' approaches to their own methods classes (Grossman, 2013; Kazemi, Lampert, & Franke, 2009; Windschitl, Thompson, Braaten, & Stroupe, 2012), we propose Figure 1 as a framework for orienting the pedagogy of teacher education. This cycle intends to offer guided assistance to candidates to learn particular practices by introducing them to the practices as they come to life in meaningful units of instruction, preparing them to actually enact those practices, requiring them to enact the practices with real students in real classrooms, and then returning to their enactment through analysis. Depending on the goals and purposes of the teacher educator, it is possible to start this learning cycle in any of its four quadrants. For example, while we might often begin by introducing practices to candidates through modeling or video representation, we could also begin by engaging candidates in an analysis of their own instruction or interaction with students in an effort to help them understand why the core practices we intend for them to develop would support their K-12 students' learning in

ways that are either similar or different to how they are currently practicing.

To better understand how this cycle maps onto the work of teacher education, we will now elaborate how this cycle might be implemented to teach novices how to enact the core practice of *Eliciting Students' Thinking*. This core practice focuses on drawing out students' ideas about content and responding to those ideas in ways that move students' learning forward.

Our framework for learning to enact core practices calls us first to embed the practice we are focusing on into an enact-able activity, what some scholars are calling "instructional activities" (Lampert & Graziani, 2009). While a practice is something that someone habitually and consistently does (Lampert & Graziani, 2009), it still remains an abstraction of the work of teaching until it is embedded into an instantiation of teaching-in-action. The use of instructional activities is one way to construct authentic episodes of teaching around core practices for the purpose of novice learning. Instructional activities are containers that offer novices an opportunity to try on core practices without having to create that opportunity themselves, which can often be too difficult given their context and/or their capacity. Instructional

activities are episodes that have beginnings, middles, and ends and within those episodes they clearly guide how teachers and students are expected to interact, how materials are to be used, and how classroom space is to be arranged. The reason for this detailed specification is to create a container within which a novice might rehearse the relational and improvisational work that teaching requires. Well-crafted instructional activities can also allow teachers to attend to how children's ideas are given voice in the classroom, and how participation structures in the classroom position students competently and enable children to orient to one another's ideas and meaningful ideas in the content. They also challenge teachers' ideas about who can learn and what it means to learn in school. In addition, instructional activities act as common texts that teacher educators can use to help novices work collectively to construct the knowledge necessary to enact the core practice in a more authentic classroom setting.

One example of how teacher educators use instructional activities to teach core practices to novices can be found at the University of Washington. Sarah Kavanagh teaches secondary social studies teachers to engage in the core practice of eliciting and responding to student thinking through a variety of instructional activities, including *Sourcing Documents* (McDonald et al., 2013). This instructional activity is approximately 10 to 15 min long and offers novices a detailed participation structure for facilitating student discourse about the origin and purpose of a set of documents, usually primary sources. The activity can be used in any social studies or history course and at any secondary grade level. While the core practice of eliciting student thinking is improvisational in nature, the instructional activity of sourcing documents involves many structured supports to help novices create opportunities to elicit student thinking, enact a plan for elicitation, and use his or her enactment as a learning tool for further professional development.

The learning cycle not only illustrates how core practices are embedded into instructional activities but also how teacher educators help novices to learn from their enactment of these activities. As an initial step in supporting teachers' learning, a teacher educator might introduce an activity to teacher candidates by modeling it themselves, by watching and analyzing a video of a teacher enacting the activity, or by reading a case in which a teacher enacts the activity. These three pedagogies (modeling, video analysis, and case analysis) are all *representations of practice* (Grossman, Hammerness, et al., 2009), which serve to help teacher candidates develop an image of the activity and embedded practices under study. Once teacher candidates have developed a vision of the activity and embedded practices through their work in Quadrant 1, they might move to the work of Quadrant 2, planning for and rehearsing the practice. Work in Quadrant 2 might take the form of collaborative lesson-planning followed by rehearsal of those plans in the context of their university-based methods course. Together, teacher educators and candidates would debrief the rehearsed attempts and revise the plan. Having prepared for enactment through planning and sheltered practice (what Grossman, Compton, et al., 2009, would call an *approximation of practice*), candidates would move into Quadrant 3, enacting the activity with students. This could take place, as it would in many teacher education programs, in the classrooms of mentor teachers or, if they were practicing teachers, in the context of their own classrooms. During enactment, teacher educators might support novices by engaging in live, in-the-moment coaching or by co-teaching to provide in-the-moment modeling. An important component of the enactment is to have teacher candidates capture their enactment in concrete ways that they can then share with the teacher educator and their colleagues for feedback. Such examples could include taking a video of their efforts or collecting and analyzing artifacts of student learning. Finally, candidates would move into Quadrant 4, where they would engage in an analysis of their specific enactment, or an *investigation of practice* (Grossman, Hammerness, et al., 2009). The analysis part of the cycle is focused on supporting teacher candidates to learn from their own practice—a skill that will likely help them as they continue to develop their practice. In this and other parts of the cycle, the reflective and analytic work that novices do together is a key aspect of giving meaning to the practices that are being worked on. As Delpit (2012) and others (e.g., Danny Martin, Erin Turner, Gloria Ladson Billings, Carol Lee) elegantly argue, equity is not visible simply in what teachers do but also in the meanings and principles that guide how they view children, the relationships they build with children, how they draw on children's cultural knowledge, and the stance they take on the work of teaching.

The learning cycle that we propose above puts core practices into conversation with a vision of professional learning for the purpose of offering the field tools for understanding how novices might learn to skillfully enact core practices in the classroom. In the next sections, we unpack the learning cycle further by illustrating how a common framework for professional preparation might help the field generate knowledge about pedagogies for professional preparation by allowing for the exchange of ideas across:

- Different settings for teacher education (university classrooms, P-12 classrooms, and hybrid spaces)
- Different content areas (math, science, social studies, and literacy)
- The three broad areas of teacher education (foundations, methods, and clinical practice).

Our hope is that with a broadly applicable common framework for professional learning, we might take steps toward developing a common language of pedagogy for learning to practice across different settings and content areas. We believe that developing a common language for pedagogies

Table 1. The Learning Cycle Across Settings.

Type of setting	Example of setting	Quadrant	Example of learning cycle implementation
Controlled setting	Methods course held at a university.	Q1	Teachers watch and discuss video of teaching
		Q2	Teachers collaboratively plan and then rehearse their plans as other teachers "play" students.
		Q3	In their field placement, teachers try out the plan they rehearsed. They capture their enactment on video.
		Q4	Teachers return to the university classroom with video of their enactment and collaboratively analyze their video and make plans for improvement of their practice.
Designed setting	Methods course held in a K-12 school. Teachers and teacher educators engage with K-12 students and K-12 teachers as a central part of the work they do together in the course.	Q1	Teachers watch a teacher educator or K-12 teacher model a teaching practice with K-12 students.
		Q2	Teachers collaboratively plan and then rehearse their plans as other teachers "play" students.
		Q3	Teachers immediately enact their plan with students at the school while teacher educators provide in-the-moment feedback.
		Q4	Teachers and teacher educators debrief the enactment they just observed.
Authentic setting	Teacher educators working with teachers at the school and/or classroom where those teachers are the teachers of record. Together they work with K-12 students whom the teachers know well and whose learning they are responsible for.	Q1	In their own classroom, teachers watch a teacher educator model a teaching practice with their students.
		Q2	Teachers work with teacher educators to plan the activity, weighing different choices they could make in posing the task, anticipate student responses, and developing questions they will ask given various student responses.
		Q3	Teachers enact their plan with their own students while teacher educators provide in-the-moment feedback.
		Q4	Teachers reflect on what they learned and revise plans for future enactments.

of practice that is relevant across multiple settings and content areas will further professionalize the field by offering teacher educators opportunities to collectively engage with one another to generate and aggregate knowledge.

Below, we will discuss how the learning cycle might be made relevant to (a) the multiple settings in which novices are currently learning to practice, and (b) the contemporary organization of teacher education. Finally, we will discuss how this framework might help the field to conceptualize core practices as dynamic entities that grow and change as professionals engage with and learn from them, therefore addressing the real danger within the core practices movement of stagnation and rapid irrelevancy.

Teacher Education Settings

The contemporary landscape of teacher education includes several different settings, each of which have a different set of affordances and constraints for novice learning. These settings include: controlled settings (i.e., university classrooms), authentic settings (i.e., P-12 classrooms), and designed settings that intentionally include elements of controlled and authentic settings to facilitate novice learning (i.e., teacher education classes held in P-12 schools that incorporate teacher educator-mediated practice with P-12 students; Grossman, Hammerness, et al., 2009). We believe

that the learning cycle proposed above is applicable across settings, although its implementation might look quite different across settings (see Table 1).

Because setting shapes the work of teacher education so drastically, having a common learning framework across settings will help scholars and practitioners aggregate knowledge from diverse settings. Because the field has no common language with which to make scholarship and practice relevant across settings, it is rare for knowledge produced in one setting to influence work in other settings. With a common framework for professional learning that can be implemented across settings, the field can begin to generate knowledge about the preparation of professionals that draws from work being done in multiple settings.

Content Areas

To be relevant to the contemporary landscape of teacher education, any framework for learning to engage in core practices must also attend to the contemporary organization of teacher education programs. Most teacher education programs are organized into methods courses (which are split into different disciplines: mathematics, literacy, science, etc.), foundations courses, and clinical practice. There is such a deep split between these areas that it is rare for teacher educators who specialize in one area to have opportunities to

learn from those working in the other areas. In addition, novices often struggle to transfer the skills and knowledge that they gain in one area into their work in another (Smagorinsky, Cook, & Johnson, 2003).

One approach to addressing this perennial problem in teacher education is to develop a common language of teacher education and an identified set of pedagogies that could map onto the different areas of content covered in teacher education programs. It may be that teacher educators working in the foundations may have a lot to teach methods instructors about how to analyze enactment through reflection, while teacher educators' working methods may have a lot to teach foundations instructors about how to rehearse enactment (Kavanagh & McDonald, 2013). However, without a common language and a framework for aggregating pedagogical knowledge and tools, we may not ever become aware of the things we have to learn from one another.

In conclusion, throughout this article, we have articulated an argument for connecting the work of identifying K-12 teaching core practices to the work of specifying and developing teacher education pedagogies. Without such a bridge, the promise of the core practices movement will stall in implementation as so many other efforts to improve teaching and teacher education have done in the past. Finally, we hope that our colleagues in teacher education will take up our call to engage collectively with us in building such a bridge by articulating a vision for teaching and teacher education, specifying the practices of both, and bridging the work of teaching to teacher preparation in ways that will support all of us to better preparing teachers and in turn, improve the learning opportunities available to K-12 students.

Declaration of Conflicting Interests

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Notes

1. In this article, we conceptualize "*teacher educators*" as those individuals within university-based preparation programs, non-university-based preparation programs, schools, and school districts who are responsible for the learning and development of teachers. Examples of teacher educators include university faculty, collaborating teachers in practice-based programs, and district or school content coaches.
2. The authors want to thank the members of the Core Practice Consortium for their intellectual leadership and engagement in teacher education practice and scholarship.
3. For our purposes, we define ambitious teaching practice as a practice that attends to the learning of all students—across ethnic, racial, class, and gender categories—and that aims to deepen students' understanding of ideas as well as their

engagement in the solving of complex problems, rather than the more common place emphasis on activities and procedural talk (Lampert & Graziani, 2009; Newmann & Associates, 1996; Thompson, Windschitl, & Braaten, 2013).

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Author Biographies

Morva McDonald is an associate professor in teacher education at the University of Washington and co-facilitator with Pam Grossman of the Core Practices Consortium. Her research focuses primarily on organizational issues in teacher education, with a particular emphasis on how to design and implement programs with social-justice commitments.

Elham Kazemi is an associate dean of professional learning and associate professor of mathematics education at the University of Washington. She studies practice-based designs for professional education for prospective and practicing teachers that advance students' learning in elementary mathematics and cultivate productive professional communities for teachers.

Sarah Schneider Kavanagh is a doctoral student in Curriculum and Instruction at the University of Washington in Seattle. Her work is centrally concerned with understanding the relationship between teaching as a professional practice and teaching as a social-justice mission. Her research interests include teaching practices that actively interrupt patterns of inequity in schools and teacher education practices that prepare teachers to interrupt persistent inequitable patterns in schooling.