# Problematizing and Reconceptualizing the Theory-Practice Discourse in Teacher Preparation: A Pedagogical Repertoires Perspective

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#### Abstract

This article problematized and reconceptualized the theory-practice dichotomy in initial teacher preparation. Using pre- and post- student teaching interview data from a larger qualitative study that investigated pre-service teachers' learning, I analyzed pre-service teachers' conceptualizations of their learning about teaching and learning. Findings demonstrated that pre-service teachers emphasize expansion of pedagogical repertoires rather than potential relationships or connections between what they learn at the university and practices in K-12 educational spaces. The study provides insight into pre-service teacher learning as a continuous process that moves beyond binary interpretations and draws on contexts and experiences that broaden teacher knowledge.

**Key Words:** Theory-practice discourse, teacher preparation, pedagogical repertoires, preservice teachers

#### Introduction

For decades, theory has collocated with practice in initial teacher preparation discourse. Gee (2015) theorizes discourse as small d discourses (i.e., any stretch of language in use) and Big D Discourses, which refer to ways of being and doing in communities. He further categorizes Big D Discourses as primary Discourses (i.e., what people acquire in their primary socializing unit early in life) and secondary Discourses "acquired within institutions that are part and parcel of wider communities" (p. 3). Big D Discourses are culturally distinctive and powerful because they capture how people enact and recognize socio-historically significant identities in time and space through integration of language, beliefs, values, tools, and actions. Gee's notion of Discourses stresses the conversations within and among historically formed social groups and sets a context for analyzing such conversations. This study highlights and addresses the Big D dichotomous long-standing theory-practice Discourse in initial teacher preparation.

Globally, scholars have investigated the relationship between theory and practice and how both are conceptualized and applied in educational settings. Craig and Orland-Barak (2015) noted that the theory-practice dichotomy "in its many expressions – the theory-practice split, the theory-practice divide, the theory-practice dilemma, the

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theory-practice chasm, the theory-practice bifurcation, the theory-practice problem, the theory-practice conundrum – has persisted internationally" (p. 2). Other expressions refer to this perceived duality as the theory-practice relationship, gap, link, nexus, debate, or dysfunction (see Feldman & Kent, 2006; Korthagen, 2010; McGarr et al., 2017; Ord & Nuttall, 2016; Tang et al., 2019). As a result, the theory-practice binary has been a dominant Discourse in the literature on teacher preparation (see Cavanagh & Garvey, 2012; Feldman & Kent, 2006; Lenz Taguchi, 2010; Ord & Nuttall, 2016; Tang et al., 2019; Zeichner, 2010). It has been identified as a perennial problem and therefore a critical issue in initial teacher preparation (Hammerness & Kennedy, 2019; Korthagen, 2011; la Velle, 2019; Sánchez, 2021).

The theory-practice Discourse, with its dichotomized view of pre-service teacher learning, appears problematic in at least two ways. First, it compartmentalizes preservice teacher learning. Second, it categorizes universities as theory-based learning settings and partner schools as practice-based learning communities (see McGarr et al., 2017). Often, the theory-practice divide in initial teacher preparation also assumes alignment of what pre-service teachers learn in the two settings, thus maintaining reductionist thinking and binary logic in the learning trajectories of pre-service teachers.

To challenge the dualistic nature of learning in university coursework and K-12 classrooms, initial teacher preparation reforms continue to suggest coherent, integrated designs "to create stronger links among courses and between clinical experiences and formal coursework" (Darling-Hammond & Hammerness, 2005, p. 392). An integrated approach, however, appears to maintain dualism as it emphasizes the quality of linkages between university-based coursework and K-12 classroom practices. It tends to embody and reproduce binary perspectives and heightens the need to reconceptualize the core of studying teacher preparation and re-examine existing theory-practice Discourse in pre-service teacher learning. Since "[D]iscourses recontextualize social practices" (Hanell & Salö, 2017, p. 159) but can also be (re)constructed, it is imperative to challenge this provocation and generate new understandings.

Hammerness and Kennedy (2019) point out the need to break down the dichotomies of theory and practice. The purpose of this study was to problematize and reconceptualize the theory-practice dichotomy in teacher preparation and to provide a scope for a non-dualistic perspective. To this effect, I suggested a pedagogical repertoires perspective to initial teacher preparation and argued that pre-service teachers emphasize expansion of pedagogical repertoires rather than potential relationships or connections between what they learn at the university and practices in K-12 educational spaces. Pedagogical repertoires relate to sets of resources that teachers develop from their experiences participating in communities of practice and from which they draw on to identify relevant knowledge used in day-to-day instructional, social, and professional interactions. These sets of resources include ways of knowing, teaching, and being a teacher.

The notion of teacher pedagogical repertoires is paramount and pre-service teachers need to develop pedagogical repertoires (Stoerger, 2012) because learning to teach is "very difficult work, far more complex than the measures" around teacher effectiveness and success/failure in learning (Britzman, 2003, p. 9). Teachers' pedagogical repertoires are shaped by how their experiences help them elaborate on the question: What have you learned about teaching and learning? Therefore, the purpose of this study was to investigate pre-service teachers' pedagogical repertoires to answer the following research question: In what ways do pre-service teachers conceptualize their learning about teaching and learning?

Teachers' pedagogical repertoires transcend their skills or pedagogical content knowledge (PCK). PCK "goes beyond knowledge of subject matter per se to the knowledge for teaching" (Shulman, 1986, p. 9). Clandinin (2000) takes issue with the concept of knowledge for teaching as it maintains the theory-practice dichotomy and frames student teaching as "the time for students to apply those bits of knowledge in practice" (p. 29). Clandinin suggests the concept of teacher knowledge, which refers to knowledge that teachers develop through a variety of experiences and becomes embedded in their lives. Teacher preparation programs concerned with teacher knowledge build on what pre-service teachers know which, as Hayes (2016) contends, is consistent with lenses that concentrate on teachers' repertoires development.

Teacher knowledge emerging from experience is "autobiographical, historical, cultural, and political and it draws on one's life. ... [and] involves a thoughtful look at texts read, experiences had, people known, and ideas considered" (Hamilton & Pinnegar, 1998, p. 236). Therefore, while participating in different communities of practice, pre-service teachers may neither keep track of where they learned (e.g., content, instructional techniques, professional dispositions) nor emphasize comparisons and alignment of what they learned in different settings. Instead, similar to how multilingual learners translanguage to expand linguistic repertoires (see García & Kleifgen, 2018; Kaya, 2021), pre-service teachers may focus on expanding pedagogical repertoires.

### Literature Review and Theoretical Framework

Winch (2018) argues that "it is a commonplace truth that successful professional practice involves the application of theoretical knowledge to professional action" (p. 51). Likewise, Scott (2017) discusses the primacy of theoretical knowledge, arguing that education theory may influence practitioners and policymakers. These arguments emphasize that a major aspect of the professionalization process is introducing theory that learners are expected to apply later. In the context of initial teacher preparation, this perspective implies the practice of the application-of-theory model in which universities and partner schools each play distinctive roles.

## **Paradigms in Initial Teacher Preparation**

In the application-of-theory model, universities provide teaching techniques and theoretical and content knowledge through coursework, and partner schools provide settings and opportunities for pre-service teachers to "apply knowledge and skills learned in coursework" (Hopkins et al., 2018, p. 928). Although realistic in certain domains, the application-of-theory model appears ineffective in initial teacher preparation (Garner & McCarron, 2020; Zonne, 2013). Typically, knowledge from the application-of-theory approach can create a discursive hierarchy between forms of knowledge thereby maintaining a knowing/doing dichotomy. Ord and Nuttall (2016) highlight that, in this sense, knowing can refer to terms such as formal, procedural, or abstract knowledge, whereas doing can be associated with characteristics such as practical, perceptual, or informal knowledge.

Teacher preparation programs that have implemented this "historically dominant 'application of theory' model of preservice teacher education" have been criticized for late clinical placements of teacher candidates in partner classrooms (Zeichner, 2010, p. 90). Others have been perceived as "overly theoretical, having little connection to practice, [and] offering fragmented and incoherent courses" (Darling-Hammond & Hammerness, 2005, p. 391). As discussed, the application-of-theory model promotes dualism and views learning to teach as a two-step process. Hillier (2013) takes issue with ideologies that assume a simplified two-step and sequential process and maintains that learning to teach "is not a simple two-step process where first one learns the content and then learns how to teach it" (p. 323). It is complex because teachers must develop the knowledge, dispositions, and abilities to meet the needs of diverse learners.

To shift the university-based application-of-theory model, many countries have introduced school, practice-based teacher preparation programs (Korthagen, 2011; Sánchez, 2021) where "the student teacher is employed as a teacher" while learning to teach (Buitink, 2009, p. 118). Although commended for early placements and substantial exposure to classroom realities, school-based teacher preparation programs have been found ineffective in part because of the lack of foundational theories. Hagger and McIntyre (2006) explain that school-based mentor teachers alone cannot support the learning of teacher candidates.

In this regard, Korthagen (2011) writes that "The balance seems to shift completely from an emphasis on theory to reliance on practical experiences" (p. 45), which could be problematic from Dewey's (1938) perspective. Dewey argued that experience and education cannot be directly equated, explaining that "the belief that all genuine education comes about through experience does not mean that all experiences are genuinely or equally educative" (p. 25). This perspective capitalizes on the role of professional communities of practice to provide students with meaningful, educative experiences and necessary supports.

According to Hagger and McIntyre (2006), the most important rationale for scho-

ol-university partnerships is high-quality support for student teachers that comes from university-based teacher educators and school-based mentor teachers. Hagger and McIntyre reiterate that university-based teacher educators "need to help both the student teachers and the school-based teacher educators to draw on research-based and other academic kinds of knowledge, and to support them" (p. 67). As such, universities can be viewed as a major support system in the learning of pre-service teachers in both university-based and school-based teacher preparation programs. Arguing for school-based teacher preparation implies advocating for initial teacher preparation grounded in practice, which directly or indirectly supports a theory-practice divide perspective.

To prepare pre-service teachers for deeper learning, Korthagen (2011) suggests a realistic approach to acknowledge and challenge the application-of-theory model of teacher preparation and its consequent theory-practice dichotomy Discourse. A realistic approach places the experiences of pre-service teachers at the heart of learning about teaching (Korthagen, 2011). Drawing on Schwab's (1978) concept of best-loved self which designates teachers as agents of education, not of its subject matter, Craig (2011) maintains that teachers create their personal histories from their experiences. This view aligns with Clandinin's (2000) positioning of teachers as holders of knowledge that matters.

Unlike knowledge as possession where teacher preparation is viewed as compartmentalized, teacher knowledge is expansive, "has a narrative history, is growth-oriented and continuous, and necessarily involves relationships among people" (Craig, 2011, p. 22). Canrinus et al. (2019) suggest a paradigm that integrates a variety of experiences to help future teachers develop the knowledge necessary to navigate their chosen career. Therefore, promoting deeper teacher learning that capitalizes on preservice teachers' funds of knowledge, the essential socially and historically accumulated and culturally developed bodies of knowledge (Moll, 2014), and other available resources can better help pre-service teachers develop their pedagogical repertoires.

## Situated Learning and Pedagogical Repertoires

Situated learning theorists (e.g., Brown et al., 1989; Lave & Wenger, 1991) argue for the centrality of context in learning. Brown et al. perceived that education systems positioned as secondary the activities and contexts in which learning takes place. They took issue with systems that distinguish what we know from what we do, "treating knowledge as an integral, self-sufficient substance, theoretically independent of the situations in which it is learned and used" (p. 32). As such, situated learning emphasizes academic, professional, and social contexts of learning (Lave & Wenger, 1991; Patel, 2017) as well as learner participation in communities of practice.

Because pre-service teachers navigate at least two main communities of practice (i.e., the university and the partner school), their learning is influenced by the social and professional practices of each community. Participation in different communities,

however, should not foster the need for comparisons that seek to emphasize and identify the merit of each community since each community produces and reproduces its array of knowledges and practices (Schatzki, 2017). From this lens, the aim of having pre-service teachers participate in these different communities is to assist them in making sense of the teaching profession and becoming better teachers.

Hayes (2016) explains that "teachers' ways of making sense" become "reflected in their repertoire of pedagogical practice" (p. 212). Gutiérrez and Rogoff (2003) refer to the concept of repertoires of practice to suggest pedagogies that promote and validate students' cultural ways of learning. They use Vygotsky's (1978) cultural-historical theory to describe learners' linguistic and cultural-historical repertoires as "ways of engaging in activities stemming from observing and otherwise participating in cultural practices" (Gutiérrez & Rogoff, p. 22). Gutiérrez and Rogoff illuminate one of the important features of repertoires, which is "encouraging people to develop dexterity in determining which approach from their repertoire is appropriate under which circumstances" (p. 22). In the present study, the concept of repertoires is used to describe the sets of resources that teachers develop from their experiences participating in communities of practice and from which they draw on to identify relevant knowledge used in day-to-day instructional, social, and professional interactions.

The pedagogical repertoires perspective is vital as it de-emphasizes dualistic approaches to learning in initial teacher preparation and capitalizes on pre-service teachers' experiences. Lenz Taguchi (2010) contends that, as educators, it is in the repertoires of embodied experiences and practices that "we can accumulate knowledge and awareness of the complexities and unpredictabilities of learning and, not the least, of the infinite possibilities and potentialities of the students we work with" (p. 138). In this way, as Hayes (2016) argues, teachers' pedagogical repertoires can be observed in their social practices as they interact with colleagues, students, and parents within and beyond schools.

Brown et al. (1989) point to the concept of apprenticeship which suggests the coaching worldview and justifies the notion of support from more capable others (Vygotsky, 1978). Lave and Wenger (1991) proposed that in a culture of practice, new-comers gain maturity and access to the community's culture as they engage in shared practice. They argued that becoming a full member of a community requires having access to activities and different members of the community, "information, resources, and opportunities for participation" (p. 101). Drawing on Clandinin (2000), Korthagen (2017) supports that pre-service teacher learning is "relational (experiences take place in social contexts), temporal (experiences are framed through previous experiences and influence new experiences), and situational (experiences are grounded in situations)" (p. 530). These components of teacher learning testify to its complexity.

The situated learning and repertoires perspectives discussed in this section provide an understanding that pre-service teachers develop pedagogical repertoires as they

navigate different practice-based communities and that learning occurs in educative social contexts. Darling-Hammond and Baratz-Snowden (2007) discuss the necessity of helping future teachers learn to think like teachers and "put what they know into action" (p. 117). It is essential to assist pre-service teachers in integrating their learning from different settings and experiences to propel their pedagogical repertoires.

### Methodology

This qualitative case study examined how pre-service teachers conceptualized their learning about teaching and learning. Lombardi (2001) invites us to consider the perspectives of pre-service teachers as they exit preparation programs. This study problematized and reconceptualized the theory-practice dichotomy based on the perspectives of five white U.S. pre-service teachers (four women and one man) who participated in a larger study that investigated teacher candidates' career choice, perspectives on the teaching profession, experiences of learning to teach, and imagined professional communities, that is, the professional communities they had not lived in yet but envisioned in the future (see Kaya, 2020; Norton & Pavlenko, 2019).

Participants in the present study – Vanessa, William, Xena, Yara, and Helen (pseudonyms) – were undergraduate students (ages 23 to 35) from one cohort of 32 students in an initial teacher licensure program housed in a public, Midwest Tier 2 research university. The context of the program was characterized by a diverse student body, including traditional and non-traditional undergraduate students who pursued teaching either as a first or a second career. The program valued and ensured field placements for pre-service teachers and prepared teachers to teach grades 1 through 6 (i.e., students aged 6 to 11) in U.S. public or private schools. All participants had the same instructors for most of their courses but were placed in different rural partner schools during their last four semesters to include: three semesters of one-day-a-week classroom observations and a final semester of student teaching.

#### **Data Collection**

After receiving approval from the institutional review board, two instructors who taught methods courses in the teacher education program recruited participants on my behalf. The reliability of this study was ensured through several key measures. First, I used interview protocols which allowed for consistent and comparable data across participants. I conducted two one-on-one interviews with each pre-service teacher in two phases – before student teaching (in late fall 2017) and after student teaching in spring 2018. The interviews took place in the library study rooms at the university and lasted 45 to 60 minutes each.

Each of the two interview protocols (i.e., one for each phase of the study) had nine questions (e.g., Tell me about what you learned about teaching in your journey to become a teacher. Where did you gain the knowledge you consider meaningful for you

as a teacher? What would you tell a friend who wants to become a teacher but does not understand why pre-service teachers have to study at the university and spend time in partner schools?). I audio recorded and transcribed the interviews, verbatim. Second, I purposively selected the five focal pre-service teachers through an iterative reading of the interview transcripts and identification of information-rich cases that met the purpose of the study. Furthermore, I engaged in regular discussions with a peer debriefer to maintain consistency in analysis and solve discrepancies in interpretations.

## **Data Analysis**

I used two main validity approaches for this study: reflexivity and peer debriefing. My interpretation of the findings was shaped by my background as former teacher and current teacher educator. As a teacher, I constantly questioned simplistic perspectives that ignored the complexity of the teaching profession. As a teacher educator, my reflections on pre-service teachers' reflections continue to expand my understandings of how they learn from a variety of experiences to inform their actions and imagined pedagogical practices. Regarding peer debriefing, I worked in tandem with a doctoral student who was not part of the study to examine how pre-service teacher learning was conceptualized.

First, I shared the purpose of the study along with data. The student asked multiple questions that were essential in interpreting and organizing the findings and for the write up of the article. We read pre- and post-student teaching interview transcripts to identify pre-service teachers' perspectives on their learning throughout their journey of becoming teachers, utilizing Saldaña's (2016) coding cycles. In the first coding cycle, we used values coding to represent participants' perspectives on their learning and knowledge (Saldaña, 2016). In the second coding cycle, we used pattern coding to "categorize and crystallize" these perspectives and group them into more meaningful and smaller number of themes (Saldaña, 2016, p. 232). Table 1 illustrates how themes were developed.

**Table 1.** *Sample Themes, Categories, and Examples* 

Theme	Category	Example
Situated learning	University	- I learned about more research
	experiences	(Vanessa).
		- Activities like role plays, discussions,
		and teaching demonstrations
		increased my confidence (William).
	Partner school	- I learned a lot; stuff that can't really be
	experiences	taught (Yara).
	•	- During <i>student teaching</i> is when you
		learn what happens behind the scenes (Helen).
		- Some <i>parents can attack</i> you instead of
		going to you or going to the principal
		(Vanessa).
Pedagogical	Cross-community	- I really like how our <i>program</i> takes the
repertoires	learning	time to teach us all these things and we
		have to continue learning in schools
		(Vanessa).
		- Once I got in there [in the partner
		classroom], it was like okay yeah we
		learned some of these things but we
		didn't learn everything (Helen).
		- Trying to track if what I know comes
		from a specific course or professor or a
		specific school where I was placed is, I
		would say, maybe one of the most
		difficult things to remember (William).
	Home and K-12	- I have made decisions based on my
	experiences	experience teaching my son at home
		(Vanessa).
		- I'm 100% sure my teacher didn't know
		how to handle second graders (Helen).

# **Findings**

Data from this study showed that pre-service teachers learned from experiences in different contexts and drew on the pedagogical repertoires that they developed from these experiences. I present pre-service teachers' experiences learning from different communities before emphasizing their pedagogical repertoires.

## Situated Learning: Learning from Different Communities of Practice

Taking into consideration the argument that learning is situated (Lave & Wenger, 1991) and recognizing that pre-service teachers are expected to perform well as students at the university and student teachers in schools, I noted their perspectives on learning in each context.

## Experiences from the University

At the university, pre-service teachers explored literature, observed and learned different teaching practices and their impact, and paid attention to the role of program staff. Vanessa referred to education theorists such as Bruner (1966) as foundational thinkers who know much about "what teachers need to pay attention to in order to help students really learn." She highlighted the value of coursework and inquiry, linking those to teacher learning: "You have to have some of the classes teaching you how to do lesson plans and things like that [i.e., inquiry]." William, similarly, emphasized the importance of coursework in the process of learning to teach. He called for teachers to be mindful of education theorists and theories, especially Vygotsky's (1978) sociocultural learning theory and notion of zone of proximal development because Vygotsky "summarizes what teachers need to know about teaching and student learning" (William). To William and Vanessa, without such learning, teachers may mislead students.

Pre-service teachers discussed how practices such as "role plays, discussions of classroom event scenarios, ... and teaching demonstrations" (William) increased their confidence as future teachers. In addition to learning from different activities and "everyone in the classroom" as well as observing instructors' ways of teaching, Yara claimed to also having learned "something that will stick" with her: "how to look at parents of the students." Yara shared that, "a lot of times I would think oh that parent wasn't trying hard enough, or they don't care about the kids." Her experiences at the university made her take "a dose of humility" as she reflected on aspects that may influence parents and students' behaviors. Pre-service teachers also explained how different classrooms at the university were communities where they built strong "relationships [that] went beyond the classroom" (Yara). Yara and Xena pointed to the support from instructors and the kinds of relationships that they developed, which went beyond their expectations.

Xena initially thought the experience of learning at the university "would be like community college [where] the teachers come, they teach, and they go. They don't really try to make connections with you and really get to know you." She elaborated on how relationships with her instructors and peers influenced her learning and how, as a consequence, she imagined prioritizing relationship building with her own students. William also spoke to the impact of relationships: "I mean this relationship has really helped us feel safe in the classroom in the classes that we've taken, and we've done better because of it." These experiences demonstrate how pre-service teachers gained

insight into ways of teaching and being an effective teacher.

For Helen, learning at the university was also influenced by the program staff who "were always there when we had questions." She explained how "everyone in the system can make your day be good or go really bad" and reflected that if she became an administrator, she would "hopefully always remember" her "power and role" in the learning experiences of all students. Helen, like the other pre-service teachers, also acknowledged that teaching is complex and difficult, and teachers deserve more respect. Vanessa shared a similar opinion, saying that "I'll have even more respect for them [teachers]. I'll get a tremendous amount of respect for them because this is hard." These excerpts demonstrate how pre-service teachers get an understanding of the complexity of teaching during their journey of learning to become teachers.

In this section I reported on how pre-service teachers described the university as a community of practice where they learned research and ways of teaching and noted the complexity of the teaching profession as well as the role of non-teaching staff in education institutions. The following section discusses their learning in partner schools.

## **Experiences from Partner Schools**

Pre-service teachers commented on their learning experiences in partner schools as being influenced by teachers (both assigned mentors and non-mentors), students, staff, and parents. Yara explained how during student teaching she "learned a lot; stuff that can't really be taught." She referred to her observations of and involvement in in-the-moment decisions that teachers make in relation to parent-teacher communications, instruction, classroom management, and unexpected situations in the classroom. Yara and the other pre-service teachers also acknowledged and were grateful for the support of mentor teachers and mentors' colleagues. Vanessa expressed gratitude for her mentor teacher who "was honest" and provided much support and advice on areas where she needed improvement. However, she pointed to the lack of support from parents who, "instead of going to you or going to the principal," often choose to "attack" teachers – sometimes on social media.

Vanessa's experience at her partner school, indeed, made her deactivate her social media accounts and decide to "never have parents as friends" on social media because of an incident that involved another pre-service teacher and the parents of a student. Those parents, Vanessa explained, "put it on Facebook instead ... They posted her picture, her name ... It had to be reported and then Facebook took it off." Despite such experiences with parents, pre-service teachers reported that experiences with students in mentor teachers' classrooms shaped their learning.

William enjoyed "hearing all the stories that students" told him. He learned from his mentor teacher how to analyze what students say to identify challenges or needs and provide necessary supports. Yara, Xena, and Helen too shared how getting to know students helped them become more empathetic. From her observations at the univer-

sity, Helen had noted the importance and power of non-teaching personnel. She made the same observation about her partner school, reflecting that student learning and the act of teaching are also influenced by individuals who do not work with students in the classroom. Student teaching helps to learn what "happens behind the scenes" and give "new respect for teachers, administrators, the janitor ... and everybody that's in the school system" (Helen). It shapes pre-service teachers' perceptions of the teaching profession.

While student teaching helped Xena to better understand that "students have hard lives" and hardships can impact their learning, her own experiences as student teacher were challenging. The school culture was not what she imagined prior to starting her student teaching. Neither the partner school nor the mentor teacher's practices seemed educative. The mentor teacher rejected Xena's hug the first day they met; she neither communicated enough nor offered Xena sufficient opportunities to teach. Xena shared that "some staff would say unnecessary things. I couldn't say anything bad because I didn't want to cause drama. I knew that it was temporary. So, I told myself 'just keep your head down and go." Also, the principal addressed student behavior issues in front of everyone, rather than "talking to students personally." Xena did not like such practices.

While experiences of learning at the university were similar, experiences in partner schools varied. As shown, the context of student teaching influenced pre-service teachers' experiences and how they conceptualized their learning as they received dissimilar support and access to resources. The focal pre-service teachers with one exception wished for a longer student-teaching placement: "I feel like it would be more beneficial if you taught for the whole year instead of just one semester" (William). Vanessa elaborated on the question of student teaching duration, saying that "It would be awesome if it really was a full year" as it would allow to see both the beginning of the year and closer to the end.

Despite dissimilar experiences in partner schools, the pre-service teachers emphasized neither the source (i.e., university course or partner schools) of the knowledge they gained or demonstrated nor comparisons regarding alignment of misalignment between what they learned in different settings. What mattered was remembering and using any components of their pedagogical repertoires to support student learning in their mentor teachers' classrooms.

# **Essentiality of Teacher Pedagogical Repertoires**

Rather than emphasize potential relationships between what pre-service teachers learned at the university and practices in partner classrooms, the perspectives of pre-service teachers in this study suggested new directions. Helen supported that universities have initial teacher preparation programs because "there is so much for new teachers to learn" and learning in one setting is "not enough to prepare good classroom

teachers." She pointed to how she reflected when student teaching – "we learned some of these things [through coursework] but we didn't learn everything" – and acknowledged that "we can't check if everything that we learned during coursework matches with what teachers are doing in the classroom because it just won't work. It's too much." Instead, Helen suggested that pre-service teachers "add each experience, good or bad, (or) each learning to a toolkit" that they will draw on when teaching.

As such, Helen's view suggested that learning for pre-service teachers requires navigating different communities and drawing on different experiences to expand pedagogical repertoires. Vanessa shared a similar perspective, explaining that the purpose of participating in different communities is to expand teacher knowledge and not to seek alignment between what is learned in these settings. She stated:

We continue learning things that can't be compared. I really like how our program takes the time to teach us all these things and we have to continue learning in schools. Like in class we learned about students with IEPs [individualized educational plans] and then you get to the classroom and your CT [cooperating teacher] is talking about some students who qualify for 504 plans.

Vanessa added that student teaching made her feel more like a professional (i.e., not a student anymore), but acknowledged that neither the university nor partner schools alone could provide "complete knowledge that a teacher really needs." At times, Vanessa drew on her own experiences tutoring. She said, "I know I've been taught and trained in different schools" but "I have made decisions based on my experience teaching my son at home, and I hope that's okay." Vanessa ended her grammatically affirmative sentence "I hope that's okay" with hesitancy and a rising intonation, sounding as though she needed reassurance or validation for her pedagogical practice of drawing on her home experience.

Xena's language indicated a similar sense of doubt. Reflecting on potential reasons why her mentor teacher offered her fewer opportunities to teach, Xena questioned her "own way" of teaching. She stated: "I don't know, maybe the way I was teaching? ... I don't know if that was not the best way?" Using 'maybe' and ending on questions signalled Xena's uncertainty, as she questioned her ways of knowing and doing (or teaching), also demonstrating her lack of confidence.

Helen remembered and reflected on the stories of two of her teachers: her uncompassionate second grade teacher who always dramatized small situations and once "got the entire class in trouble," and her high school teacher who "made government – a boring class – so enjoyable." Drawing on her experience with the high school teacher, Helen planned and student taught a similar government lesson. Helen also showed empathy for a student who experienced several surgeries by making herself available to the student. She shared: "I know for sure that was the right thing to do for that girl [student]. ... I'm 100% sure my [second grade] teacher didn't know how to handle second graders." These stories illustrate the different ways pre-service teachers drew

on their own experiences to expand their pedagogical repertoires. Unlike Vanessa and Xena, however, Helen positioned herself as a teacher who knew she would draw on her lived experiences to help her relate to students.

Yara pointed to her focus on constructing knowledge from different settings and sources for the purpose of facilitating student learning. She explained how she could remember a theory, an idea, a story, an experience, an activity, or a technique, but what mattered to her was how she could use it to support student learning. William shared a similar idea when he pointed to the challenge of trying to "track" the source of what he learned in different communities. William stated:

Trying to track if what I know comes from a specific course or professor or a specific school where I was placed is, I would say, maybe one of the most difficult things to remember. Is that something we should be doing?

This excerpt along with the others described above provided evidence in support of the pedagogical repertoires perspective. Even Xena, despite her challenging experiences in her partner classroom, noted the reality of gaining additional knowledge and learning "new things" that she described as being crucial for teachers to know and be able to do.

In this section I presented the findings which supported essentiality of teacher pedagogical repertoires. These repertoires mattered to pre-service teachers more than potential connections between what they learned in different communities of practice. The pre-service teachers concentrated on learning (theirs and students') and issues such as their uncertainties and the duration of student teaching which, as most suggested, should last an academic year instead of one semester.

#### Discussion

The theory versus practice Discourse in initial teacher preparation has led many preparation programs to practice the application-of-theory model (see Winch, 2018) which supports the theory-practice dichotomy and all it entails. This dichotomy has created false expectations, including the one that theoretical knowledge can easily be transferred to practice. While supporting that learning is situated and influenced by communities and their cultures and practices (Brown et al., 1989; Hammerness & Kennedy, 2019; Korthagen, 2017; Lave & Wenger, 1991), I problematized and reconceptualized the established dichotomous Discourse. I argued that pre-service teachers emphasize expansion of pedagogical repertoires rather than potential relationships or connections between what they learn at the university and practices in K-12 educational spaces.

Pre-service teachers commended staff, instructors, mentor teachers, and other members of the school community for their ways of teaching, building relationships, supporting, and giving them access to multiple resources. However, the experiences of one pre-service teacher also demonstrated how she disagreed with a few practices,

mostly during her student teaching. Wenger (1998) makes clear that similar to how family members may hate, love, agree, and disagree with each other, such love, hate, tensions, agreements, and disagreements are found in different communities of practice. Through a pedagogical repertoires perspective, teacher candidates can be prepared to be adaptive and reflective practitioners who can effectively respond to the complexities of schools and other communities and promote meaningful learning.

Pre-service teachers in this study learned by reflecting on instructors' practices and collaborating with peers and mentor teachers. They drew on their experiences in elementary and secondary schools as well as their experiences with literacies in the home to develop teacher knowledge. In addition, they learned from lived experiences in K-12 schools during student teaching. Vanessa shared how she learned to never befriend the parents of students on social media as a result of another student teacher's challenging experience, and Helen imagined becoming a supportive administrator as she reflected on the power of non-teaching personnel on student learning. These findings support situated and sociocultural approaches and experiences upon which teachers draw to develop their pedagogical repertoires.

The experiences of navigating different communities of practice provided preservice teachers with opportunities to constantly reflect. As they reflected on class-room practices and their semester-long student teaching experience, the pre-service teachers wished for a longer period of student teaching. This finding aligns with Darling-Hammond's (2006a; see also Darling-Hammond, 2006b) argument that extended student teaching is an important attribute of stronger initial teacher preparation programs. The perspectives of pre-service teachers in the present study also showed that developing teacher pedagogical repertoires mattered more than the often-emphasized comparisons intended to evaluate and rank the learning of pre-service teachers in universities and in partner schools.

The concept of teacher pedagogical repertoires can be highly valued when reminded that teaching is a complex, multifaceted practice influenced by multiple components requiring a wide range of relevant knowledge, skills, and dispositions, which can inform and enhance classroom practices. Unpacking such necessary knowledge, skills, and dispositions can help understand that "there is so much for new teachers to learn" as Helen expressed in this study. Loughran et al. (2005) maintain that, indeed, "there is so much to learn, and do and so many experiences linked to learning to teach" (p. 220), and Rooks and Winkler (2012) write that "knowledge is not compartmentalized" (p. 3). Therefore, what should matter most in initial teacher preparation is helping preservice teachers expand their pedagogical repertoires in and outside of their professional communities of practice, not establishing comparative assessments or investigations that value potential connections or disconnect between what pre-service teachers learn in different settings.

This study provided insight into understanding that similar to learning in other

contexts, pre-service teacher learning is situated. It showed that the development of teacher pedagogical repertoires is a learning process that crosses boundaries between universities and partner schools and between educational institutions and other communities of practice (e.g., homes). The study contributes to challenging the theory versus practice dichotomy to view pre-service teacher learning as continuous and non-dualistic. As evidenced by pre-service teachers' views, initial teacher preparation programs lay the groundwork, and novice and experienced teachers continue to expand pedagogical repertoires. Therefore, educators of future teachers should look into models that integrate the components of pedagogical repertoires that are essential for effective teaching (see Canrinus et al., 2019). A pedagogical repertoires approach supports pre-service teachers' development of professional or teacher knowledge as candidates transition from being students to becoming teachers.

## **Implications**

Pedagogical practices that promote active learning are a mixture of ways of knowing, being, and doing/teaching. Therefore, pre-service teachers need to develop and expand their pedagogical repertoires, while teacher preparation programs must work to ensure educative experiences and attend to issues that matter to teacher candidates. Given that pre-service teachers come to understand through lived experience that teaching is a complex profession, and that teacher knowledge is not compartmentalized, there is a need for teacher educators and mentor teachers to make clear specific ways for pre-service teachers to expand their pedagogical repertoires while navigating different communities of practice. Teacher educators can also prepare pre-service teachers for the potential dissonance between their learning expectations as they go into student teaching and the reality in school communities (see Kaya, 2023).

Second, while in the press of performing well as students at the university and student teachers in partner schools, teacher candidates bring with them funds of knowledge from their homes, communities, and prior school experiences (Moll, 2014). Unless these funds of knowledge are valued and promoted as part of their pedagogical repertoires, pre-service teachers may exit preparation programs questioning such knowledge. Therefore, teacher educators and mentor teachers can and should model how to incorporate funds of knowledge in classrooms, a relevant realistic approach to building responsive educators. They need to integrate pedagogies and practices that reassure pre-service teachers that teacher knowledge emerges from experiences, as not all preservice teachers are able to confidently assert this knowledge as a viable component of their pedagogical repertoires.

Third, teacher educators and mentor teachers can engage in self-study that makes their practices visible to pre-service teachers, also demonstrating how they learn from experience. Martin and Russell (2020) invite us to consistently ask ourselves two essential questions, "Am I still learning from experience?", "Am I teaching my students

how to learn from experience?" (p. 1054). Given their reflective nature, these questions are essential guides to effectively shaping practice and expanding teacher candidates' pedagogical repertoires. Therefore, the role and responsibility of those who work with teacher candidates to foster their reflective practices cannot be understated since engaging these future teachers in such practices allows them to critically evaluate their own learning, teaching, and professional growth.

Finally, pre-service teachers can develop their own pedagogical repertoires through collaboration with different members of their professional communities. Lenz Taguchi (2010) tells us that "individual learning is the result of a collaborative process" (p. 155). Given the ever-growing cultural and linguistic diversity in K-12 classrooms, professional development is also needed for pre-service and mentor teachers to expand their own pedagogical repertoires. One way to do so is through collaborative practitioner inquiry. Dana and Yendol-Hoppey (2020) conceptualize practitioner inquiry as a pathway to equity. They discuss that individuals learn to teach and teach to learn through practitioner inquiry. Costa and Garmston (2015) capture so eloquently that "what makes teaching a profession is the continual inquiry, expansion of repertoire, and accumulation of knowledge through practice" (p. 162). Expanding pedagogical repertoires, as suggested in this article, is a multi-faceted process that goes beyond initial teacher preparation.

#### Limitations

This study has three main limitations. The first is the small sample. The second is the design, which is a single case and limits applicability of the findings. The third limitation is also related to the design. A study where pre-service teachers would document the ways they develop their pedagogical repertoires throughout a semester or semesters – rather than rely only on what they recall during the interviews – would yield more and richer data.

#### Conclusion

In this article, I used the concept of pedagogical repertoires to argue against the long-standing theory-practice dichotomy that has dominated Discourse in pre-service teacher learning for decades, portraying schools as institutions of educational practice and universities as ivory towers of theory. The dichotomous Discourse views preservice teachers' knowledge and development as compartmentalized (Rooks & Winkler, 2012). It also maintains the status quo in efforts to conceptualize partner schools and universities as two coordinated, coexisting, and principal professional communities of practice that pre-service teachers navigate to develop their pedagogical repertoires.

The pedagogical repertoires perspective takes into account the complex nature of teaching and conceptualizes teacher preparation as a time when prospective teachers learn and reflect on their experiences from different communities (e.g., universities, partner schools, homes, prior education institutions) to develop sets of resources from which they draw on when teaching, socializing, and interacting professionally. In sum, if initial teacher preparation programs are to provide pre-service teachers with experiences intended to help them gain teacher knowledge, it is essential to take up the call and emphasize expansion of pedagogical repertoires rather than potential relationships or connections between what pre-service teachers learn at the university and practices in K-12 educational spaces.

#### References

- Britzman, D. P. (2003). *Practice makes practice: A critical study of learning to teach.* Suny Press.
- Brown, J. S., Collins, A., & Duguid, P. (1989). Situated cognition and the culture of learning. *Educational Researcher*, 18(1), 32-42. https://doi.org/10.3102/0013189X018001032
- Bruner, J. S. (1966). Toward a theory of instruction. The Belknap Press.
- Buitink, J. (2009). What and how do student teachers learn during school-based teacher education. *Teaching and Teacher Education*, 25(1), 118-127. https://doi.org/10.1016/j.tate.2008.07.009
- Canrinus, E. T., Klette, K., & Hammerness, K. (2019). Diversity in coherence: Strengths and opportunities of three programs. *Journal of Teacher Education*, 70(3), 192-205. https://doi.org/10.1177/0022487117737305
- Cavanagh, M. S., & Garvey, T. (2012). A professional experience learning community for pre-service secondary mathematics teachers. *Australian Journal of Teacher Education*, *37*(12), 57-75. http://dx.doi.org/10.14221/ajte.2012v37n12.4
- Clandinin, J. (2000). Learning to teach: A question of knowledge. *Education Canada*, 40(1), 28-30.
- Costa, A. L., & Garmston, R. J. (2015). *Cognitive coaching: Developing self-directed leaders and learners*. Rowman & Littlefield.
- Craig, C. J. (2011). Narrative inquiry in teaching and teacher education. In J. Kitchen, D. C. Parker, & D. Pushor (Eds.), *Narrative inquiries into curriculum making in teacher education* (pp. 19-42). Emerald.
- Craig, C. J., & Orland-Barak, L. (2015). International teacher education: Promising pedagogies introduction. In L. Orland-Barak, & C. J. Craig (Eds.), *International teacher education: Promising pedagogies* (pp. 1-5). Emerald Publishing.
- Dana, N. F., & Yendol-Hoppey, D. (2020). The reflective educator's guide to classroom research: *Learning to teach and teaching to learn through practitioner inquiry*. Corwin.
- Darling-Hammond, L. (2006a). Constructing 21st-century teacher education. *Journal*

- of Teacher Education, 57(3), 300-314. https://doi.org/10.1177/0022487105285962
- Darling-Hammond, L. (2006b). *Powerful teacher education: Lessons from exemplary programs*. John Wiley & Sons.
- Darling-Hammond, L., & Baratz-Snowden, J. (2007). A good teacher in every class-room: Preparing the highly qualified teachers our children deserve. *Educational Horizons*, 85(2), 111-132. https://www.jstor.org/stable/42926597
- Darling-Hammond, L., & Hammerness, K. (2005). The design of teacher education programs. In L. Darling-Hammond, & J. Bransford (Eds.), Preparing teachers for a changing world: *What teachers should learn and be able to do* (pp. 390-441). Jossey-Bass.
- Dewey, J. (1938). Experience and education. Touchstone.
- Feldman, P., & Kent, A. M. (2006). A collaborative effort: Bridging theory and practice in pre-service preparation. *The New Educator*, *2*(4), 277-288.
- García, O., & Kleifgen, J. A. (2018). Educating emergent bilinguals: Policies, programs, and practices for English learners. Teachers College Press.
- Garner, P. W., & McCarron, G. P. (2020). Developing leadership in early childhood education and care through the integration of theory, policy engagement, and advocacy. *Journal of Early Childhood Teacher Education*, 1-18. https://doi.org/10.1080/10901027.2020.1799117
- Gee, J. P. (2015). Discourse, small d, big D. *The International Encyclopedia of Language and Social Interaction*, 1-5.
- Gutiérrez, K. D., & Rogoff, B. (2003). Cultural ways of learning: Individual traits or repertoires of practice. *Educational Researcher*, *32*(5), 19-25. https://doi.org/10.3102/0013189X032005019
- Hagger, H., & McIntyre, D. (2006). Learning teaching from teachers: Realizing the potential of school-based teacher education. Open University Press.
- Hamilton, M. L., & Pinnegar, S. (1998). Conclusion: The value and promise of self-study. In M. L. Hamilton (Ed.), *Reconceptualizing teaching practice: Self-study in teacher education* (pp. 235-246). Falmer Press.
- Hammerness, K., & Kennedy, B. (2019). Teaching practices grounded in foundational knowledge, visions, and contexts. *The New Educator*, *15*(1), 66-83.
- Hanell, L., & Salö, L. (2017). Nine months of entextualizations: Discourse and knowledge in an online discussion forum thread for expectant parents. In C. Kerfoot, & K. Hyltenstam (Eds.), *Entangled discourses* (pp. 154-170). Routledge.
- Hayes, D. (2016). Teachers' work in high-poverty contexts: Curating repertoires of pedagogical practice. In J. Lampert, & B. Burnett (Eds.), *Teacher education for high poverty schools* (pp. 211-222). Springer.
- Hillier, J. M. (2013). How does that work? Developing pedagogical content knowledge from subject knowledge. *Teacher Education and Practice*, 26(2), 321-338.
- Hopkins, S. L., Round, P. N., & Barley, K. D. (2018). Preparing beginning teachers for

- inclusion: Designing and assessing supplementary fieldwork experiences. *Teachers and Teaching*, 24(8), 915-930.
- Kaya, J. (2020). Inside the international student world: Challenges, opportunities, and imagined communities. *Journal of International Students, 10*(1), 124-144. https://doi.org/10.32674/jis.v10i1.1031
- Kaya, J. (2021). Promoting linguistic repertoires in second language classrooms. *Réflexions*, 40(3), 35-37.
- Kaya, J. (2023). The expectations-reality dissonance in student teaching: A discourse analysis of one pre-service teacher's perspective. *Educational Linguistics*, *2*(1), 29-50. https://doi.org/10.1515/eduling-2022-0020
- Korthagen, F. A. J. (2010). How teacher education can make a difference. *Journal of Education for Teaching*, 36(4), 407-423. https://doi.org/10.1080/02607476.2010 .513854
- Korthagen, F. A. J. (2011). Making teacher education relevant for practice: The pedagogy of realistic teacher education. *Orbis Scholae*, *5*(2), 31-50.
- Korthagen, F. A. J. (2017). A foundation for effective teacher education: Teacher education pedagogy based on situated learning. In D. J. Clandinin, & J. Husu (Eds.), *The Sage handbook of research on teacher education* (pp. 528-544). Sage.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge University Press.
- la Velle, L. (2019). The theory–practice nexus in teacher education: new evidence for effective approaches. *Journal of Education for Teaching*, 45(4), 369-372. https://doi.org/10.1080/02607476.2019.1639267
- Lenz Taguchi, H. (2010). Going beyond the theory/practice divide in early childhood education: Introducing an intra-active pedagogy. Routledge.
- Lombardi, J. (2001). Supervision of student teachers: Emerging models and innovative approaches in the USA. *Teacher Development*, *5*(3), 309-322.
- Loughran, J., Berry, A., & Tudball, L. (2005). Learning about teaching. In C. Kosnik,C. Beck, A. R. Freese, & A. P. Samaras (Eds.), *Making a difference in teacher education through self-study* (pp. 203-225). Springer.
- Martin, A., & Russell, T. (2020). Advancing an epistemology of practice for research in self-study of teacher education practices. In J. Kitchen, A. Berry, S. Bullock, A. Crowe, M. Taylor, H. Guðjónsdóttir, & L. Thomas (Eds.), *International handbook of self-study of teaching and teacher education practices* (pp. 1045-1073). Springer.
- McGarr, O., O'Grady, E., & Guilfoyle, L. (2017). Exploring the theory-practice gap in initial teacher education: Moving beyond questions of relevance to issues of power and authority. *Journal of Education for Teaching*, 43(1), 48-60.
- Moll, L. C. (2014). L. S. Vygotsky and education. Routledge.
- Norton, B., & Pavlenko, A. (2019). Imagined communities, identity, and English lan-

- guage learning in a multilingual world. In X. Gao (Ed.), Second handbook of English language teaching (pp. 703-718). Springer.
- Ord, K., & Nuttall, J. (2016). Bodies of knowledge: The concept of embodiment as an alternative to theory/practice debates in the preparation of teachers. *Teaching and Teacher Education*, 60, 355-362.
- Patel, C. (2017). Jean Lave and Etienne Wenger's situated learning: Legitimate peripheral participation. Macat International.
- Rooks, D., & Winkler, C. (2012). Learning interdisciplinarity: Service learning and the promise of interdisciplinary teaching. *Teaching Sociology, 40*(1), 2-20. https://doi.org/10.1177/0092055X11418840
- Saldaña, J. (2016). The coding manual for qualitative researchers. Sage.
- Sánchez, J. G. (2021). Practicing with theory: Teacher education at high tech high/graduate school of education. *The New Educator*, 17(1), 76-95.
- Schatzki, T. (2017). Practices and learning. In P. Grootenboer, C. Edwards-Groves, & S. Choy (Eds.), *Practice theory perspectives on pedagogy and education: Praxis, diversity and contestation* (pp. 23-43). Springer.
- Scott, D. (2017). Education systems and learners: Knowledge and knowing. McMillan.
- Shulman, L. S. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher*, 15(2), 4-14. https://doi.org/10.3102/0013189X015002004
- Stoerger, S. (2012). Breaking away: How virtual worlds impact pedagogical practices. In H. H. Yang, & S. C. Yuen (Eds.), *Handbook of research on practices and outcomes in virtual worlds and environments* (pp. 431-450). IGI Global.
- Tang, S. Y. F., Wong, A. K. Y., Li, D. D. Y., & Cheng, M. M. H. (2019). Examining student teachers' engagement with the theory-practice link in initial teacher education. *Journal of Education for Teaching*, 45(2), 123-139. https://doi.org/10.108 0/02607476.2018.1548167
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes.* Harvard University Press.
- Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity.* Cambridge University Press.
- Wenger, E. (2011). Communities of practice: A brief introduction. *Scholars' Bank, 1-7*. http://hdl.handle.net/1794/11736
- Winch, C. (2018). Applied theoretical knowledge and professional and vocational education: Informed know-how in a non-intellectualist framework. In S. Allais, & Y. Shalem (Eds.), *Knowledge, curriculum, and preparation for work* (pp. 51-67). Brill.
- Zeichner, K. (2010). Rethinking the connections between campus courses and field experiences in college- and university-based teacher education. *Journal of Teacher Education*, 61(1-2), 89-99. https://doi.org/10.1177/0022487109347671

Zonne, E. (2013). Perceiving, interpreting and innovating the religious dimension in school cultures. In G. Skeie, J. Everington, I. t. Avest, & S. Miedema (Eds.), *Exploring context in religious education research: Empirical, methodological and theoretical perspectives* (pp. 87-114). Waxmann.