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Practising preservice teachers' experiences of learning as synchronous boundary crossing

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ABSTRACT

Teacher shortages have seen preservice teachers filling paid teaching positions while continuing to complete their teaching qualifications in Australia and internationally. While responding to market logic and addressing teacher supply issues, limited research has occurred on how this impacts these paid practising preservice teachers' experience of learning. This paper reports on six in-depth interviews with preservice teachers from Queensland, Australia, undertaking Permission to Teach and Turn to Teaching. Framed by boundary crossing and practice architectures, this study revealed cultural-discursive, material-economic, and social-political arrangements that influenced these preservice teachers' synchronous learning experiences across school and university contexts. On one hand, findings showed some practising preservice teachers appreciated the opportunity to enrich their learning experience through the synchronisation of practical-theoretical learning across sites. On the other hand, many deprioritised university learning engagement to manage teaching obligations and, in doing so, privileged discourse of practice-based teacher education. Findings have implications in Australia and internationally for initial teacher education where preservice teachers are employed in schools.

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Alternative teacher preparation pathways; boundary crossing; initial teacher education; preservice teachers; practice architectures

Introduction

The impact of teacher workforce shortages across the world is of significant concern. Australia offers a clear case in point, along with other countries such as the UK (See & Gorard, 2020; Sims & Allen, 2018) and the US (Garcia et al., 2022). In Australia and elsewhere, an insufficiency of qualified teachers to meet school requirements has been partly attributed to past declines in initial teacher education (ITE) enrolments impacting teacher workforce supply (Weldon, 2015, 2018). The effects of this decline are compounded by the continuing trend for teachers at all career stages to elect to exit the profession (Brandenburg et al., 2024). Concerns are mounting about the impact of teacher workforce shortages on student learning (Carver-Thomas & Darling-Hammond, 2019; Håkansson Lindqvist et al., 2022; Kelchtermans, 2017), the

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manageability of teacher and school leaders' work (Heffernan, Bright, et al., 2022; Heffernan, MacDonald, et al., 2022), and the profession more broadly.

Internationally, alternative teacher pathways have been viewed as one means of addressing workforce shortfalls in hard-to-staff schools (Dadvand et al., 2024; Dawborn-Gundlach et al., 2025), often located in low socio-economic (Dadvand et al., 2024) or rural and remote settings (Blackmore et al., 2023). Teach for America (Kraemer-Holland, 2023), Teach First (Brooks & Perryman, 2024), School Directed Salaried Trainees in the UK (George & Maguire, 2019), and Teach for Australia (Evangelinou-Yiannakis, 2019) offer examples of this approach. Showing some similarity, Australia's 2022 National Teacher Workforce Action Plan (Department of Education, 2022) sets out, among other recommendations, to increase the supply of teachers by increasing the uptake of conditional registration of preservice teachers. Conditional accreditation (NSW Education Standards Authority [NESA], 2024), or Permission to Teach approval (Queensland College of Teachers [QCT], 2024) as it is called in some Australian states, such as Queensland, enables preservice teachers to take on paid employment as classroom teachers while concurrently completing their studies. This same Action Plan (Department of Education, 2022) advocated for opportunities for fast-tracked pathways into the classroom before full qualification.

While all seven states and territories across Australia have implemented these recommendations in slightly different ways, pathways involving paid teacher employment are gaining national traction (Dawborn-Gundlach et al., 2025). In this paper, I refer to preservice teachers in these circumstances as *practising preservice teachers* (PPSTs), as they are employed in schools as practising teachers with much the same incumbent responsibilities as their in-service practising teacher colleagues, while concurrently required to meet the study expectations of preservice teachers. In doing so, these PPSTs are in a unique learning position, toggling between university studies and school-based employment. Queensland serves as a useful context, implementing, since 2022, the Turn to Teach (TTT) initiative in conjunction with increases in Permission to Teach (PTT) approved positions. Thus, in this study, PPSTs represent a larger group including PTTs and TTTs.

While international research (Guthery & Bailes, 2022; Redding, 2022; Redding & Henry, 2018; Redding & Smith, 2019; Thomas & Lefebvre, 2020) has contributed to some understanding of the challenges (and opportunities) of alternative teacher preparation programmes in their various forms, much less research has occurred in the Australian context (see, for example, Evangelinou-Yiannakis, 2019; Joseph, 2019; Lampert & Dadvand, 2024), and even less investigation in the Queensland context. Furthermore, few studies have specifically investigated the impact of these pathways on PPSTs' learning experiences (see, for example, Thomas & Lefebvre, 2020), with a large majority focused on participation and retention rates.

Given the significance afforded ITE as a determinant of teacher effectiveness and career readiness (see, for example, the *Next Steps: Report of the Quality Initial Teacher Education Review*, 2022; *Strong Beginnings: Report of the Teacher Education Expert Panel*, 2023), understanding how PPSTs experience their learning is crucial to the ongoing refinement of such pathway offerings and ensuring equitable access to ITE that develops the practicalities of teaching concurrently with the dispositions and abilities needed to be

the kind of 'transformative intellectuals' (Giroux, 1988, p. 127) critical to the teaching profession.

This paper therefore aims to contribute to understanding the PPST learning experience by drawing on six in-depth interviews with PPSTs undertaking Permission to Teach (PTT) or Turn to Teaching (TTT) pathways in Queensland, Australia. This exploratory study used practice architectures (Kemmis et al., 2013; Mahon et al., 2017; Schatzki, 2002) as a way of thinking about how arrangements (cultural-discursive, material-economic, and social-political) in place in PPSTs' school and university sites of learning influenced the learning they experienced as they continuously crossed the boundaries (Akkerman & Bakker, 2011) between learning sites. This paper therefore responds to the following research question:

> How do practising preservice teachers (PPSTs) experience learning within Permission to Teach (PTT) and Turn to Teach (TTT) pathways?

In the following section, I describe PTT and TTT teaching arrangements in Queensland, Australia. Next, I review research literature relevant to this topic and explain the conceptual framework for this paper. The study methods are then outlined, with the findings subsequently presented and discussed. The paper concludes with key implications for future policy, practice, and research.

Queensland pathways

Permission to Teach (PTT)

In Queensland, preservice teachers may apply to the state regulatory authority responsible for teacher accreditation, the Queensland College of Teachers (QCT), for Permission to Teach (PTT) in a school before completing their academic teaching qualification. If deemed to possess the necessary 'knowledge, qualifications, skills or training' (QCT, 2024) by the authority, preservice teachers may take up a paid teaching position that a qualified teacher has not been available to fill. Teaching positions can be taken up in any of Queensland's schooling sectors (state, Catholic, or independent) and involve up to a full-time teaching load. The school is expected to provide 'support and mentoring' (QCT, 2022). Preservice teachers must continue to 'complete coursework, assessment, and program requirements' (Queensland College of Teachers QCT, 2022) of their academic university programme while teaching.

Since 2021, there has been a 231% increase in PTT approvals in Queensland (QCT, 2023), with 95% of the 888 approvals in 2022 being preservice teachers enrolled in ITE programmes. These PTTs were employed in both primary and secondary schools. Approval can be provided for preservice teachers at any stage of their ITE programme, with some PPSTs in the very early stages of their studies. The 2022 Principles for PTT (QCT, 2024) offer guidance as to how the higher education institution (HEI), preservice teacher, and school might support PTTs.

Turn to Teach (TTT)

The TTT Programme is a formal internship programme that commenced in 2022 and has been implemented at seven Queensland universities. Applicants must hold an undergraduate degree and complete a two-year master's teaching qualification. During the

first year, they receive a scholarship and undertake full-time study and complete the required professional experience (practicum) requirements. In the second year, TTTs engage in a paid internship. Placed in a state (government) school (primary or secondary as relevant), they undertake supervised teaching duties until they are evaluated to be ready to work independently in the classroom. This can occur as early as the first four months.

In contrast to PTTs, TTT interns are allocated a 50% teaching load and study part-time. It is required that TTTs 'receive mentoring, support, and access to a TTT Intern Community of Practice (TTT CoP)' (Queensland Government, 2024). Quite differently to PTTs, schools must provide TTTs with a mentor and a supervising teacher responsible for regular evaluations of progress. Universities also provide regular university liaison visits to the school site. TTTs must graduate at the end of their internship year and are guaranteed a permanent teaching position in a state school at this time. They must commit to a return of service of two or three years, depending on the school.

The emergence of alternative pathways to teacher preparation

Alternative teacher preparation pathways and certification have emerged as a topic of research significance over the past two decades. Unlike the Australian context, where traditional approaches to ITE have remained the norm until quite recently, international contexts have seen an 'unfolding' (Thomas & Baxendale, 2022, p. 2) of 'early entry programs' (Thomas & Lefebvre, 2020, p. 6) that have 'pushed against traditional education structures' (Lefebvre & Thomas, 2017, p. 359) by employing students completing their teacher qualification as paid classroom teachers. Teach for America (TfA), founded in the US in 1990, is a clear example that has been, to a large extent, the centrepiece for research in this field.

The TfA represents one of the most influential privatised alternative teacher preparation programmes in the US based on an 'on-the-job model' (Kraemer-Holland, 2023, p. 2) of teacher preparation, with a focus on hard-to-staff schools in low socio-economic communities (Thomas & Lefebvre, 2018, 2020). In many ways, TfA has opened the door to reimagining what teacher preparation can potentially look like (Kraemer-Holland, 2023). By 2007, TfA had transformed into Teach for All, a movement that saw global derivatives of the programme such as Teach First in the UK (Spicksley, 2019), Teach for India (Blumenreich & Gupta, 2015), and Teach for Australia (Evangelinou-Yiannakis, 2019) emerge. A plethora of alternative certification pathways is now on offer in the US and elsewhere. These include, among others, online and privatised licensure programmes, university-based residencies and privatised licensure (Guthery & Bailes, 2022; Myers et al., 2020), and emergency certification (Mobra & Hamlin, 2020).

While these programmes vary, they seem to respond to the growing call for greater opportunities for in-situ learning and the fast-tracking (Guthery & Bailes, 2022) of preservice teachers into paid teacher employment. According to Moon (2016) and others (Darling-Hammond, 2017; Jenset & Klette, 2023; Zeichner, 2023), programmes globally have taken a 'practice-turn' (Reid, 2011, p. 299) in the belief that extending the 'vocational component' (Aprile & Knight, 2020, p. 870) of teacher preparation will strengthen preservice teachers' preparation for the profession (Wei & Lu, 2022). This move has

further been touted as a counter to overly theoretical university studies (Blumenreich & Gupta, 2015).

The practising preservice teacher experience

While several quantitative studies have reported that the learning outcomes of students taught by alternatively prepared teachers are commensurate with their traditionally certified counterparts (Lucksnat et al., 2024), several studies have noted higher levels of attrition of teachers certified through non-traditional programmes (Guthery & Bailes, 2022; Redding, 2022; Redding & Henry, 2018; Redding & Smith, 2019), drawing attention to the importance of understanding the preservice teachers' experiences in these programmes. Both Matsko et al. (2022) and Thomas and Baxendale (2022) have noted a quantitative and evaluative focus of research to date, focus on participation and retention rates rather than pursuing a better understanding of the experiences of these preservice teachers.

While the school-situated nature of alternative teacher preparation pathways affords preservice teachers extensive opportunity to 'develop their practical knowledge by solving authentic challenges in the workplace' (Wei & Lu, 2022, p. 342), scholarly critique suggests that teachers prepared through such pathways may lack critical breadth and depth of knowledge and understanding of teaching to effectively and confidently respond to the complexities of teaching, consequently placing their professional identity development as a teacher at risk (Blumenreich & Gupta, 2015; Joseph, 2019). In 2020, Thomas and Lefebvre provided one of only a few studies about the learning experiences of these preservice teachers. They found that these preservice teachers were driven by 'an instructional imperative of immediacy' (p. 13), discarding learning which might take too much time or seem too abstract to be immediately useful. Their study found learning 'disinvestment' (Thomas & Lefebvre, 2020, p. 13) was compounded by challenges in finding connections between university and in-situ learning and limited capacity to commit to their studies. Australian researchers, Lampert and Dadvand (2024), further warn that alternative pathways privilege the development of the practicalities of teaching at the expense of nurturing teachers' sense of social justice as educators.

Other qualitative or mixed method studies, both international (Kraemer-Holland, 2023; Thomas & Lefebvre, 2018) and Australian (Evangelinou-Yiannakis, 2019; Joseph, 2019), identified that while these preservice teachers might complete their pathway of preparation, they can experience overwhelm and burnout. In another Australian study, Joseph (2019) found preservice teachers in the Teach for Australia programme felt they had limited time to develop a professional identity while learning on the job, while other studies (Guthery & Bailes, 2022; Matsko et al., 2022) reported that preservice teachers felt less prepared for teaching. The increased likelihood that these preservice teachers take up positions in challenging school contexts (Redding & Smith, 2019) has been shown to exacerbate already significant demands.

Kavanagh (2022), however, has challenged the field to think differently, or at least less negatively about, 'practice-based teacher education' (p. 66). More specifically, she argues that the belief that 'the centering of practice requires a decentering of something else' (p. 66) is overly simplistic. Cochran-Smith and Lytle (1999) similarly posit that an either/or between *knowledge* [learning] *in practice* and knowledge [learning] *for* practice

(Cochran-Smith & Lytle, 1999) represents a false dichotomy and instead, offers an opportunity to progress teacher education. Castro and Edwards (2021) likewise claim that ITE innovation is not only essential but inevitable. That said, Castro and Edwards (2021) and Thomas and Lefebvre (2018) warn, however, that innovation must be underpinned by quality ITE experiences of learning. Such are the tensions between teacher preparation that may appear to be responding to market logic (Mutton & Burn, 2024) (a workforce shortfall) and a commitment to socially transformative teacher education (Giroux, 1988).

With these tensions in mind, this study draws on constructs of boundary crossing (Akkerman & Bakker, 2011) and practice architectures (Kemmis et al., 2012; Mahon et al., 2017) to theoretically and empirically explore the PPSTs' experiences of learning.

Boundary-crossing as a practising preservice teacher

In this study, I draw on boundary crossing (Akkerman & Bakker, 2011) to think about the learning experience of PPSTs, simultaneously learning to teach at the school and university site. According to Akkerman and Bakker (2011), a boundary can be seen as a socio-cultural difference between two sites that are otherwise connected by some relevant practice or purpose. When traversed, these differences can lead 'to discontinuity in action and interaction' (Akkerman & Bakker, 2011, p. 133). Practice tensions occur where valued expertise and capabilities in one context may be perceived to lack connection to or mobilisation within the other.

Boundary crossing has been previously used to frame studies involving a traditional teacher preparation structure whereby preservice teachers spend time at the university site completing coursework as one site of learning, with several interjected and discreet periods of classroom practicum as another site of learning (Chan, 2019; Harrison, 2018) (Figure 1).

Wang et al.'s case study (2022) went further and explored the experiences of a preservice teacher undertaking 'recursive' (p. 1003) boundary crossing whereby the preservice teacher continued to study during a school-based practicum (Figure 2). While Wang et al. (2022) work is more representative of the kind of concurrent boundary crossing of PPSTs, the preservice teacher in this study was on a placement, and not in a paid teaching position.

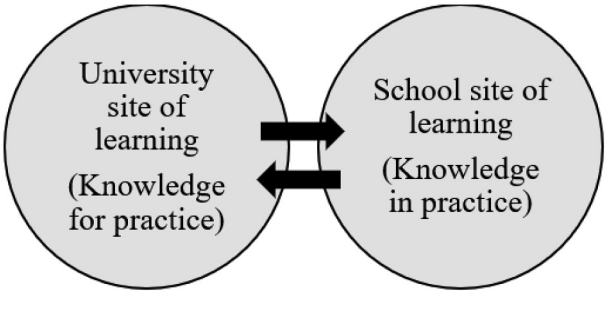

Figure 1. Learning as boundary crossing for discreet periods of in-situ practicum experiences.

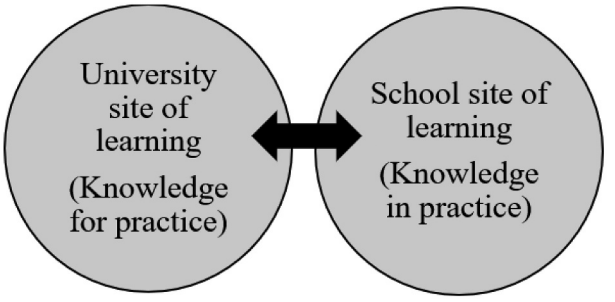

Figure 2. Recursive teacher learning across sites of learning.

Figure 3. Synchronous teacher learning across learning sites.

I extend this conceptualisation further, framing the boundary crossing of PPSTs as *synchronous teacher learning*, metaphorically represented as two sides of the same coin (Figure 3) to underscore the concurrency of their experience.

Under these circumstances, PPSTs have the opportunity to find ways to connect or bring *into sync* their learning (for and in practice) in mutually valued (and valuable) concordance. Akkerman and Bakker (2011) explain, however, that cultural-discursive, material-economic, and social-political arrangements in place at each site (Kemmis et al., 2012) will influence how this opportunity is experienced, and what transformations of learning can occur.

Practice architectures

For this study, I considered teacher learning as a *practice* relevant to university and school 'sites' (Schatzki, 2002, 2012). I used practice architectures (Kemmis et al., 2013) as a methodological resource to analyse the influence of arrangements at each site (Mahon et al., 2017, p. 1) on PPSTs experience of synchronous teacher learning.

According to Mahon et al. (2017), 'particular practices shape and are shaped by the arrangements with which they are enmeshed in the site [or sites] of practice' (p. 6). In essence, 'practices' are constitutive of particular sayings (language used), doings (actions), and relatings (interpersonal connections), and each of these can be constrained or enabled by the cultural-discursive arrangements (that is, what is appropriate to say and think), material-economic arrangements (such as resources and funding), and social-political arrangements (organisational and social relationships) that exist within particular sites where the practice occurs (Kemmis &

Grootenboer, 2008). This research seeks to understand the sayings (how PPSTs speak about their learning practice), doings (the actions they take as learners), and relatings (interpersonal relationships underpinning their learning practice) of synchronous teacher learning as perceived by PPSTs and how site arrangements shaped these during PTT and TTT pathways (Figure 4).

Methods

Following university ethics approval (ETH2023–0541), six preservice teachers from one regional university in Queensland, three undertaking PTT and three TTT, were recruited via a generic email invitation to the larger PPST cohort; thus, participants were not specifically selected from the larger cohort. Following voluntary consent, each participated in a 45-min online semi-structured interview with the researcher. Each interview was audio recorded and transcribed using a professional transcription service. Following this, pseudonyms were allocated (see Table 1) and interview data de-identified. Pronouns *they* and *their* are used to report findings.

Data were analysed using a hybrid thematic approach (Fereday & Muir-Cochrane, 2006), drawing on both deductive and inductive coding. This approach enables analysis to be initially driven by a study's conceptual framework and subsequently enriched through the coding process; thus, Round 1 coding commenced with the development of an initial coding frame representative of boundary crossing and practice architecture constructs (Figure 5). The author applied the coding frame to one PTT and one TTT interview transcript and revised codes as relevant. Next, the revised coding frame was applied to all interviews, and additional codes were noted (Figure 5, Round 1). In Round 2, all interview transcripts were revisited using the final coding frame. Discrepancies between Round 1 and 2 coding were resolved by engaging in a blinded coding of relevant text segments. Coding verification and consistency were achieved through a final review of codes and aligned data. Sub-themes were subsequently developed to

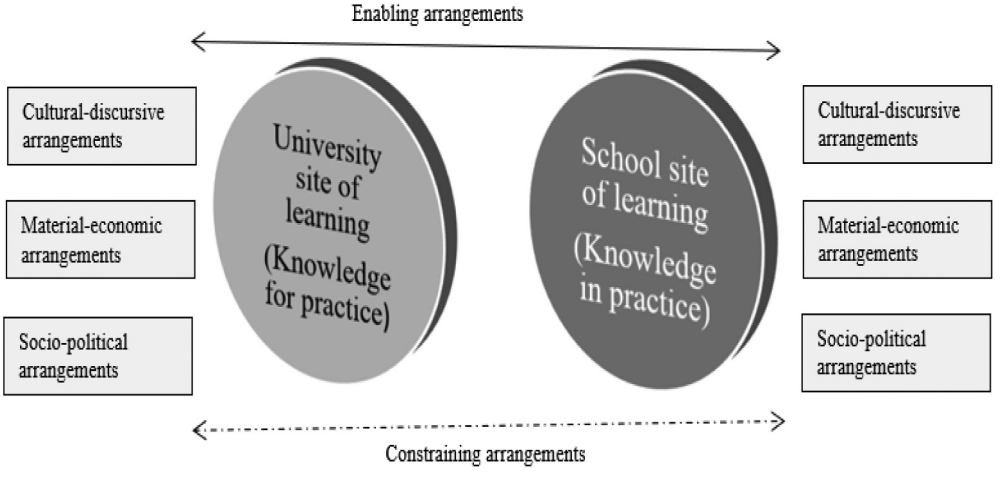

Figure 4. Practice architectures' influence on synchronous teacher learning.

Table 1. Participant demographics.

Pseudonym	Pathway	ITE program	Year of Study (at time of interview)	Teaching	Time in paid employment in school	Teaching load
Casey	PTT	Bachelor of Education (4-year program)	3rd year	Primary	12 months	4 days/week
Jordan	PTT	Bachelor of Education (4-year program)	3rd year	Primary	2 years	5 days a week
Sam	PTT	Bachelor of Education (4-year program)	2nd year	Primary	6 months	4 days a week
Remy	TTT	Master of Teaching (2-year program)	2nd year*	Secondary	10 months	2.5 days a week
Chris	TTT	Master of Teaching (2-year program)	2nd year*	Secondary	10 months	2.5 days a week
Fin	TTT	Master of Teaching (2-year program)	2nd year*	Primary	10 months	2.5 days a week

*PPST nearing graduation.

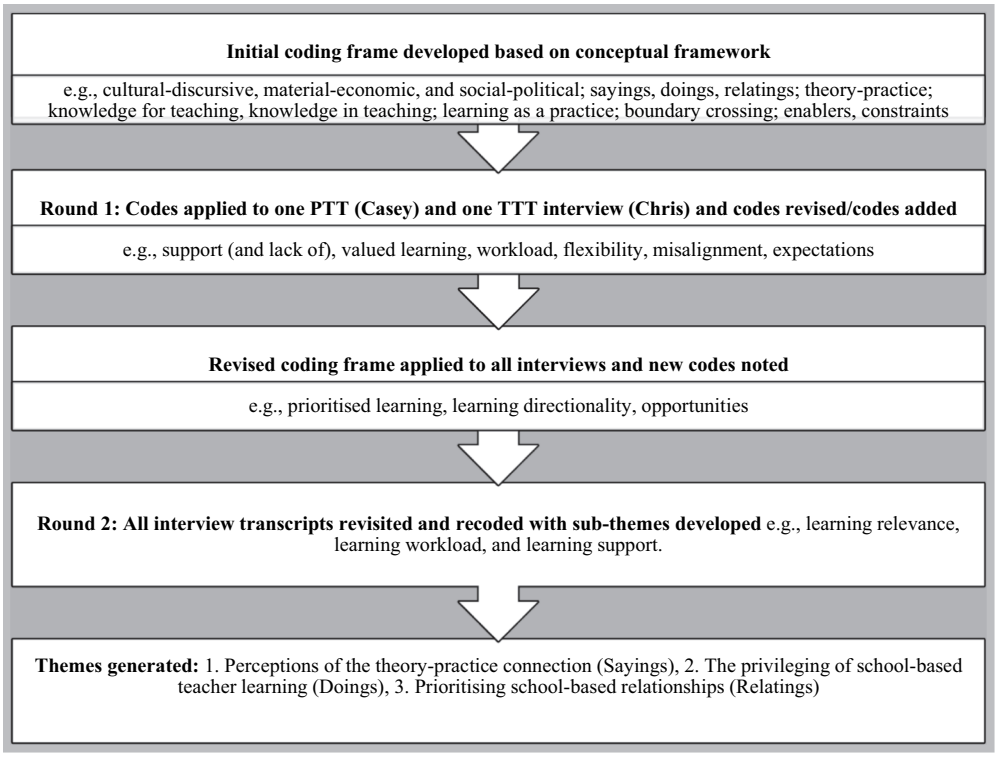

Figure 5. Process of analysis.

represent associated codes. The conceptual framework (sayings, doings, and relatings) acted as a lens through which the overarching themes were generated (Figure 5).

Findings

In this section, I present how PPSTs from this study explained their experience of synchronous teacher learning (through the lens of sayings, doings, and relatings) within PTT and TTT pathways. In doing so, I highlight perceived arrangements across school and university learning sites influencing these experiences.

Sayings: how do PPSTs speak about their synchronous teacher learning experience?

The connection between university and school learning sites seemed somewhat elusive for some participants, with PTTs most likely to report difficulty making these links. For some PTTs, this was due to the learning experience at university being out-of-step with what they immediately required in the classroom. All three PTTs, for example, found they were required to take on teaching responsibilities not yet covered in their coursework. Sam, for instance, was about to embark on assessment and report writing responsibilities without having yet covered this process in their university learning. Casey explained how, 'when you're suddenly teaching but you haven't actually done the learning before … that stuff is challenging.'

Having relied on the school to learn particular skills first, some felt that future learning on the topic at the university site was somewhat redundant. Casey stated, 'I'm good with that to be honest because I learn more on the job than I do at uni, I think. I have always learned by doing rather than theory.' Coupled with the fact that Casey was 'managing fine,' the need for university learning was questionable in their eyes. As they explained:

> I guess in some respects, when they [teacher educators] start talking about child development and all of that kind of thing … it probably helps you understand the students a lot more, but being a PTT, you know that stuff already without having to learn it formally because you've learned it by seeing and by being involved with the kids.

Jordan felt the disconnect between university and school more significantly: '[PTT] really amplifies the disconnect between the two, I feel, universities and schools … There's not much actually connecting the two, they're very much different entities.' He explained how other teachers shared the same sentiments: 'Other teachers doing degrees and other quals to advance their careers say the same thing—there is just this disconnect.' Interestingly, Jordan did state that occasionally their university learning assisted with their teaching but that their 'real-life teaching' was often not useful for university assignments as 'the very strict marking criteria and objectives for assessment can limit how much of your real-world experiences you can draw on.'

In other situations, university teacher learning was perceived as irrelevant given the school's specific pedagogical framework. To illustrate, Casey and Sam's school did not implement cooperative learning approaches; thus, these university topics were seen as superfluous to their learning needs. As Casey explained, 'I get through it for the assignment but when you don't get to practice it or it is not valued in the school you're in, it kind of fades out.' Relevant learning connections for their teaching futures beyond this

PTT seemed to lack motivational impetus as they focused on what was necessary in the here and now.

Despite perceiving a general disconnect between learning sites, Sam and Casey found that PTT made, in some instances, university work 'more relatable' through real-time bridging between practical and theoretical learning:

> Before I did PTT, I was quite detached from my learning . . . . I used to feel like I really didn't get what this was in practice. Now with my own class, I'm finding Uni a little bit easier because I can see exactly what you're saying.

TTT participants seemed more likely to leverage their synchronous learning experience. As Chris explained:

> Having that practical application with still having access to the uni library and all that stuff and then having course content fed through, I can go and say 'Ok, cool, that made sense. That's a cool bit of coursework, let me go and see if I can do it in the classroom.'

Fin concurred, stating that '[a]ll these theories and learning helped, and it's opened my mind about what these theories, all these readings, actually look like in real life.' Chris found that while they may not consciously apply coursework learning to the classroom context, university learning served as a tool for reflecting on classroom practice: 'I came up with some ideas to do this in class using what was available and then reflected on it because of what I learned in the course.' The structure of the TTT programme (with a 50% teaching and 50% study load) also seemed to allow more time to think about and experiment with concurrent learning.

Doings: what actions characterise their synchronous teacher learning experience?

Opportunities as PPSTs allowed for new ways of learning to emerge. For instance, Jordan (PTT) felt being an employed teacher in their own classroom, rather than a preservice teacher on a practicum, empowered them to take risks and try out practice without the pressure of being continuously observed and assessed. They described 'the freedom to experiment and maybe get something wrong as well as do things maybe a little bit differently' as a 'real bonus' while on PTT, untethered from the ongoing 'spotlight' they felt while on practicum.

The time demands of synchronous teaching and study loads, however, served to undermine university-based teacher learning engagement. While the part-time study (50%) and teaching (50%) load in the second TTT year was described as 'somewhat of a relief' (Fin) from the full-time study load of the first year, they still felt unable to give balanced attention to their learning at both sites. Consequently, they felt unable to 'dig into their learning' (Fin), relying on a surface or cursory address of the coursework. As Chris stated:

> If I found a concept or I found something that I was actually quite interested in pursuing, I had to pull myself back and then say, 'Is this in the assignment?'

Despite allocated study time, the substantial demands of teaching meant TTTs prioritised classroom responsibilities for which they were being paid. As Chris explained:

> My first priority was making sure that the deputy principal thought I could do what I was doing, that I was learning on the job and that the students were actually achieving something. The coursework, again, took a backseat.

PTTs similarly accommodated the demands on their time. For example, Jordan reduced their university course load, enrolling in fewer courses, to 'stay on top of things.' Both Jordan and Sam utilised this enrolment flexibility, despite delaying their graduation, to better manage their synchronous learning responsibilities.

In contrast, Casey maintained a full study load while on PTT, able to leverage her one day off from teaching and the willingness of school leaders to offer 'time off to complete assignments.' Furthermore, Casey and Sam indicated that all lesson planning was provided to them, acknowledging the out-of-school time this made available to undertake their university study: 'I don't know how I would get that [planning] done as well as study' (Sam). School structures made possible a more manageable learning load.

Relatings: what interrelationships are important to their synchronous teacher learning experience?

Connection and learning relationships were important to these PPSTs, though PTTs tended to gravitate towards school-based support in preference to university connection. PTTs perceived school-based collegial support to provide more contextually relevant and relatable learning, as it was 'more often than not just really practical' (Jordan). In instances where school support was not available, learning what was needed at school was very stressful: 'It's worrying . . . I was just fumbling around, trying to work it out. It is much less stressful with a mentor' (Sam). The relational support available in schools was critical to coping with the demands of teaching as a PTT. Notably, where relational support was unavailable, PTTs did not always reach out to the university personnel for support. In Casey's mind, university lecturers could seem 'annoyed that I had taken a PTT.' Sam concurred, stating that the university showed 'a lack of understanding about what PTT is.' From their perspective, lecturers expected them to just 'manage the clashes' (Casey) between coursework expectations and teaching responsibilities. As Casey explained, I am trying to balance this assignment, but I need to make sure the reporting gets done. Generally, most of the time I get them done on time, but when lecturers put all the assignments due at the same time as reporting, it is not doable.

Forced to choose between university and school responsibilities, PTTs concentrated their efforts on their paid teaching position. As Casey explained:

> It was hard because I was a high-achieving student. Since permission-to-teach, I don't join in on the live tutorials. There's no time . . . and I don't do the readings like I did . . . it's probably bad saying this, but my principal and my mentor and even my doctor have said, 'P's get degrees.'

Insufficient time and out-of-sync learning expectations made dual investment in synchronous teacher learning challenging.

TTT participants spoke somewhat more positively about the potential for university liaisons and coordinators, *and* school-based supervising and mentor teachers to support their learning experiences. In Remy's case, the university

liaison helped them manage the concurrent learning demands of the TTT pathway: 'There was my liaison officer. She's got me to pull my head into line at times to get the uni stuff done, which is great.' Interestingly, neither Chris nor Fin felt the need to draw heavily upon the services of the university liaison, or TTT coordinator, and instead found the support offered via their school mentors and university peers most significant to their learning experience. Fin, for example, described their mentor's critical feedback as an important 'part of the learning, part of the growing.'

By and large, PPSTs did not describe relational learning supports in ways that indicated a crossing of the boundary between university supports and school-based colleagues. Further, the absence of a strong relational university presence was underscored, particularly among those undertaking PTT.

Discussion

The aim of this study was to explore how PPSTs, undertaking either Permission to Teach (PTT) or Turn to Teach (TTT) teacher preparation pathways in Queensland, Australia, experienced their learning. In elucidating the sayings, doings, and relatings of participants' synchronous teacher learning experiences, the findings provided insights into the kinds of cultural-discursive, material-economic, and social-political arrangements (Kemmis et al., 2013; Mahon et al., 2017) at the university and school sites that influenced learning as a *practice* as they concurrently crossed the boundary (Akkerman & Bakker, 2011) of the university and school sites.

From a cultural-discursive perspective, TTT and PTT pathways would appear to emulate contemporary discourse that privileges the value of vocational sites for teacher learning (Aprile & Knight, 2020). Similarly to Thomas and Lefebvre's 2020 study that noted a reorientation of learning effort by TfA students away from coursework to the school learning site, many of these PPSTs believed that, in many instances, their school-based in situ learning offered a more relevant and powerful learning experience than the more theoretical focus of university coursework. The foregrounding of knowledge [learning] in practice and the deprioritisation of knowledge [learning] for practice (Kavanagh, 2022) to varying extents among PPSTs, therefore, reflects a broader cultural discourse that challenges the relevance of university-based ITE learning yet, in doing so, neglects to underscore that the teaching profession is constituted of complexities that go well beyond the functional practicalities (Giroux, 1988).

In some instances, PPSTs felt that the school environment itself prioritised practical knowledge over theoretical or academic knowledge and understandings, a finding that has been noted in previous studies on valued funds of knowledge in school contexts (Ion & Luca, 2016; Larsen et al., 2023). The privileging of practical knowledge is simultaneously represented in policy, such as the Australian Professional Standards for Teachers (Australian Institute for Teaching and School Leadership [AITSL], 2016), which underscore functional tasks of teaching (Mockler, 2022). This leaning towards teaching as a practical pursuit may serve to reinforce the 'practice turn' (Reid, 2011) of the profession and the escalating challenge to the relevance of university learning to teacher preparation that has gained traction in edu-political discourse (Jenset & Klette, 2023; Schatzki, 2002).

Material-economic arrangements at both the school and university sites can further compromise PPSTs investment in their learning across university *and* school sites. For example, coursework deemed out-of-step with PPSTs' real-time classroom learning needs (Thomas & Lefebvre, 2020) reinforces the divide between knowledge *for* and knowledge *in* practice (Cochran-Smith & Lytle, 1999); yet may represent an appropriate learning progression for teacher development. Consequently, PPSTs may over-rely on school-situated learning to make decisions about practice (Wei & Lu, 2022) in the absence of rigorous research and theoretical resources.

As Blumenreich and Gupta (2015) and Joseph (2019) warn, where the university site does not co-contribute to the learning experience, PPSTs may set aside learning about progressive or alternative practices in favour of duplicating the status quo. PPSTs may be challenged to adapt to diverse contexts in their teaching futures without a robust knowledge base on which to draw and an opportunity to engage in a comprehensive process of identity development (Blumenreich & Gupta, 2015; Guthery & Bailes, 2022; Joseph, 2019; Matsko et al., 2022). This finding underscores the need for ITE to first and foremost, maintain its position as a key partner in teacher preparation, regardless of shifts towards stronger practice opportunities or employment-based pre-qualification experiences. Concurrently, ITE providers can consider ways in which flexibility can be innovatively built into ITE programmes while maintaining the quality of teacher preparation (Thomas & Baxendale, 2022) to accommodate these changing times.

Furthermore, the learning and teaching workload arrangements for PPSTs make engagement with studies alongside the steep learning curve of teaching as a novice in the profession, challenging. The transition into the profession has been well documented as a time of potential overwhelm and burnout (Cobb, 2022; Kelly et al., 2019) in cases where teachers have already completed a full qualification. In this study, PPSTs were still in the throes of university study, compelling most to prioritise school site learning. Extending previous research, this study has demonstrated how PPSTs' prioritisation of school site learning was reflective of both a broader cultural discourse and concern over contractual commitments with their employer/school. Previous studies of novice teachers have identified precarity of employment as a significant vulnerability that influences professional decisions (Lambert & Gray, 2020; Larsen & Allen, 2021). This study demonstrated that for PPSTs, such a vulnerability influences learning decisions as well.

Some PPSTs explained the importance of material-economic arrangements that afforded them some additional time to engage in synchronous learning. For example, PTTs, with the option to reduce university study workloads, and TTTs with an arranged part-time study allocation, did identify times when they could reflect on bidirectional learning connections between university and school learning. At these moments, their learning was more reflective of synchronous teacher learning. However, these occasions were inconsistent at best with PPSTs feeling generally overwhelmed, reflective of findings from previous studies (Kraemer-Holland, 2023; Thomas & Lefebvre, 2018).

Socio-political arrangements, as in the kinds of support and social networks available across the university and school sites, showed some difference between PTT and TTT pathways. Similar to Thomas and Lefebvre's (2020) finding that practising preservice teachers in their study perceived a lack of connection to the university site, PTTs also felt relationally disconnected from the university. These PTTs perceived that the value of

socio-connection at the school site was of greater value to that could be attained through the university, reflecting again the discourse of the 'practice-turn' (Reid, 2011). TTTs were more likely to speak to the availability of learning relationships and networks between their university and school site learning in the form of university liaisons, coordinators, school mentors, and supervising teachers. In the case of PTT, where formal relational supports were absent, the relational conduit between learning sites was limited.

In summary, PPTs in this study encountered a range of cultural-discursive, material-economic, and socio-political arrangements (Kemmis & Grootenboer, 2008; Kemmis et al., 2013; Mahon et al., 2017) at the university and school sites that shaped how their experience of synchronous teacher learning was enabled and constrained. While material-economic arrangements including some university and school-based flexibility afforded some time relief to PPSTs as they worked to engage synchronously across learning sites, workloads, and associated concerns regarding contractual agreements meant that PPSTs made decisions about where they could invest learning time, where they could not, and the extent to which they had the time to make connections between learning sites. These decisions further shaped, and were shaped (Mahon et al., 2017), by the cultural-discursive and socio-political privileging of the school learning site as more relevant, powerful, and valuable.

Limitations

The author acknowledges the limitations of this study. Firstly, as a small-scale exploratory study that sought rich rather than broad insights about the experience of learning for PTT and TTT participants, the findings cannot be assumed to represent the learning experiences of all PPSTs undertaking these teacher preparation pathways. Second, as a Queensland study, findings may not be generalisable to other Australian states, or different teacher preparation pathways in Australia or internationally. Despite these limitations, this study has provided much-needed insights into the learning experience of this under-researched group of preservice teachers. The author recommends further research that draws on these findings to inform research that is larger scale and involves a broader range of contexts across Australia and internationally.

Conclusion and implications

As alternative teacher preparation pathways take hold in numerous countries, including Australia, this study aimed to provide insights into practising preservice teachers' (those that take up paid teaching positions whilst still completing their university-based qualifications) experience of learning within PTT and TTT pathways in Queensland, Australia. Drawing on the constructs of boundary crossing (Akkerman & Bakker, 2011) and practice architectures (Kemmis et al., 2013), I conceptualised synchronous teacher learning as a practice of learning that occurs concurrently across sites that is commensurately valued and perceived as connected, bi-directional, and in-sync.

In this paper, I presented findings from six in-depth interviews with practising preservice teachers. By way of analysis, I used the constructs of sayings, doings, and relatings alongside cultural-discursive, economic-material, and social-political arrangements, explained within the theory of practice architectures (Kemmis & Grootenboer, 2008; Mahon et al., 2017) to understand their experience of learning and the

arrangements that influenced this. Findings showed that these practising preservice teachers identified some enabling arrangements and several arrangements that constrained their experience of synchronous teacher learning.

The implications of this work are twofold. First, from a research perspective, these findings make clear the importance of alternative pathways for teacher preparation to be grounded in research so that both intended and unintended consequences on preservice teacher learning are fully understood. The escalation of PTT and the implementation of TTT in Queensland have occurred to a large extent in a vacuum from research, and this study highlighted cultural-discursive, economic-material, and social-political arrangements at both the university and school learning sites that can significantly impact PPSTs experience of learning. A strong programme of research in this space will ensure that future implementation of these and other initiatives are conceptually, theoretically, and empirically informed.

Second, regarding policy and associated practice, these findings underscore the need for alternative approaches to teacher preparation to be guided by principles that take account of key cultural-discursive, economic-material, and social-political arrangements that will enable synchronous teacher learning. Guidelines must ensure that 1. discourse across both sites speaks to the connection between university and school learning opportunities; 2. structures and resources, such as a reconsideration of learning and teaching workloads and programmatic requirements, will secure the necessary time and space needed by PPSTs to engage with their learning in deep and rich ways at both sites; and, 3. the availability of supportive networks across school and university learning sites that can facilitate a more synchronous experience of learning.

Of significance is the need to ensure that the university, as a key stakeholder in the PPST space, maintains its involvement to ensure that we develop teachers who are both strong practitioners and 'transformative intellectuals' (Giroux, 1988, p. 127). In a dynamic educational landscape that is likely to continue to disrupt traditional pathways to ITE (Kavanagh, 2022), innovation and creativity will be needed to provide the arrangements needed to support synchronous teacher learning that is bi-directional, connected, and commensurately valued as PPSTs concurrently cross the boundary of university and school learning sites.

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