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Towards a network learning system: reflections on a university initial teacher education and school-based collaborative initiative in Chile

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ABSTRACT

This article focuses on the development of a network learning system to enhance professional learning in Initial Teacher Education (ITE) through collaboration in a university–school partnership. The Chilean education system, characterised by market-oriented reforms and competition, serves as a unique context where to explore the development of an initiative designed to reframe relationships between ITE staff and school teachers with the purpose of reducing the distance between academic preparation and the day-to-day realities of teaching in schools. The findings of this exploratory study offer optimistic insights on how the initiative becomes a space for building trust and relationships among professionals and disrupts boundaries between institutions enhancing teacher professional learning, which are particularly promising given the policy context.

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Introduction

Despite the strength of the evidence that the quality of the teaching workforce is closely related to the quality of outcomes achieved by young people and in some systems, there remains a considerable distance between academic preparation of teachers and the day-to-day realities of teaching in schools (Cornejo-Abarca 2007). In response to this, school-led teacher education and collaborative partnerships between universities and schools are increasingly being seen as a helpful approach in preparing pre-service teachers (Jackson and Burch 2019).

In Chile, the distance between teacher preparation and professional experience is often exemplified by the limited, and at times outdated knowledge and experience of university initial teacher education staff (ITE staff) about the realities of the day-to-day work of teachers (Cornejo-Abarca 2007). The impact of this gap in knowledge and experiences profoundly limits the ability of ITE staff to offer high-quality learning opportunities for student teachers and connect with and support the professional development of in-service teachers. Therefore, it is an on-going challenge to equip ITE staff with the necessary skillset to effectively prepare new teachers for the challenges that they will face when they begin their careers, particularly for those entering challenging urban contexts and thus, a rethinking of roles and relationships and a new approach is required.

This article draws out the lessons from the pilot Internship Programme (The Programme), an initiative designed to explore the possibility for reframing roles and relationships between ITE staff

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and school teachers using a model of school-based collaborative enquiry in a highly competitive, inequitable culture, underpinned by low levels of trust. Primarily, the Programme was intended to provide mutual learning through contemporary insights into the contrasting worlds of the academy and schools and therefore to build new understandings about the realities of classroom practice. Secondly, the Programme aimed to build teacher leadership and create space for reflection and innovation in teaching practice within schools through a range of methods of collaborative enquiry and joint practice development (see Fielding *et al.* 2005).

This pilot Programme is the first phase of building a Networked Learning System (NLS) between one university and its school partners in one region in Chile. An NLS is defined by two main characteristics:

- (a) networks working across different types of boundaries (physical, as classroom, organisational, geographical and/or professional, as phase, sector, curricula)
- (b) and driven by design-based research, collaborative enquiry and joint practice development. Its purpose is to innovate, test and refine practice and to build leadership capacity through practice-based professional learning. In taking this approach the Programme has the potential to simultaneously impact on practice in schools and universities.

The exploration of this approach is underpinned by a politico-practice position of the authors, which in a similar vein to Stenhouse (1984) argues that the role of educational research is to serve teachers and has the primary aim of creating good teaching. Therefore, the main purpose of this article is to provide insights on how to better serve ITE staff and school teachers from the implementation of a programme that promotes mutual professional learning that impacts on both practice and outcomes.

Acting as second order action researchers, the two overarching research questions we explore in this article are:

To what extent can the Internship Programme contribute to reframing the relationships between teacher educators and teachers in schools, and what the implications are for their professional learning? and

To what extent the Internship Programme can be a catalyst to build a NLS?

This article is structured in five sections. First, we provide an overview of the theoretical framework that underpins the Programme. Second, we describe the Chilean educational system and The Programme. Third, we discuss our role as second order action researchers and how we generated data. Fourth, we address the two research questions by presenting the key lessons from the implementation of the Programme. Finally, we reflect on the possibilities arising from this experience in relation to building a NLS to strengthen teacher education. We now move on to consider the theoretical framework that underpins and defines the approach adopted by the programme.

Reframing university–school relationships through collaborative endeavour

We have developed a theoretical framework that operates at three distinct levels: theoretical foundations, approaches and mechanisms (See Figure 1). For the purposes of this article, we consider collective efficacy and agency as the underpinning theoretical foundations. We build on the approaches undertaken by Research-Practice Partnerships (RPPs), Professional Learning Communities (PLCs), Professional Learning Networks (PLNs) and Networked Learning Communities (NLCs) to define our approach to building a NLS and we draw on collaborative enquiry and joint practice development as the mechanisms to build the system.

Theoretical foundations: collective efficacy and agency

Over the last thirty years the concepts of efficacy and agency have been applied extensively in educational research. Self-efficacy is the capability to produce and achieve certain outcomes (Zee and

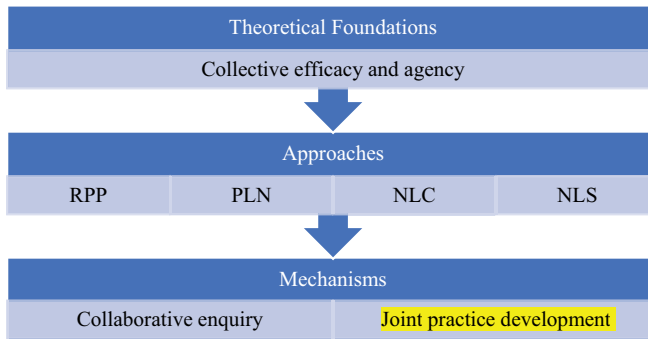


Figure 1. Theoretical framework.

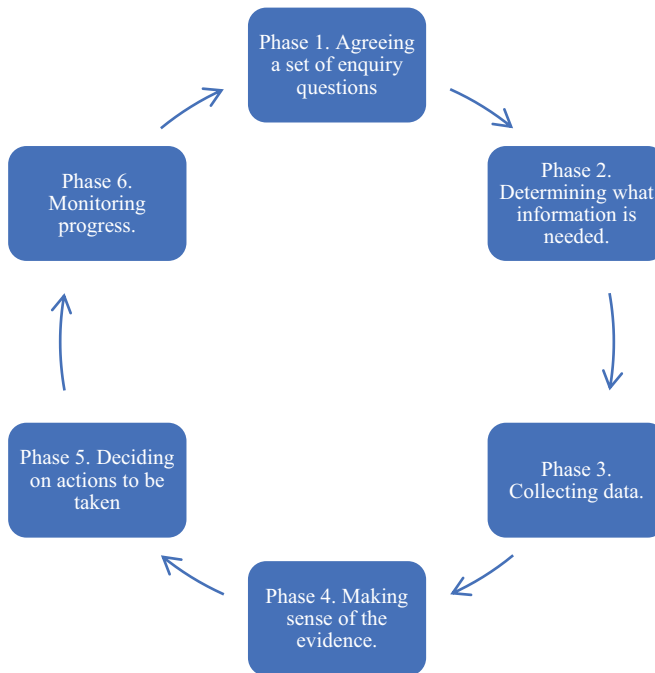


Figure 2. The enquiry process.

Koomen 2016). Teacher’s self-efficacy (TSE) is the belief that one can influence how well students learn, even those students who may be difficult or unmotivated (Fackler and Malmberg 2016) regardless of external conditions such as student background characteristics or school climate (Bandura 2000).

Taking efficacy and agency as the key constructs, at the first level of our theoretical framework we use these in the plural. Therefore, the theoretical foundations of collective efficacy and agency underpin our approach. Social cognitive theory suggests that the foundation of human and collective agency is the belief of personal and collective efficacy (Bandura 2000). This idea suggests that unless people believe that they can make a difference there is too little incentive to act. Theoretically, this is the case for both individuals and for groups. Likewise, belief is also central to the concept of self-efficacy, the extent of peoples’ beliefs are related to how much effort individuals are prepared to expend, how long they persist in the face of difficulties, their resilience in dealing with failures, and the stress they are prepared to tolerate in coping with demanding situations (Bandura 2000).

Much of the research has explored teacher-level effects on TSE but there are also studies focused on classroom, school and leadership effects on TSE (Fackler and Malmberg 2016). Consistently, research demonstrates a strong relationship between teacher efficacy, classroom practices, and student achievement (Goddard *et al.* 2000). Four major sources of self-efficacy are: mastery experiences, vicarious experiences, verbal persuasion, and physiological reactions (Bandura 2000) and it has been demonstrated that these apply to both to individuals and organisations (Goddard *et al.* 2000).

Goddard *et al.* (2000) argue that ‘*Collective teacher efficacy refers to the perceptions of teachers in a school that the efforts of the faculty as a whole will have a positive effect on students*’ (p. 480). In understanding collective teacher efficacy (CTE) it is important to note that much of the literature conceptualises CTE as an emergent group-level attribute rather than an individual attribute, therefore it is the group’s shared belief in its joint capabilities to act.

Collective and individual teacher efficacy mutually influence each other. Therefore, changes in CTE can affect individual teachers’ self-efficacy. For example, collective high expectations create the conditions for all teachers to do what it takes to succeed and therefore create high levels of teacher efficacy. We now move on to the second level of the conceptual framework that deals with concepts that underpin the approach of The Programme.

The approach

In education the idea of ‘networks’ has been applied to professional groups of individuals within a school (Bryk *et al.* 1999). Networks can also span a local area or whole country (Little 1993, Lieberman and Grolnick 1996), The Organisation for Economic Cooperation and Development (OECD 2003) used the concept of networks as collaborative capacity building entities, defining ‘Networked Learning Communities’ (NLC) as placing emphasis on knowledge transfer, professional learning and their position between central and local educational structures:

Networked Learning Communities are purposefully led social entities that are characterised by a commitment to quality, rigor and a focus on outcomes . . . They promote the dissemination of good practice, enhance the professional development of teachers, support capacity building in schools, mediate between centralised and decentralised structures, and assist in the process of re-structuring and re-culturing educational organisational systems.

(OECD 2003, p. 154)

More recently, the concept of Professional Learning Networks (PLN) has gained popularity with researchers in some quarters who have recast the concept of NLCs as PLNs. For example, Brown and Poortman (2018) define PLNs as entities involving groups of professionals who engage in collaborative learning with others, outside of their everyday community of practice, with the general goal of improving teaching and learning. There is little clear water between the OECD (2003) definition of NLCs and Brown and Poortman’s (2018) definition of PLNs.

Some might argue this is a classic case of educational recycling of ideas. We will leave this debate for others to settle; however, what is clear is that at best PLNs are an evolution of an idea that has a long and established track record within education and elsewhere. The concept can be traced back through generations of teachers and educators who have embarked on this type of professional development. In the early 2000s, there was the national Networked Learning Communities programme (see Hadfield and Chapman 2009) in England, this built on the traditions of Improving the Quality of Education for All in the early nineties (Hopkins *et al.* 1994), which in turn developed the ideas of John Elliott (1991) and his team at the University of East Anglia that drew on the ideas of Stenhouse’s approach to curriculum development (Stenhouse 1975). This genealogy can be traced back further to the work of Kurt Lewin in the 1940s. The rise of partnership working and networking in education is an international movement with strong examples across most continents, ranging from isolated rural contexts to complex urban settings and involving different

groups such as type of practitioner (e.g. teacher, school leader and district officer), educational setting (e.g. early years, primary secondary) or communities (e.g. curriculum specialists, LGBT, BAME).

Over recent decades the case for creating stronger relationships that move knowledge, practice and ideas across classrooms and schools, districts and systems in a diverse range of contexts has become compelling (cf. Chapman and Hadfield 2010, Ainscow *et al.* 2019). The evidence is stacking up to such an extent that the potential for creating a networked approach even in the most challenging circumstances is being explored (Pino-Yancovic and Ahumada 2020). The idea of developing Networked Learning Systems (NLSs) builds on the above ideas to provide a values-driven systemic perspective to improvement at all levels of the system.

In addition to PLCs and NLCs, there is a wide range of literature pertaining to research-practice partnerships (RPPs). RPPs are specific long-term partnerships between researchers and practitioners that focus on a range of problems of practice rather than a single issue or gaps in existing theory or research (Coburn and Penuel 2016). They are diverse in nature and can involve systematic enquiry to improve pedagogical practice through methods such as improvement science (Bryk *et al.* 2015) whilst others focus on place-based approaches to improve outcomes in high poverty settings (Chapman *et al.* 2019).

For the purposes of this article, we build on the key principles and characteristics of the above approaches to professional learning and improvement by defining a NLS as an educational system that:

is connected through networks across different types of boundaries. These may be physical (e.g. classroom, organisational, geographical) and/or professional (e.g. phase, sector, curricula) and is driven by design-based research and collaborative enquiry to innovate, test and refine practice and to build leadership capacity through practice-based professional learning.

The purpose of a NLS is to support the development of more equitable education systems by improving outcomes for *all* learners. In a NLS, educators are collaborative inquiring professionals that lead improvement in their own and other professional settings. Equally, students are collaborative inquiring learners who are empowered to lead their own and each other's learning. Put simply, NLS are self-improving systems where everyone's expertise and learning are valued and they drive improvement.

NLS bring to bear all of the available resources and expertise that exists within an educational system in a connected and coherent fashion to deliver the best possible outcomes for all learners. It is important to highlight the crucial role of universities within the NLS. As longstanding institutions with a focus on evidence, research and knowledge creation universities are ideally placed to promote evidence-informed practice and stimulate innovation in education systems. ITE staff also have a unique position and can act as 'honest' or 'neutral' brokers within the system and therefore, are well positioned to build coalitions and promote collaboration between different parts of the system and with key partners. All of this is a physical manifestation of the civic role of the university, which in these complex and challenging times is becoming increasingly important in different parts of the world. We now move on to the third level, the mechanism that underpins the NLS.

The mechanisms: collaborative enquiry and joint practice development

Collaborative enquiry is a process in which teachers, individually and collectively, prepare classroom lessons, reflect systematically about their teaching-learning practices in classroom, and assess and provide feedback to improve their practice (McLaughlin and Talbert 2006, DeLuca *et al.* 2015).

NLSs are underpinned by focused collaborative enquiry led by ITE staff and school teachers. The enquiry process involves six broad overlapping phases (See [Figure 2](#)).

Joint practice development is conceptualised as the process of learning new ways of working through mutual engagement that opens up and shares practices with others (Fielding *et al.* 2005). The central tenant of this approach is that the mutual learning takes place between individuals, small teams, schools and other organisations must encompass interactions related to the innovation of practice.

Chilean education system and the internship programme

The Chilean Education System is underpinned by the market-oriented education reforms of the 1980s. This involved the decentralisation of public-school management responsibilities to municipalities and the introduction of a nationwide voucher programme (Santiago *et al.* 2017) which means that schools are financed through a direct payment to the schools or municipality based on student attendance. Schools are organised as: (a) municipal schools, administered by the country's municipal governments; (b) private subsidised schools that are privately managed; (c) corporation schools, vocational high schools managed by business corporation; and (d) private non-subsidised schools that are fully funded through parental school fees (Mineduc 2018).

Inequality is the most pressing issue for Chile and remains highest among the OECD countries. Households at the top of the income distribution get a large share of national income: the top 10% earns 26.5 times the average income of the bottom 10%, compared to an OECD average of 9.6 times (Santiago *et al.* 2017).

In 2016, there were changes in the management of the workforce. The law included: mandatory accreditation of ITE programmes, external assessment of student teachers before their graduation; the development of teacher evaluation processes to inform decisions about promotion; increased levels of performance-related pay; increased non-teaching time; the introduction of teacher professional development plans that are linked to both individual and school objectives.

The System for Teacher Professional Development has created new demands on ITE programmes and in-service professional development that require the rethinking of roles and responsibilities for ITE staff, their students and teachers working in schools.

The Internship Programme is a university-led initiative, organised into three cohorts (each lasting six months) over a three-year period and is funded by central government. The aim is to strengthen ITE by developing professional capacity and collaboration between participants. A key purpose of the Programme is to build an inter-professional learning community that is based on mutual trust and respect. The Programme is underpinned by the following core principles:

- Professional and relational trust
- Capacity building
- Learning community
- Research-informed professional learning

The Programme involved ITE staff working directly with school-based teachers through collaborative enquiry and joint practice development. This approach involved focusing on a problem of practice and developing strategies for co-teaching lessons and working on collaborative enquiry approaches including 'lesson study' (Coenders and Verhoef 2019). The time allocated for the programme ranged from 12 to 22 hours per week. The first cohort of participants involved four ITE staff and five teachers working in two schools.

An application process was used to select the participants. Candidates also had to identify a *problem of practice* and set of enquiry questions. Furthermore, the University released ITE staff from teaching commitments for up to 22 hours per week and offered a stipend to the school teachers so that they could attend additional meetings. A series of set up meetings with leadership team and headteachers set the context for the initiative and secured senior leadership sponsorship of The Programme in their school.

ITE staff developed co-teaching strategies in partnership with a school teacher from the same curriculum area. In each of the schools, the pairs co-taught lessons and undertook collaborative

enquiry within an interdisciplinary team of four to five educators. Specifically, the teams led two workshops per month in each school focusing on the collaborative enquiry process, two management meetings per month involving the ITE staff and the programme coordinator. The external adviser facilitated monthly reflective meetings designed to draw out the learning from the process.

Generating data

The argument we develop draws on our 'insider' involvement as researchers employed as a programme coordinator and an external adviser with the initiative. The Programme leader was involved directly in the development while the external adviser acted as a critical friend. In this way, we were able to influence the design, extract key lessons, provide mutual support and explore how research evidence and processes might help to further improve the Programme.

Given the nature of our involvement in the Programme, the obvious methodological challenge relates to trustworthiness of our interpretations and analysis. We viewed this challenge as an opportunity. Given our privileged access, we were able to gain deep insights through the systematic collection of data. Furthermore, we addressed this challenge by integrating strategies for ensuring rigour and trustworthiness into the qualitative research process both during and at the end of the enquiry (Morse *et al.* 2002). We triangulated our findings by adopting a range of methods and participant perspectives (Cypress 2017). For example, we checked, compared and contrasted data from interviews with data from surveys to ensure the trustworthiness of the data. Furthermore, we checked, compared and contrasted the different perspectives of ITE staff and school teachers.

All participants completed a semi-structured questionnaire at the beginning and the end of the Programme (n = 18). Semi-structured interviews (n = 8) and focus groups with school teachers and ITE staff (n = 4) were also undertaken. Our findings are also underpinned by our archive of documents that recorded the development of the projects, including observational notes and records of meetings.

Our analysis identified patterns and key themes in the in the data (Miles and Huberman 1994). Initially, the transcripts were coded using the research questions whilst also being open to identifying new and emerging themes within the data. From the review of initial codes second order codes emerged, which in turn allowed the generation of key themes. For the purposes of this article, we present these themes as Key Lessons.

Results

Exploration of the capacity of the Programme to reframe the relationships between teacher educators and teachers in schools, and the implications for their professional learning led us to identify three key lessons that have emerged from the first year of the programme. Taking each lesson in turn:

Structures, processes and culture

The structures and processes underpinning the NLS, especially those related to professional learning through collaborative enquiry and joint practice development through co-teaching can promote a transparent, collaborative and reflective approach to exploring practice. In turn, this can support positive cultural change for individuals and organisations in different parts of the system.

Collaborative enquiry serves as a process to critique and support the improvement of classroom practices and ultimately to impact on student learning. This was an important lever in developing a common understanding and shared set of values that contributed to building a strong collaborative culture within the programme.

Joint practice development through co-teaching was also an important collaborative element within the Programme. The process of sharing the school classroom, designing, innovating and

working together to teach lessons. The empathy that emerged as the sophistication of understanding about school and university structures, processes and culture enhanced and reinforced the professional trust and collaboration between participants. The school teachers and ITE staff recognised the power of this approach in further strengthening their collective agency and deepening the examination of practices that led to innovation. A school teacher reflected:

The collaborative enquiry allowed me to better understand some barriers that my students were facing and being able to mobilise towards more inclusive pedagogical practices.

(School Teacher C)

The participants highlighted an increase in their reflective practice during the experience. School teachers from one participant school commented on their specific learning during the stage of identifying a problem of practice and the alternative approaches/insights that emerged from the group reflection.

A member of the ITE staff commented that the collective reflection that occurred during the enquiry process was useful in strengthening the pace of decision-making in classrooms. This decision-making capacity is pre-service teachers lack and it is not promoted in the university curriculum. One member of the ITE staff reflected:

Pre-services teachers are not being prepared for this type of decision making in their ITE programme, so when they are in their clinical practicum in schools and are requested to respond to a much faster and permanent decision making, they are simply incapable of doing it.

(ITE Staff G)

Similarly, one school teacher noted:

When we reflect on our practice, we realised some weaknesses. Working collaboratively made it easier to come to a conclusion that really contributed to improve our teaching and putting our students' interests as the main focus of action.

(School Teacher D)

Participants identified key 'problems of practice' and used these issues to co-construct enquiry questions. These questions were explored through lesson study and various forms collaborative of enquiry to support the development of high-quality reflective interaction rather than narrow evaluative conversations.

In order to support cultural change, the Programme provides an important opportunity for ITE staff and school teachers to take on additional formal and informal leadership roles. This has the effect of building leadership capacity and a culture underpinned by the use of data and collaborative enquiry. In turn, this has an impact on the development of collective agency as the experience allowed them to build confidence and capability to engage in new collaborative way of working and as advocates for redefining roles and relationships between the university and school sectors.

Participants' reflections about their involvement in the Programme highlight that the ways of working and interacting within the Programme involved a deep reframing of their traditional professional identities and developing a sense of collective power and agency. Although participants did not use the word 'leader', they noted the gratifying feeling they felt as the result of leading change in classrooms. A member of the ITE staff commented:

I think the relationship we build during direct and on-going contact, but also the because of the approach and our role as collaborative researchers where we all have expertise and share it, is critical in having a more powerful impact on both professional development and on improving student learning. That is, it would have been impossible for me to come up with an idea such as the one we created as a team. I needed to be thinking with others to develop it.

(ITE Staff F)

At the same time, school teachers recognised that their collective agency and efficacy had increased to the extent that they were able to see their impact on student learning. One teacher reflected: ‘We were actually able to include more learning than what we commonly see as part of the content so I could clearly see the impact of our work in my students’ (School Teacher D). A second teacher from the same school highlighted the power of putting student voice at the centre of the curriculum:

We designed the lessons around our students’ interests. We had to collect data in order to learn what their interests were and therefore were able to create very appealing lessons for them, which I think allowed a much more meaningful learning to occur.

(School Teacher E)

Teachers identified the power of participating collaborative enquiry in terms of increasing agency and capacity to engage more meaningfully with their peers and students.

Finally, the leadership of university coordinator was crucial in creating a context for this work to happen. This was particularly important given the competitive nature of the Chilean education system. High-quality facilitation was central to creating and maintaining a culture underpinned by mutual trust and openness to new ideas and developing new practices, where personal and professional interactions were positive and valued. As one of the participants explained, the facilitator also led the reflection and the mutual challenge of ideas:

I think it was especially useful when the facilitator posited questions either to clarify information or to rethink our ideas. There were so many things that we assumed when working with others or about how the school/ universities operate so having an external view in a role of a critical friend made a difference.

(ITE Staff G)

We now move on to consider the second lesson.

Trust, shared values and purposes

The intensive and immersive nature of the Programme promoted the development of trusting relationships among participants in a very short period of time. The Programme required that professionals from the university and the schools had to expose their own practice, assumptions and ideas to each other’s scrutiny.

School teachers opened their classroom doors to critique and ITE staff were open to understanding the challenging nature of the context while maintaining professional respect and a non-judgemental stance of teachers’ work. During the meetings, it was constantly reinforced the value added as a result of the different voices brought to discuss issues of practice. Participants believed that the work done collectively was higher quality because of the participants’ diverse expertise and experiences. This led to the creation of a common language of practice that facilitated reflection and the sharing of ideas, which is critical to accessing unused expertise (Miles and Ainscow 2010).

A major strength of the Programme was that it allowed ITE staff and school teachers to gain new insights from each other’s worlds and develop new ways of working. For example, one member of the ITE staff reported: ‘Our ITE students tend to come back and say how awful it is and then we reinforce this idea’ (ITE Staff H). This faculty member went on to say that now they pushed back on this by explaining the complexity and challenges that teachers face on a day-to-day basis.

Teachers valued working with the ITE staff. One school teacher reported the value of having ITE staff working with them in the school: ‘It’s just like having another teacher in the room now’ (School Teacher C).

School teachers valued the collaborative experience of working closely and they reflected on the value of co-teaching. They perceived that the experiences of co-teaching during the Programme enhanced the quality of their teaching in terms of enriching the design and/or the curriculum

coverage. It also strengthened their capacity for reflection, particularly around the implementation of shared designed lessons. As one teacher commented:

When you have two teachers in the classroom you can do more innovative activities, provide more timely and pertinent feedback, which in turn makes him/her the main protagonist in their own learning and the teacher assumes the role of the facilitator of that process (...)

(School Teacher A)

Put simply, the nature of the Programme and the collaborative enquiry approach provided the context for mutual learning, which allowed the participants to expose their values and practices in a safe and private space. The professional dialogue and personal interactions at the outset of the programme were crucial in establishing the conditions where trust could be built very quickly. This in turn implied that the ITE staff gained a better understanding of teaching and learning in classrooms, which helped them to recognise and validate other forms of knowledge and expertise, especially in challenging urban classrooms.

The Programme provided the opportunity to explore roles between ITE staff and school teachers. The ways of working in the programme emphasised that ITE staff would join the daily work of teachers sharing their tasks and schedule, and all participants would have an equal voice and were involved as equal partners in the decision-making process during the collaborative enquiry (i.e. agreeing on defining the problem of practice). As one ITE staff expressed:

(...) I would like to highlight the collaborative work with a teacher within the classroom. (During the internship) I always worked with a classroom teacher, and we taught the lessons as a team, we planned together, and the students saw us as equals. We focused our work on knowing our students in terms of skills and interests and then designed lessons that were aligned and coherent with such knowledge. We also worked with student surveys when we felt we needed it ...

(ITE Staff H)

There was the perception among ITE staff that the Programme encouraged participants to reassess the whole notion of expert and expertise within academy. This involved having difficult conversations regarding what it means to be expert and apprentice, and the false dichotomy it might suggest when trying to develop collaborative approaches to professional learning and school improvement. In other cases, ITE staff talked about what it meant to embrace more of an apprenticeship approach to work with teachers' colleagues. One ITE staff explained:

The internship invited me to locate myself in the place of the apprentice, which involved moving from the more traditional role of "the teacher" to "the psychologist" (...) it was not an easy task. However, that really enriched both my understanding and sympathy for the experiences that my students, pre-service teachers, have to navigate when doing their clinical practicum.

(ITE Staff F)

Moreover, when talking about the steps they use when conducting their enquiry processes, ITE staff reflected on how they were able to exert more fluid roles between experts and apprentices through the process:

Each of the analysis we did as a group were conducted under the idea that we were simultaneously both apprentices and experts, including our students (...) This idea defied the traditional approach with which (a) university connects with schools, where ITE staff (are) typically seen as the experts and teachers and pre-service teachers are seen as the apprentices.

(ITE Staff I)

Despite these important achievements in reframing the traditional roles, navigating them was a challenging task, particularly in one school, where participants tended to repeat the traditional roles. That meant school teachers focused more on practice, for example, class activities, and ITE

staff focused more on theoretical teaching knowledge. A member of the ITE staff further explained this difficulty by saying:

There was an insistence by the university staff, like let's review the planning again and the teachers were very much centered on actual practice, for example, "what materials do we need for tomorrow's activity?", they were always alluding to practice. We were sort of thinking a lot about what we were doing and how in a more theoretical way, which made the collaborative work difficult at certain times.

(ITE Staff F)

In terms of responsibilities, the collaborative enquiry process fostered collective responsibility regarding the result of the enquiry. This emphasis was also embedded in some of the methodologies used particularly in one of the schools, lesson study, where the design, the implementation and the evaluation of the session was developed as a collaborative endeavour. In the second school, collective responsibility was stronger within the team of a school teacher and the ITE staff from the same disciplinary area.

We now move on to the third and final lesson.

Schools and universities as sites of theory and practice

ITE staff and school teachers came to view the relationship between theory and practice as dynamic and a false dichotomy. They considered the relationship between theory and practice. For example, ITE staff argued that theory needs to serve practice, therefore, it is crucial for teachers to be given the space and tools to use theory to better understand their practice. One member of ITE staff developed this idea by stating that:

This experience has allowed me to get a better idea of the complexity and relevance of practice. At the university we tend to value the conceptual more theoretical preparation, which of course it is very important. However, this knowledge (the theory) must be closely linked to the teaching work (practice) so it can provide student teachers with a set of tools to face classrooms.

(ITE Staff G)

A school teacher reflected that the Programme promoted the development of co-constructed knowledge and understandings that integrated ITE staff as supporters and advocates of teachers' work. This teacher expressed: '(This experience) is a way to generate knowledge and expertise with and from school teachers' expertise collaboration with the university expertise'.

Likewise, ITE staff reflected on how the experience of the Programme supported them to gain a deeper understanding of the day-to-day issues that teachers face in their classrooms:

The complexity of teaching and learning in urban schools hits you directly, and it is something very different to what we do at the university in ITE with pre-service teachers. I am used to talking about issues such as motivation, childhood development, etc. but here these themes have been converted into people with a name and last name. It (the internship) also allows you to value and reflect on all the work of teachers in classrooms, their energy, the applied expertise and their commitment to do their best each day.

(ITE Staff G)

Simultaneously, school teachers referred to the ways in which theory contributed to improving practice through interaction with ITE staff who encouraged them to use new theoretical lenses to understand their practice:

To me the main learning was the collaborative work we developed. They (ITE staff) brought new ideas, frames and perspectives to our work but presented them as a way to help us instead of imposing them to us as something finished or (a) recipe.

(School Teacher C)

It could be argued that traditionally, schools and have been dominated by a discourse of implementing practice, while universities have been dominated by a discourse of generating theory. The different paces that these two settings operated at was quickly recognised by the participants.

ITE staff reflected on the exceptional pace that schools worked at compared to the pace of work in the university. This demanded rapid and constant decision-making about practice in ‘real time’ rather than the slower more considered decision-making that was often found in the university. ITE staff also highlighted the importance of the emotional dimensions of practice in schools and the challenge of ensuring an inclusive approach. In contrast, the programme provided school teachers with the opportunity to learn about some of the theoretically dominated challenges faced in a university setting. These included the pressures placed on ITE staff to undertake high-quality research and produce quality publications whilst on precarious contracts and also having to manage students.

Whilst the university lacks the dynamic, chaotic and fast-moving pace of schools, it is also a challenging environment to operate in. It would seem that the different worlds of theory and practice vary in so many ways, however, they both present significant and unique pressures and challenges for those who work in them.

At this regard, ITE staff highlighted that the Programme supported them to work in a more integrated way; combining different disciplinary knowledge around issues of teachers’ practice. ITE staff also took ideas from the classroom into the ITE programme. One ITE staff talked about integrating emotional dimensions of teaching and issues about inclusion into her courses to increase pre-service teachers’ awareness regarding those earlier on in their preparation. This suggests that the Programme shifted understanding about the challenges, tensions and dilemma that exist within the school settings and has informed ITE curriculum development. We now move on from the Key Lessons to discuss the potential for the programme to act as a catalyst for building a NLS.

Discussion

Our second research question focused on the extent to which the Internship Programme can be a catalyst to build a NLS to strengthen teacher education. Our analysis identified that four features of the programme can act as a catalyst for this.

Taking each in turn:

Firstly, the Programme deals with some of the complexities around promoting the change in the way ITE staff and school teachers see and approach each other’s world. In a context where the professionals who work in schools and those who work in the university are disconnected, the Programme offers one way to disrupt boundaries between the two institutions allowing ITE staff and school teachers to develop a more complex understanding of each other’s professional and personal worlds. To the extent that the Programme stimulates a strong sense of value and respect about different types of expertise and knowledge, it contributes to create hybrid spaces that bring together practitioner and academic knowledge (Zeichner 2010). This hybrid space emerges as a caring atmosphere that assists participants to engage in the development of their professional knowledge and skills.

In this space, the blurring of boundaries and mutual learning that the Programme promotes supports the movement of knowledge from different fields, from theory, research and practice, and the creation of new knowledge through collaborative work and enquiry (Jackson and Temperley 2007).

Secondly, the Programme builds strong relationships that by starting ‘small’ have the potential to create and sustain a culture where risk taking, challenging learning-focused conversations are not only accepted but promoted and encouraged in a highly competitive and inequitable context. These relationships underpin the idea of a NLS. For example, at the end of the Programme, ITE staff commented in different occasions how just then, after spending one semester in a school working

collaboratively with school teachers, they felt ready to actually move forward and were completely engaged in developing the collaborative enquiry process. This reinforces previous literature that claims how strong social relationships among teachers and between faculty members and a principal are critical preconditions for the formation of a professional learning community (Retallick and Butt 2004, Stoll and Louis 2007).

Thirdly, a NLS is underpinned by a strong network of relationships, and in order to have that, there needs to be trust. The Programme illustrates that the development of trust was the core element in reframing relationships. Trust underlies any collaborative enquiry activity to the extent that making classroom practice public to others involves risk taking for participants. Trust is often seen as a prerequisite to teachers being willing to share their teaching with others, and where trust is compromised this can act as a barrier to teachers working together productively (Cranston 2011, Eden 2018). Teachers are reluctant to expose weaknesses in their practice where there is a fear of negative consequences and where teachers are reluctant to take perceived risks, change can be constrained (Le Fevre 2014).

Given high levels of mistrust within the Chilean education system (Conejeros *et al.* 2010) including between students and government (Salinas and Fraser 2012) the development of trust and strong relationships between partners and sectors would seem an important first step in reimagining initial teacher education. There are some recent examples of emerging collaborative practices that indicate there is some hope for this type of approach within the Chilean system (Pino-Yancovic and Ahumada 2020). Furthermore, recent education reforms including new structural arrangements for school and system governance, new regulations for ITE, legislation for teaching careers seem to open up some spaces for the integration of collaborative and more systemic approaches. The trust developed among participants in this Programme creates the conditions for developing collaborative enquiry approaches to innovate, test, and refine practice.

Fourthly, the Programme provides an important opportunity for preparing ITE staff to work with students and student teachers on collaborative and research-based approaches to teaching, as well as becoming a platform to frame student teachers' clinical experiences. The Programme offers school teachers opportunities to develop and strengthen professional skills with colleagues on a range of issues including enquiry methods, use of data to inform decision-making and curriculum development.

The Programme's impact on school teachers' and university-based ITE staff relationships suggests that the internship experience could be an important platform and good starting point for promoting mutual learning because it creates a space for sharing and exploring common challenges through collaborative enquiry, undertaking joint practice development and innovating practice. This stronger collaboration could accelerate the development of a NLS.

In summary, our analysis suggests that the Internship Programme provides a mechanism to build trust and relationship very quickly and has the potential to support the development of a NLS.

Disclosure statement

No potential conflict of interest was reported by the authors.

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