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Distributed leadership across a network professional learning community

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Abstract

A network professional learning community (PLC) is characterised by a non-hierarchical approach to professional learning. Members are supported to engage and to learn when leadership is distributed across a network PLC. The mixed methods study reported here was designed to examine how a network PLC could effectively improve visual arts pedagogy in early childhood education (ECE) settings. The design and analysis were considered through a lens of distributed leadership. The research had two main stages, a nationwide survey and an embedded case study. The case study findings demonstrated the possibilities of a network PLC approach to foster distributed leadership across PLC members, the facilitator, ECE teams and leaders; participants successfully shared and applied new learning and improved pedagogy for visual arts learning. Overall, this study suggests that leadership is a critical aspect of the network PLC approach, and that attention should be paid to distributed leadership and to the role of the positional leaders in supporting the application of learning from a network PLC to education settings.

Keywords: Leadership; distributed leadership; teacher leadership; facilitation; professional learning; networks

Introduction

Leadership has been identified as a key characteristic of effective professional learning communities (PLCs), and leadership in network PLCs is different from single-organisation PLCs or learning organisations more generally. Azorin et al. (2020) argue that distributed leadership is the most appropriate theoretical lens for research about network learning communities, and the research reported here fits within such a view. The study was designed to examine the leadership of various actors and the ways leadership is shared, and the influence of distributed leadership to support the aims and outcomes of a network professional learning approach. This mixed methods study (Denee, 2022) explored the leadership of the PLC facilitator, the leadership of the PLC participants as teacher leaders, and the leadership practices of the positional leaders which supported an effective team culture and enabled participants to put learning into practice. The experiences and outcomes for the participants in this study indicate that leadership is available to all members of a network PLC, and that the leadership practices of all members are worthy of consideration if the goal is to embed pedagogical learning in member education settings. The first section considers literature on distributed leadership in education settings and distributed leadership in professional learning networks. The methodology is briefly outlined before the case study findings are reported with

a focus on leadership across the various roles in the network PLC. The findings are then be discussed in relation to the literature, resulting in recommendations for professional learning design and research with a lens of distributed leadership.

Distributed leadership

Distributed leadership indicates that leadership is available to all members, and this approach considers leadership as practice rather than bound to certain roles (Clarkin-Phillips, 2011; Denee & Thornton, 2017, 2021). Spillane et al. (2004) view distributed leadership as a web that stretches between leaders, followers and situation, whereby the leadership practices and interactions are the focus rather than the actors per se. In an education setting, distributed leadership can allow those in teaching positions as well as assigned leadership roles to contribute to decision-making and to shape pedagogy (Timperley, 2005). My previous research (Denee, 2017) looked at the nexus of distributed leadership and professional learning in ECE settings, and found a powerful relationship where teachers were motivated and engaged in learning that was meaningful to them. Furthermore, all members of a learning community benefit when teachers enact leadership practices sharing and facilitating professional learning.

Teacher leadership is a term that describes the ways teachers take on leadership roles and practices without necessarily holding a leadership position or title (Halttunen et al., 2019). Halttunen et al. (2019) argue that distributed forms of leadership can improve pedagogy when teachers see themselves as influential and responsible to create a high-quality educational context for children. In a study on teacher leadership in NZ ECE settings, Cooper (2018) reconceptualised teacher leadership as everyday collective leadership (ECL), and found that regardless of position, teachers routinely enacted leadership collectively for the improvement of teaching and learning. Such a view of teachers as inherently leaderful is taken in the study reported in this article.

Positional leaders hold significant influence over distributed leadership and professional learning processes in ECE settings, and leaders' attitudes and understanding have an impact on the success of the learning process for improvement to teaching (Denee & Thornton, 2017). Prenger et al. (2017) found that the ability of teachers to enact leadership of learning back in their workplaces was mediated by the social climate and support available at each school connected to the network PLC. Teachers may be supported or thwarted in their attempts to create changes to practice for themselves and more broadly across the organisation, depending on the related factors of relational trust and supportive leadership (Healy, 2012; Nolan & Molla, 2016; Poekert, 2012; Prenger et al., 2017). Edwards-Groves and Grootenboer (2021) suggest that such trust generates the conditions needed for professional learning for school improvement and transformative changes to practice. It is important to consider the role of the positional leaders connected to a network, because when teachers are coming from a variety of settings there are

many more positional leaders whose attitudes and engagement have an influence on successful application of learning from the PLC (Fullan, 2004; Prenger et al., 2017).

Network PLC leadership

The term "professional learning community" broadly describes groups of teachers meeting for professional learning on a regular basis (DuFour & Eaker, 2009), and while definitions vary, there appears to be general agreement that leadership is a critical factor for PLC success (Hord, 2009; Stoll, 2011). Literature on PLCs tends to describe leadership as shared and/or distributed, inclusive of teachers (Azorín et al., 2020; Bolam et al., 2005; Hord, 2009; Thornton & Cherrington, 2014). In PLCs, teachers choose the direction of reflective learning about practice (often within a prescribed focus area), and enact leadership in a variety of ways (Poekert, 2012). Azorín et al. (2020) argue, "professional learning networks actively distribute leadership across traditional boundaries to release the potential of those within the network" (p. 119). When participating in network PLCs, teachers are required to enact leadership in their workplaces because they have responsibility for disseminating the learning back in their own teams and education settings (Azorín et al., 2020; Jackson & Temperley, 2007; Prenger et al., 2017). This makes teacher leadership a critical consideration in a network approach. Teacher leadership and professional learning have been shown to operate in a constructive cycle, each benefiting the other (Denee, 2017; Marsh, 2015; Poekert, 2012), and PLCs present a clear illustration of this cycle as distributed leadership is both developed through and contributes to the PLC (Hipp, 2004; Prenger et al., 2017).

Despite an emphasis on members of the PLC having agency and control, external guidance is a powerful factor in PLC success, particularly in the establishment phase (Stoll, 2011; Thornton & Cherrington, 2014). In a literature review about teacher professional development, Postholm (2012) describes an "external resource person" having a role of supporter and challenger in co-operation with the teachers in the PLC where teachers hold more power over what is learnt, goal setting, and directing the learning. This conception of the role is mirrored in Thornton and Cherrington's (2019) study of PLCs in ECE settings, where an external facilitator is positioned as a challenger and supporter, and has a role in providing resources. Timperley (2011) agrees that external experts are necessary in order to contribute new knowledge and shift thinking, although they caution that the inclusion of external experts is not a guarantee of success.

Leadership has always been a prominent concept in PLC research (Hord, 2009; Stoll, 2011), and distributed and shared approaches are promoted, yet little research addresses what such leadership looks like in practice for the various actors across a PLC (Azorín et al., 2020; Thornton & Cherrington, 2014). This study focused on the network PLC approach, seeking to understand what aspects were effective and why. Specific attention was paid to distributed leadership across the different members of the network and associated ECE settings, and the

leadership practices that were important for the application and sharing of learning from the PLC into teaching practice with children. Those findings are reported in this article.

Methodology

This mixed methods study was conducted in two main phases: a nationwide survey of ECE teachers and leaders, and a case study focused on a network PLC. An interpretive, constructivist view of research (Schwandt, 1994) shaped the methodology, including strategies for data collection and analysis. The survey was conducted through the online tool, Qualtrics, and received 193 responses from ECE teachers and leaders. The survey data is less relevant to this article than the case study and therefore is not reported here. The case study was a single embedded type (Yin, 2017), in which I sought to gather rich and varied data from a range of sources to understand the ecology and effectiveness of the network PLC. The network PLC involved seven teachers from four ECE settings, meeting monthly for nine months. I acted as both the researcher and the facilitator of the PLC, and this dual role required careful consideration of bias, influence and trust. While tensions between the two simultaneous roles needed to be carefully managed, the positioning of the researcher within the PLC case study enabled close observation and deeper insight into the processes and experiences of the participants (Silverman, 2017). As an experienced professional learning facilitator and a researcher and teacher of visual arts, I brought expertise to both the leadership of the PLC and the shared exploration of visual arts pedagogy. This supported the ethics of the study by strengthening the benefits of the study for the participants and their learning communities (Tobin, 2018). PLC meetings included practical art workshops and reflective dialogue about visual arts teaching and learning.

The key data sources from the case study drawn on in this leadership article are: PLC participant interviews; team focus group interviews; positional leader interviews; PLC focus group; meeting dialogue; and participant reflective journals. The research design and analysis were shaped with distributed leadership in mind, including a specific leadership research question, interview questions focused on leadership practices of both positional and teacher leaders, and intentionally empowering the PLC participants as teacher leaders throughout the PLC journey. Azorín et al. (2020) argue that "distributed leadership provides important theoretical and practical insights into the working of professional learning networks, as complex eco-systems" (p. 121), and that view influenced the design of the study to consider leadership practices across the eco-system of this particular network PLC. Case study data was thematically analysed based on Braun and Clark's (2006) multi-stage approach, resulting in groups of themes about visual arts pedagogy, professional learning, and leadership.

Case study findings: Leadership for professional learning

Leadership enabled the participants' professional learning in various ways during the PLC. In this section, interview data and written reflections are drawn upon to illustrate the teachers' leadership

of professional learning in their teams, and also the supportive leadership environment in each service which enabled the individual participants to engage with the PLC, to share the learning, and to apply their new knowledge in practice. The final section of the findings considers the role of the PLC facilitator.

Teachers having an influence within their teams

The PLC was designed with an expectation that participants would share professional learning with their colleagues who were not attending the PLC. This was discussed and agreed to in the information and consent process when participants joined the PLC and the research project. First, teachers' effective leadership practices are reported, illustrating what participants did which helped them to have an influence, to apply their learning about visual arts pedagogy and to communicate about it to their colleagues. Second, the barriers which made it difficult for participants to share learning and to have an influence in their teams are described.

Effective practices

The PLC participants enacted a range of leadership practices to bring the professional learning back to their workplaces and teams. The leadership practices and supportive factors included formal structures such as team meetings and systems, and informal approaches such as conversation and role modelling.

Team meetings were used at all four services in this study for scheduled time to share professional learning with teams. Participants used a range of strategies such as a workshop or presentation, facilitating professional dialogue amongst the team, and sharing articles and readings from the PLC. Programme planning meetings for children's group learning were another time where participants were able to influence team pedagogy. Each of the four ECE settings had an expectation that teachers would write written reflections, usually for appraisal or certification purposes, and sometimes as a requirement after attending professional learning. These formal systems helped the PLC participants to reflect on the learning from the PLC at regular intervals and to articulate what this meant in their particular contexts, including goals for practice. Written reflections were shared with the positional leader and in some cases, participants shared these with their teams too. This provided participants with a different way to articulate and justify new ideas with colleagues.

Role-modelling was highlighted by all participants as an achievable and successful strategy for sharing new learning with their teams. One participant explained that she used role modelling to show that visual arts was a worthwhile use of teacher time, explaining that by "modelling, I suppose sitting with the children, making art together and saying, you know what – let's just leave other things and just focus on this for a while." The participants talked to their team to let them know what their plans were and the pedagogical reasons why, for example role modelling and explaining that visual arts learning could be intentionally planned and carried out over a sustained

period of weeks. Another kind of role-modelling happened when PLC participants made changes in the environment for visual arts provision, and explained the pedagogical reasons underpinning these.

PLC participants were conscious of supporting their colleagues when someone who was not in the PLC wanted to try new visual arts practices with groups of children. Participants supported their colleagues by supervising any children who were not involved in the art experience and offering knowledge and support. They were conscious of making space for the team members who were not in the PLC to take the lead with visual arts experiences at times. One PLC participant said, "I took a step back to let them take a step forward… I'm letting them have experiences with it as well," and felt happy knowing that she did not need to be the only arts person in the team.

All participants described having informal conversations with colleagues about their ongoing visual arts learning as an important way of sharing enthusiasm and new ideas in a non-confrontational manner. Informal dialogue was also raised as an achievable practice when there was less formal meeting time available due to other pressures in the service, and often meant talking while in ratio with children. The morning set-up time was highlighted by participants as an effective time for informal conversations because often the teachers were choosing materials and planning experiences, so they could discuss their pedagogical ideas in relation to these decisions. Another common time for such dialogue was at the end of the day when there were very few or no children left.

Barriers

A range of barriers were identified in the individual and focus group interviews that impacted on the participants' leadership and learning.

Participants felt very busy day-to-day in their teaching roles and reported that they struggled to make time to implement ideas from the PLC, which reduced the opportunity to share learning and have an influence in their teams. Teachers found that ratios meant that they often had responsibility for a larger group which meant always needing to keep an eye on many other children while trying to engage with a small group, and sometimes having to move away to attend to other children's needs. Participants at all four services found that there were busy periods in which there was little time for teachers to communicate and implement new practices, due to planned and unplanned events. Planned events included external reviews, community events and projects, and unplanned events included staff having health issues and staff leaving. Each service had a range of responsibilities and projects to devote time and energy to, all of which reduced time for team dialogue through, for example, cancelled team meetings or team meetings being too full of other work.

Some of the barriers to having a leadership influence back in the workplace were relational, meaning the difficulties lay in how to communicate new ideas and challenge established practices in the team, and uncertainty about when and how to lead learning with colleagues. One participant

commented that if you were not in a position of leadership, it was more difficult to come back and change current practices for new approaches. Another participant who was a recent graduate felt that her level of experience made it harder to take on a leadership role, particularly with more experienced colleagues who held different beliefs about visual arts pedagogy:

> *I'm still quite a new teacher, so you know, I'm just still learning myself about the whole aspects of being a teacher. So, I think that can also make it more challenging to take on that role of leadership and have those professional discussions.*

The strong beliefs of both management and other colleagues were another barrier to introducing intentional teaching approaches in some cases. Participants reported that it was hard to know how to challenge strongly held beliefs in a way that would be both critical and at the same time not produce defensiveness and conflict that could become a further barrier to professional dialogue. One participant said that she found it difficult when a colleague offered the children activities that she felt were not good practice for visual arts learning, and "didn't really know how to respond to that, I didn't really know how to bring about professional discussion with that colleague," without that person feeling upset and becoming defensive. She said:

> *I've found when I've tried to talk to some people in my team about it… I have found it difficult to not feel like I'm saying, what you're doing is wrong, basically… Whereas, I think if they were part of this (PLC) group it would be much easier because we'd be naturally having those discussions.*

This type of tension ultimately stopped some participants from having critical professional conversations about visual arts pedagogy with certain colleagues.

Across two of the participating ECE settings, three of the original PLC members resigned and therefore left the PLC early on. For the two PLC participants who ended up being the only ones from their teams attending the PLC, this was a barrier to having an influence. The issue was discussed at length during the PLC meetings and in the post-PLC interviews. One participant whose colleague had resigned early on in the PLC said she thought it was, "really important to have more than one person from a team… as it's dropped off for me, I've found that quite hard, to keep things going on your own." Despite having the benefit of multiple participants, those who did have more than one team member in the PLC wished that they had their whole team attending and proposed that this would be a better approach in future PLC projects to support teacher leadership.

New team members in the ECE settings meant starting again with different people to explain new thinking and to work on shared visual arts pedagogy. After staffing changes, participants felt they had to wait for the teaching team to settle together and build relational trust, before they could have any kind of challenging pedagogical dialogue about visual arts. Relatedly, it was an issue for some participants when they had long term relievers; it was difficult

to judge what was appropriate in terms of sharing with relievers or challenging their practice, and what was a worthwhile use of participants' energy and time considering a reliever would not be staying in the team. Part-time teachers did not necessarily see PLC participants role-modelling if they were not working when new ideas were applied in practice, and not present for many of the formal and informal conversations about visual arts pedagogy.

Supportive leadership in the participants' workplaces

The positional leaders at each of the four ECE services provided an environment of supportive leadership to allow the PLC participants to learn and to lead learning. Before the PLC began, the positional leaders gave consent for their teachers, themselves, and their services to be involved in the project and this was an initial indication of their support. This section describes the positional leaders' use of a range of established practices and systems to support teachers to bring professional learning back to the workplace, to share this with their colleagues and to put it into practice with children. The data below is drawn from interviews with PLC participants and positional leaders, and summarised here to be concise.

Distributed leadership practices:

- Remembering each teacher's professional learning and goals, looking out for opportunities where they might extend themselves.
- Encouraging teachers to try new practices and to share areas of strength and areas of learning with the team.
- Aiming to send two teachers at a time to professional learning opportunities to facilitate shared dialogue and collaboration in practice.
- Mentoring, including listening to teachers as they reflect on professional learning, and offering encouragement and support.
- Looking out for times when team members are trying new practices with the children, covering them in terms of supervision and routines for the rest of the group.

Systems and tools:

- Team meetings with time for teachers to report back from professional learning, aiming for shared understanding and shared goals for practice. Written reflections, considering what was learned and what this might mean for practice.
- Daily diaries and communication books as a tool for sharing ideas and plans with the team.
- Appraisals, including goal setting, planning strategies, regular reflection, mentoring and support.
- Group planning for children's learning, as an opportunity for teachers to implement new professional learning.
- Budget to provide teachers with money for resources and materials, so that they could implement their new learning in practice with children.

The positional leaders commonly reported that their services had benefited from the PLC and the resulting improved practice around visual arts. One positional leader appreciated the long-term nature of the PLC because, "there was an opportunity to implement, reflect, re-discuss, implement," and she said it prompted them "to constantly think, oh she's going back——oh, let's reflect again." The supportive leadership in each of the four services enabled the PLC participants to bring professional learning back to their teams and into practice. This support from the leaders was important in the teams where only one PLC member remained.

Facilitator leadership in the network PLC

As the facilitator of the network PLC, I provided oversight and meeting facilitation. I planned the structure of the PLC as a whole, thinking about the arc of the learning journey from beginning to end, considering both practical learning and reflective dialogue as the two key professional learning elements. During the PLC meetings, I had a role as facilitator in building and sustaining relational trust, distributing leadership, facilitating group dialogue, managing the time and space, and maintaining connection between meetings. To foster relational trust at the beginning of the PLC, I facilitated the development of a group agreement on foundational ways of working together at the first meeting of the PLC. The interpersonal practices I used in developing trust with the participants included asking individuals about their work and lives, ensuring I had spoken to each person with warmth each time we met, and making sure everyone was included in conversations during break times. In later interviews, participants said that these actions helped them to feel supported and nurtured. This in turn made them feel that they were in a safe environment in which to develop relationships and to share their professional challenges and ideas. The relational trust built was such that one participant commented, "I can just be comfortable here and be me, and just learn."

I distributed leadership in the PLC group by encouraging participants to share their ideas and perspectives and looked for opportunities to enable each participant to lead learning, to develop participants' sense of belonging and commitment and strengthen their engagement. For example, I invited participants to take turns hosting alternate PLC meetings at their centre or kindergarten, including planning and facilitating an art experience, organising the food and carrying out the welcome and conclusion of the meeting. I tried to ensure the sharing of power within the group, so that I did not position myself as the expert all the time and participated in discussions as a co-learner. I aimed to model curiosity, engagement, and vulnerability.

Participants highlighted the importance of my role in facilitating group dialogue to ensure that power was shared. Participants reported that they felt supported by my strategies of ensuring everyone had time to speak. This was balanced by allowing conversation to flow naturally and take tangents, so that those who were speaking felt like their perspective was valued. I regularly pointed out links between what different people were saying and made references to ideas people

had raised at previous meetings, further emphasising the value of each person's contributions. Participant feedback included the following:

> *There was another woman who was very quiet, and even right from the word go you would bring her in, and you brought me in as well, and I think that was just – again, gave that level of comfort, that what you have to say is important.*

This study demonstrated that PLC facilitators can create equitable opportunities for learning by actively supporting the reflective learning process through both encouragement and challenge. Further, the facilitator has a responsibility to be engaged in individual and group learning to ensure those who are not as confident are well supported to participate and to make progress. In this network PLC case study, the data indicated a range of areas of effective leadership practice in the role of PLC facilitator: planning and structuring the professional learning; facilitating relationships and resources; support and encouragement; maintaining momentum and focus; and fostering leadership in others. According to this study, the facilitator can look for opportunities to share power in the PLC group, and to develop each member as a leader in a distributed leadership model. As members develop confidence and a sense of responsibility, the professional learning may benefit from increased engagement and commitment. Overall, the leadership findings present a complex landscape of people and practices in the network PLC. The leadership practices were varied across roles and contexts, and the different members of the PLC used different approaches to progress and support professional learning and practice.

Discussion

The design, implementation and analysis of this research has maintained a distributed perspective on leadership, developed in my previous study (Denee, 2017) and supported by PLC literature (Azorín et al., 2020; Stoll, 2011; Thornton & Cherrington, 2014). The following discussion examines the ways teacher leadership, supportive positional leadership, team culture and facilitator leadership all enabled the application and sharing of learning from the PLC to the four ECE settings in this study, in relation to the wider literature.

Teacher leadership

The PLC participants in this study, and their leaders and teams, all highlighted the importance of role-modelling practice as a central mode of sharing new learning with colleagues. In this case, when teachers role-modelled new ways of teaching and demonstrated what was possible for visual arts pedagogy, the rest of the team and the positional leaders were more likely to engage with the professional learning and seek to find out more. In the post-PLC interviews, the participants and teams suggested that innovative practice was often a catalyst for team reflective professional dialogue, and that within such dialogues, the PLC participants had the opportunity to enact leadership in sharing their new knowledge and having an influence on team pedagogy. Similarly, in

her study on ECE teachers' professional dialogue, Healy (2012) found that such dialogue provided an opportunity for teachers to make connections between theory and practice, and according to interview and reflection data this was true for the participants and their teams in this case study also.

The PLC participants had an influence on team pedagogy through leadership practices, including negotiating and introducing new ideas for teaching. The teacher leadership practices unpacked by the PLC participants included supporting colleagues to take risks and try new ideas in practice, offering knowledge and resources, and ensuring the rest of the environment was being managed while the team member engaged in a new visual arts experience with children. Further, the participants used democratic and inclusive ways of communicating new ideas with their teams; this was sometimes during planned team meeting times, and sometimes in spontaneous and informal professional conversations. One positional leader explained the value of team meeting discussion to involve the whole team with new ideas: "that way, everybody's kind of aware that there might be a shift in practice, and can support it; it often just brings up conversation, or discussion around it." These findings regarding teachers' leadership practices are congruent with Cooper's (2020) framing of teacher leadership as leadership-in-practice, which allows for leadership to be explored in actions and practices rather than in individuals and positions. As such, teacher participants are positioned as active leaders of professional learning through practice. My previous study on distributed leadership for professional learning (2017) suggests that teachers have unique strengths to lead professional learning, because they have an inside perspective on what this new learning will mean in a particular context and team dynamic. In this research, the PLC participants talked repeatedly about needing to contextualise the new learning to their particular ECE setting, and this was evident in interviews, written reflections and learning story data. Azorín et al. (2020) argue that positional leaders operating with a distributed leadership approach can provide teachers with the support to engage in network learning community activities and promote new learning back in their workplaces. However, they also argue that network leadership research has not yet clarified how positional leaders can provide such support through specific leadership practices and actions. The role of the positional leader in supporting teachers as leaders is addressed in the next section.

Supportive positional leadership

In this network PLC case study, supportive positional leaders facilitated the sharing of PLC learning in their respective ECE settings. All participants appeared to benefit from supportive positional leaders, which may be a result of the research design requiring the positional leader to be involved in interviews and to provide release time. Unsupportive leaders would have been unlikely to participate in the PLC in the first place. This bias towards supportive positional leaders in the case study offers an opportunity to look at effective leadership practice, in a similar way to my previous study on effective positional leaders in ECE (Denee, 2017). According to interview

data, positional leaders in the four participant ECE settings used an array of leadership practices and systems to provide the PLC participants with support: managing systems to support teacher leadership and application of learning in the ECE setting; mentoring and coaching practices for encouragement and extension; and providing resources and time and space to enable teachers to innovate and share new learning. These practices and systems used by positional leaders enabled teachers in this study to apply and share professional learning from the network PLC into the ECE setting, within a culture of distributed leadership.

The findings here regarding the supportive leadership practices of positional leaders are congruent with previous studies about leadership for professional learning. Thornton and Cherrington (2014) found that when ECE teams aimed to operate as PLCs, the support of the positional leader was a crucial factor in the effectiveness and sustainability of the PLC. Heikka and Waniganayake (2011), taking a distributed view of pedagogical leadership, assert that positional leaders, "are responsible for creating a community that fosters learning and communication and where responsibilities are distributed among teachers, children, families and the community" (p. 510). The findings from this case study indicate that leaders enact a complex range of practices to foster relational trust, and that the resulting trust makes professional learning for transformative change possible, supporting similar claims by Edwards-Groves and Grootenboer (2021).

Team culture

The experiences of the four ECE teams in this case study suggest that team culture can have a substantial influence on whether teachers apply and share professional learning in their work context. Case study participants and their teams and leaders all reported relatively positive team culture and relational trust in individual interviews and focus groups, both before and after the PLC. Examples of difficulties in team dynamics were seen in the PLC case study data as well, where relationships between older and younger teachers, relievers, and part-timers, and between different personalities, all had the potential to make it difficult to raise new ideas and challenge colleagues' habits of thinking. Yet overall, the PLC participants all experienced the positive effects of being in a team culture based on distributed leadership.

Because the four teams already assumed that every member would have an influence and introduce innovation and new knowledge, the participants were empowered to share their learning with their team. In order to build confidence in new ways of working, teachers need to feel safe enough to take risks and experience failure. This finding is in line with other early childhood literature on teacher professional learning and application in practice where teachers were more likely to take risks and enact new practices in a supportive collegial team environment (Nolan & Molla, 2016). In a study on ECE teachers' distributed leadership, Clarkin-Phillips (2009) found that teachers were more likely to engage in leadership practices within a supportive and encouraging environment, and that a starting point for this was identifying and valuing teachers'

different strengths. Cooper (2018) argues that a "culture of niceness can demand conformity to the group, and in turn, hinder teacher leadership" (p. 68), so the matter of relational trust is not straightforward. The findings from this network PLC study suggest that teachers need to agree on and develop a culture of distributed leadership and relational trust, and value and support each other's teacher leadership, if they are to combat the tendency to value harmony above critical professional dialogue in ECE identified by Thornton and Wansbrough (2012) and Healy (2012). If the goal of professional learning is to encourage teachers to develop pedagogy and try new ways of teaching and learning with children, then consideration must be given to the complexity of team relational trust in education settings.

Facilitator leadership

As well as the researcher, I acted as facilitator of the PLC, and this dual role brought certain strengths and challenges to leadership of learning. As a qualitative researcher, I was able to get to know the participants very well and had additional opportunities to build relationships and understanding through the interviews and focus groups. One key challenge in my role was balancing my neutrality as a researcher with my investment in their success as a facilitator; I considered this in view of my ethical responsibility to ensure that the research benefited the participants (Tobin, 2018).

In the post-PLC interviews, participants highlighted a variety of leadership practices which they found effective and supportive in my facilitation role: actively leading discussions and experiences; designing times for structured goal setting and reflection throughout the PLC; and maintaining focus and momentum to ensure progression of learning for the participants. My communications and actions between meetings turned out to be important to the participants' application of learning: keeping up their engagement through extra resources and emails; responding to written reflections with constructive feedback; and visiting the services to support visual arts practice and excursions. One surprising finding was that my role as facilitator turned out to be important for equity across the group of learners. Some participants had sufficient skills and energy to put learning into practice but some needed more support, and it was important as the facilitator to be aware of the diverse participants and to adapt my approach to different learners. Considering the influential role of the facilitator, designing and deciding the learning, there is surprisingly little written about the leadership practices of the person or persons running a PLC. The facilitator tends to receive a mention as an important figure without much in the way of analysis (for example, Bolam et al., 2005; Prenger et al., 2021; Stoll et al., 2006). The findings in this study suggest that this role is complex and requires intentional consideration and understanding to effectively lead learning in a network PLC.

Conclusion

Distributed leadership provides an effective lens to understand the system of a network PLC and the ways adults work together to progress professional learning and practice in education settings,

according to the findings of this study. The participants in a network PLC have responsibility for sharing and applying learning from the PLC to their education settings, and this requires them to enact leadership as teachers. In this case, the positional leaders' support was critical in enabling the participants to enact leadership, and in encouraging the sharing and development of new practices in the setting. Positional leaders have a strong influence over team dynamics and the development of a culture of distributed leadership to enable participants to enact pedagogical leadership, and therefore the role of the positional leader is an important consideration in developing effective network PLCs and in PLC research. My experiences in facilitating the visual arts network PLC led me to understand that the PLC facilitator has an important leadership role and can be influential in empowering participants to apply learning to their settings. Overall, this study indicates that the leadership practices across the eco-system of a network PLC are rich with potential to support teacher professional learning and are worthy of further consideration in both research and practice.

References:

Azorín, C., Harris, A., & Jones, M. (2020). Taking a distributed perspective on leading professional learning networks. *School Leadership & Management, 40*(2–3), 111–127. https://doi.org/DOI: 10.1080/13632434.2019.1647418

Bolam, R., McMahon, A., Stoll, L., Thomas, S., Wallace, M., Greenwood, A., Hawkey, K., Ingram, M., Atkinson, A., & Smith, M. (2005). *Creating and sustaining effective professional learning communities*. Bristol: University of Bristol.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Clarkin-Phillips, J. (2009). Distributed leadership: Utilising everyone's strengths. *Early Childhood Folio,* 13, 22–27. https://doi.org/10.18296/ecf.0180

Clarkin-Phillips, J. (2011). Distributed leadership: Growing strong communities of practice in early childhood centres. *Journal of Educational Leadership, Policy and Practice, 26*(2), 14.

Cooper, M. (2018). *Shifting the lens: Everyday collective leadership activity in education* [Doctoral thesis, University of Auckland]. Auckland.

Cooper, M. (2020). Teachers grappling with a teacher-leader identity: complexities and tensions in early childhood education. *International Journal of Leadership in Education*, 1–21. https://doi.org/10.1080/13603124.2020.1744733

Denee, R. (2017). *Distributed leadership for professional learning: Effective leadership practices in early childhood education* [Master's thesis, Victoria University of Wellington]. Wellington, New Zealand.

Denee, R. (2022). *Visual arts in ECE: Strengthening intentional teaching through a network professional learning community* [Doctoral thesis, Te Herenga Waka-Victoria University of Wellington]. Wellington.

Denee, R., & Thornton, K. (2017). Effective leadership practices leading to distributed leadership. *Journal of Educational Leadership, Policy and Practice, 32*(2), 33. https://doi.org/10.21307/jelpp-2017-0016

Denee, R., & Thornton, K. (2021). Distributed leadership in ECE: perceptions and practices. *Early Years*, 1–16. https://doi.org/10.1080/09575146.2018.1539702

DuFour, R., & Eaker, R. (2009). *Professional learning communities at work: Best practices for enhancing students achievement.* Solution Tree Press.

Edwards-Groves, C., & Grootenboer, P. (2021). Conceptualising five dimensions of relational trust: implications for middle leadership. *School Leadership & Management*, 1–24. https://doi.org/10.1080/13632434.2021.1915761

Fullan, M. (2004). *Systems thinkers in action: Moving beyond the standards plateau: Teachers transforming teaching*. Department for Education and Skills.

Halttunen, L., Waniganayake, M., & Heikka, J. (2019). Teacher leadership repertoires in the context of early childhood education team meetings in Finland. *Journal of early childhood education research,* 8(1).

Healy, C. (2012). *Overlapping realities: Exploring how the culture and management of an early childhood education centre provides teachers with opportunities for professional dialogue* [Master's thesis, Victoria University of Wellington]. Wellington.

Heikka, J., & Waniganayake, M. (2011). Pedagogical leadership from a distributed perspective within the context of early childhood education. *International Journal of Leadership in Education, 14*(4), 499–512. https://doi.org/10.1080/13603124.2011.577909

Hipp, K. (2004). Teacher leadership: Illustrating practices reflective of schools engaged in purposeful efforts to create and sustain learning communities. *Leading and Managing, 10*(2), 54.

Hord, S. (2009). Professional learning communities. *Journal of Staff Development, 30*(1), 40–43.

Jackson, D., & Temperley, J. (2007). From professional learning community to networked learning community. In L. Stoll & K. Louis (Eds.), *Professional learning communities: Divergence, depth and dilemmas* (pp. 45–62). Open University Press.

Marsh, S. (2015). A Model for Leadership That Improves Learning: New Insights for Schools and Scholars. *Leadership and Policy in Schools, 14*(1), 67–103. https://doi.org/10.1080/15700763.2014.983132

Nolan, A., & Molla, T. (2016). Teacher professional learning in Early Childhood education: Insights from a mentoring program. *Early Years*, 1–13. https://doi.org/10.1080/09575146.2016.1259212

Poekert, P. E. (2012). Teacher leadership and professional development: Examining links between two concepts central to school improvement. *Professional Development in Education, 38*(2), 169–188. https://doi.org/10.1080/19415257.2012.657824

Postholm, M. B. (2012). Teachers' professional development: a theoretical review. *Educational Research, 54*(4), 405–429. https://doi.org/10.1080/00131881.2012.734725

Prenger, R., Poortman, C. L., & Handelzalts, A. (2017). Factors influencing teachers' professional development in networked professional learning communities. T*eaching and Teacher Education, 68*, 77–90. https://doi.org/10.1016/j.tate.2017.08.014

Schwandt, T. A. (1994). Constructivist, interpretivist approaches to human inquiry. *Handbook of qualitative research, 1*, 118–137.

Silverman, D. (2017). *Doing qualitative research: A practical handbook* (5th ed.). SAGE Publications Limited.

Spillane, J. P., Halverson, R., & Diamond, J. B. (2004). Towards a theory of leadership practice: A distributed perspective. *Journal of Curriculum Studies, 36*(1), 3–34.

Stoll, L. (2011). Leading professional learning communities. In J. Roberston & H. Timperley (Eds.), Leadership and learning (pp. 103–117). Sage.

Stoll, L., Bolam, R., McMahon, A., Wallace, M., & Thomas, S. (2006). Professional learning communities: A review of the literature. *Journal of Educational Change, 7*(4), 221–258. https://doi.org/10.1007/s10833-006-0001-8

Thornton, K., & Cherrington, S. (2014). Leadership in professional learning communities. *Austral-asian Journal of Early Childhood, 39*(3), 94. https://doi.org/10.1177/183693911403900312

Thornton, K., & Cherrington, S. (2019). Professional learning communities in early childhood education: a vehicle for professional growth. Professional Development in Education, 45(3), 418–432. https://doi.org/10.1080/19415257.2018.1529609

Thornton, K., & Wansbrough, D. (2012). Professional learning communities in early childhood education. *Journal of Educational Leadership, Policy and Practice, 27*(2), 51.

Timperley, H. (2011). *Realizing the power of professional learning.* McGraw-Hill Education.

Timperley, H. S. (2005). Distributed leadership: Developing theory from practice. *Journal of curriculum studies, 37*(4), 395–420.

Tobin, K. (2018). Methodological bricolage. In S. M. Ritchie & K. Tobin (Eds.), *Eventful learning: Learner emotions* (Vol. 61, pp. 31–55). Koninklijke Brill NV. https://doi.org/10.1163/9789004377912_003

Yin, R. K. (2017). *Case study research and applications: Design and methods.* SAGE Publishing.

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