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Exploring the impact of an online learning community to support student teachers on school placement

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ABSTRACT

This paper documents the design, implementation, and evaluation of an online learning community (OLC), within the Republic of Ireland, which set out to support student teachers in a hybrid space during their school placement experience. Guided by qualitative research, data collection methods included interviews and analysis of students' forum postings. Key findings illustrated that the OLC provided a valuable learning context for student teachers. The presence of cooperating teachers, as online tutors, as well as a higher education institute tutor was recognised as critically important for facilitating the OLC. A significant conclusion to this study is that hybrid spaces, that are aligned with the practicum, can provide opportunities for dialogic reflection and enquiry within a community of learners. With the increased attention of adopting online pedagogical approaches, stemming from the COVID-19 pandemic, this paper offers two research-based design principles to facilitate OLCs that support student teachers on school placement.

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school placement; online learning; hybrid space; knowledge generation

Introduction

Within the past two decades, the potential benefits of online learning have been of increasing interest within initial teacher education (ITE) research and practice (Clarke 2009; Cochran-Smith et al. 2015; Collin and Karsenti 2012; Dabner, Davis, and Zaka 2012). However, this interest was propelled to new heights in spring 2020, as the COVID-19 global pandemic resulted in teacher education programmes, internationally, pivoting, redesigning, and delivering their coursework and practicum components at a distance (Carrillo and Flores 2020; Flores and Gago 2020; Hodges et al. 2020; la Velle et al. 2020). A wide body of research has documented how teacher education programmes, in a range of jurisdictions, have responded to online delivery, illustrating how higher education institutes (HEIs) engaged in emergency planning and rapid transformation to online delivery (Flores and Gago 2020; Kidd and Murray 2020; la Velle et al. 2020). In tandem with such research, there has also been a call to explore new possibilities in ITE, given the approaches implemented in response to COVID-19 (Ellis, Steadman, and Mao

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2020). As Darling-Hammond and Hyler (2020, 463) observe, 'while learning in the time of COVID has been challenging for student teachers and prospective teachers alike, this moment of disruption has created the opportunity for rethinking and reinventing preparation, as well as schooling itself'. Attention has been paid to how HEIs have dealt with and responded to full online delivery and how online learning may play a more pivotal part in future ITE provision. That said, Carrillo and Flores (2020) caution that more in-depth research into online teaching and learning in ITE is necessary, which moves beyond emergency online provision. A focus should be on sustained effective online pedagogies that provide opportunities for meaningful professional learning (Carrillo and Flores 2020; Hodges et al. 2020).

This paper addresses the research gap relating to online teaching and learning in ITE. It presents the design, implementation, and evaluation of an online learning community (OLC), which set out to support student teachers in a hybrid space, as they engaged in an onsite school placement experience in a HEI-based teacher education programme within the Republic of Ireland (RoI). While this OLC was employed prior to the COVID-19 pandemic, it highlights how an OLC can be developed and enacted, complementing face to face teaching. Within the design component, a review of online and teacher education pedagogy is presented. Considerations are then given to the implementation of the OLC. Drawing on multiple methods of data, the process of professional learning within the community is explored, alongside how professional relationships within the OLC influenced learning. In order to set the scene for this research, the policy context is now presented, illustrating how school placement is operationalised within the Republic of Ireland.

The policy context

Teacher education programmes in the RoI have been in the reform spotlight for the last two decades. Until 2006, ITE providers, universities and colleges of education alike (collectively now referred to as HEIs) exercised institutional autonomy in relation to the design, content and delivery of their teacher education programmes (Harford and O'Doherty 2016; Heinz and Fleming 2019; Mooney Simmie 2012; Solbrenke and Sugrue 2014). The establishment of the Teaching Council of Ireland in 2006, as a statutory body, would mark a new direction in teacher education reform. In relation to ITE, the Teaching Council Act conferred responsibility for the review and accreditation of ITE programmes. School placement would be extended to 30 weeks on the concurrent (4-year undergraduate) programme and 24 weeks on the consecutive (2-year postgraduate) programme. Despite the publication of *Guidelines on School Placement* for HEIs and schools (Teaching Council 2013, 2021), a formalised model of partnership remains absent in Ireland (Hall et al. 2018). While student teachers are assigned cooperating teachers during their school placement, there is no formal mentoring requirement on the part of cooperating teachers (Gorman and Furlong 2023). The responsibility for evaluating student teachers' work on school placement is with full- and part-time academic staff who are employed by the ITE provider. The publication of *Céim: Standards for Initial Teacher Education* (Teaching Council 2020) stipulates this requirement further where the formal responsibility of supporting student teachers remains with HEIs. While in certain jurisdictions, opportunities are afforded to allow for triadic dialogue between student teachers,

cooperating teachers and HEI tutors, this remains underdeveloped within the RoI, due in part to the absence of a formal model of partnership, time allocation, and professional development (Farrell 2021).

Literature review

The past three decades has witnessed growing emphasis on the importance of building OLCs to improve and maintain student engagement and to facilitate effective learning experiences across a range of HEI-programmes (Akyol, Garrison, and Ozden 2009). In tandem with this, collaborative-based learning within learning communities has been lauded in teacher education (Cochran-Smith and Lytle 1998, Cochran-Smith and Lytle 2009; Darling-Hammond 2006; Korthagen et al. 2001). For this study, a range of seminal online and teacher education pedagogical frameworks are reviewed. Commonalities across these frameworks are then presented and provide the theoretical underpinnings for the design of the OLC, that is central to this research.

The community of inquiry framework

The Community of Inquiry (CoI) framework, first presented in an article written by Garrison, Anderson, and Archer (1999), is regarded as a seminal framework for supporting online collaborative learning. It is not specific to any one discipline and research has illustrated how it has been employed across a range of programmes (Castellanos-Reyes 2020; Stenbom 2018). The CoI framework is premised in the belief that effective and meaningful higher-order learning can take place in a community of learners. To achieve this, three key elements are deemed essential: teaching presence, social presence and cognitive presence (Akyol and Garrison 2011; Garrison, Cleveland-Innes, and Fung 2010; Shea et al. 2010). The three presences are interdependent, as presented in Figure 1.

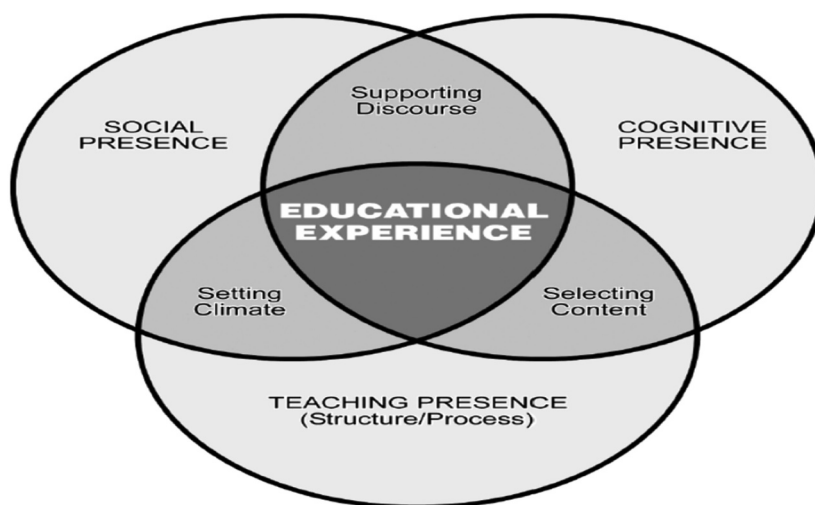


Figure 1. Community of inquiry framework (Garrison, Anderson, and Archer 1999, 88).

To maintain an effective teaching presence in an OLC, several factors must be considered. When designing an online environment, there should be clear measurable learning outcomes that are appropriate to the students' learning, and meaningful learning activities are organised (Fiock 2020; Palloff and Pratt 2007; Richardson et al. 2012). There should also be appropriate emphasis placed on facilitating and enhancing discourse within the online space. The online teacher should recognise and build on the learners' comments, raise questions, make observations, and move the discussions with efficiency (Anderson et al. 2001; Arbaugh and Hwang 2006; Fiock 2020; Garrison 2017; Shea et al. 2003). Facilitating discourse is only effective when participants engage, and a community may not be formed unless learners interact with each other (Arbaugh and Hwang 2006). In fostering active participation, it is important that there is a clear syllabus, participation guidelines, a willingness to step in and be proactive in keeping the participation going in the appropriate direction from the outset.

The nature of social presence in an online environment has been shown to be an important factor in designing and sustaining an effective OLC (Aragon 2003; Dunlap and Lowenthal 2009; So and Brush 2008; Swan and Shih 2005; Szeto 2015). Social presence fosters interactions among participants and strengthens interpersonal relationships between the learner and teacher (Dunlap and Lowenthal 2009; Richardson et al. 2017). Participants should value the importance of working as a group, as they engage in working in collaborative activities as opposed to building personal relationships (So and Brush 2008). A critical component in fostering social presence within a community of inquiry is ensuring that open communication is reciprocal and respectful in nature (Garrison 2017). In addition, the self-esteem of all participants should be enhanced through recognising and valuing all participants, encouraging participants to engage, complimenting learners, listening to inputs, and responding to contributions, expressing agreement, and responding to questions posted by others (Dunlap and Lowenthal 2009).

Within the Col, cognitive presence can be enhanced through practical inquiry (Garrison 2017). There are four phases: the trigger phase, the exploration phase, the integration phase, and the resolution phase. The first phase is concerned with triggering the event. Within this phase, the online teacher introduces a probing issue or dilemma that relates to the learners' experience or previous studies in the area. The second phase focuses on exploration, where participants are exploring the nature of the problem and make attempts to comprehend the problem through the process of gathering information and seeking explanations. The third phase, integration, focuses on constructing meaning. Learners are highly reflective in this phase where they share ideas, offer meaningful solutions to existing problems, and provide rationales and justifications. The final phase focuses on how the problem is addressed, or how its complexity is reduced.

Reflection and enquiry within teacher education

While the Col provides a framework for designing effective online learning, the pedagogical frameworks of Korthagen et al. (2001), Cochran-Smith and Lytle (2009) and Zeichner (2010) provide nuanced insights into fostering collaborative reflection and enquiry with student teachers. First, the ALACT model, named after the first letter of five phases, *Action, Looking Back, Awareness of Essential Aspects, Creating Alternative Models of Action, Trial*, is used in a range of teacher education programmes internationally (Korthagen 2013, 2017;

Korthagen et al. 2001). While the framework was put forward more than 20 years ago, research has continued to be carried out on its effectiveness in teacher education, and how critical reflection can be fostered in this model (Korthagen 2013, 2017). The framework is grounded in action-oriented reflection. The ALACT model is facilitated through five phases (see Table 1). It provides an appropriate mechanism to explore the challenges that student teachers encounter on their practicum, and alongside this, provides strategies around cultivating an open supportive environment. Second, it values the learning that can be gleaned by discussing issues that directly relate to practice. Through engaging in this reflective dialogue about their school placement, student teachers are constructing new knowledge in a collaborative space.

The ALACT model closely aligns with ‘Inquiry as Stance’ (Cochran-Smith and Lytle 2009). Inquiry as stance promotes practice as ‘a site for inquiry, interrogating one’s own work and other’s practices and assumptions, and learning from and about practice by collecting and analysing the data of daily work’ (Cochran-Smith and Lytle 2009, 108). Inquiry as stance is underpinned by a process of collaboration where collective groups, within schools or across schools in face-to-face or in virtual networks, come together to improve practice and to enhance learning and bring about change in educational practice (Cochran-Smith and Lytle 2009; Dana and Yendol-Hoppey 2014; So 2013; Zuidema 2012). The affordances of new technologies have enabled the establishment of enquiry communities online where the sharing of enquiries into classroom practice can be facilitated in a virtual space (Cochran-Smith et al. 2015; Zuidema 2012). Cochran-Smith and Lytle (2009, 22) believe that online communities can ‘create a space for an interactive intellectual community where distal educators can participate in enriching and inventing the documentation of teaching and learning practice’. Through modelling online, teacher educators can encourage participants to ask questions and engage in ‘critically constructive’ conversations (Zuidema 2012, 63). Therefore, careful thinking and time should be invested into the design and conceptualisation of such experiences (So 2013). In addition, the presence of the teacher educator is pertinent in facilitating an enquiry-led community (Zuidema 2012).

A perennial problem in ITE is the lack of connection between HEI-based coursework and the school placement experience (Zeichner 2010). While most HEIs include a range of school placement experiences within their programmes, the disconnect between what student teachers learn in their coursework and what they are learning on school placement remains problematic. Often, cooperating teachers have limited insight into the student teachers’ coursework components and receive limited information on how to support student teachers to enact approaches that are endorsed in the student teachers’

Table 1. The five phases of the ALACT model (Korthagen et al. 2001).

Phase	Description
Phase 1	This is the ‘action’ phase that leads the reflective process. A probing question or artefact can be used to guide the reflection.
Phase 2	The student teacher engages in ‘looking back’ and reflects on their prior experience.
Phase 3	This phase involves an ‘awareness of essential aspects’ where the student teacher is encouraged to confront challenges or problems in practice. The teacher educator may provide feedback that is closely connected to the student’s problem.
Phase 4	The student teacher identifies alternative solutions to the challenges and creates alternative models of action.
Phase 5	The student teacher engages in a ‘trial’ phase where they implement what has been learned through ALACT.

coursework (Clarke, Triggs, and Nielsen 2014; Zeichner 2010). Zeichner (2010, 92) calls for hybrid spaces that ‘bring together school and university-based teacher educators and practitioner and academic knowledge in new ways to enhance the learning of prospective teachers’. This provides rich opportunities for teacher learning, where synergies are created ‘through the interplay of knowledge from different sources’ (Zeichner 2010, 95).

The review of key seminal frameworks in online learning and teacher education have illustrated that learners can construct knowledge through a process of collaboration and reflection. The next section illustrates how these pedagogical frameworks informed the design of the OLC.

Designing and implementing the OLC: project línte

During the design phase of this study, a specific title was given to this online community so that it would be distinct and recognisable to all in the HEI, including student teachers, staff, and placement tutors. The title Línte translates as ‘lines’ in the Irish language. In relation to this project, this would relate to a line of support for student teachers to link with their peers and tutors. Línte also serves as an acronym, Learning in Networks through Enquiry. Through providing reflective enquiry-oriented spaces, student teachers would have the opportunity to critically reflect on their teaching and construct new knowledge (Cochran-Smith and Lytle 1999, 2009; Garrison 2017; Korthagen et al. 2001).

Three tutors were involved in the facilitation of the OLC. This included the first author, a HEI-based teacher educator, and two full time primary school teachers. A participant profile of the two teachers is presented in Table 2. In advance of facilitating the sessions, the three tutors engaged in planning and professional development where the theoretical underpinnings were discussed and the questions that would guide the discussion. One hundred and 10 student teachers, from a 2-year postgraduate ITE programme, were invited to engage in the OLC, as this was aligned with their penultimate six-week school-based onsite placement.

Student teachers engaged in a six-week school-based placement, which was face-to-face teaching in primary schools in Ireland. During the six-week placement, the OLC was facilitated synchronously during weeks one, three, and five, as illustrated in Table 3.

Table 2. Cooperating teacher (tutor) participants.

Tutor (Pseudo)	Gender	Experience	Background
Caoimhe	Female	10 years	Involved in mentoring newly qualified teachers and received relevant CPD.
Jenny	Female	10 years	Involved in mentoring newly qualified teachers and received relevant CPD.

Table 3. Organisation of the synchronous sessions.

Day	Weeks	Time	Student teachers in plenary	Student teachers in each breakout group
Monday	Weeks 1, 3, 5	5.00pm	15	5
Monday	Weeks 1, 3, 5	5.45pm	15	5
Monday	Weeks 1, 3, 5	6.30pm	15	5
Tuesday	Weeks 1, 3, 5	5.00pm	15	5
Tuesday	Weeks 1, 3, 5	5.45pm	15	5
Tuesday	Weeks 1, 3, 5	6.30pm	15	5
Wednesday	Weeks 1, 3, 5	5.00pm	12	4
Wednesday	Weeks 1, 3, 5	5.30pm	12	4

Table 4. Student teacher participants.

Student Teacher (Pseudo)	Gender	Age Profile	School/Class Context
Andy	Male	20–29	Multigrade
Avril	Female	20–29	Single grade
Fiona	Female	20–29	Single grade
Grace	Female	30–39	Single grade
Jane	Female	20–29	Single grade
Ken	Male	40–49	Multigrade
Lisa	Female	30–39	Single grade
Mary	Female	20–29	Multigrade
Mike	Male	20–29	Single grade
Niall	Male	20–29	Single grade
Paul	Male	40–49	Multigrade
Ross	Male	20–29	Multigrade

Student teachers engaged in the OLC after the school day had ended. Student teachers then engaged in an asynchronous discussion forum in weeks two, four, and six. In advance of the first synchronous session, an induction session was provided to present an overview of Linte and afford student teachers the opportunity to become familiar with the resources. Thereafter, each 45-minute synchronous session began with a full-group discussion, outlining a short welcome, and setting the structure for each session. Student teachers were then divided into groups (typically groups of five) with a tutor within a breakout room. They reflected on two key questions, an element of their School Placement that had been going well, and an element of their School Placement that had been challenging or a question that the student would like to put to the group. The breakout groups then returned to the full-group, and the tutors provided an overview of the salient points discussed in the breakout groups. When engaging in the asynchronous discussion forum, student teachers were asked to read other participants' postings on how their placement had progressed and if (and how) the discussions in the synchronous sessions supported them on school placement.

Research approach

The research approach underpinning this study was guided by two research questions.

- If, and how, the OLC supported student teachers' professional learning during their school placement;
- If, and how, professional relationships influenced the learning process within the OLC.

While 110 student teachers engaged in Linte and a survey was initially considered, it was decided that a qualitative approach would be more appropriate, as it would provide rich descriptive insightful accounts in response to the two research questions (Miles and Huberman 1994). Twelve student teachers and the two cooperating teachers were invited to partake in this research. For student teachers, purposive sampling was employed (see Table 4). That said, maximum variation was used to select a diverse range of student teacher participants e.g. gender, age profile, and class level. Two methods of data collection occurred. First, student teachers' forum postings in the asynchronous forum,

on weeks 2, 4 and 6. When posting to the forum, student teachers were encouraged to include a *Status Report* (providing an update of their experience), *Messages of Encouragement* (to or from peers and tutors), and *Requests for Help* (issues and challenges that remain). This approach was adopted from the framework of Irwin and Hramiak (2010). In adhering to the ethical guidelines, the forum postings of the 12 participants were only reported in the findings. At the end of the school placement, the 12 student teachers and the two cooperating teachers were then invited to engage in one-to-one semi-structured interviews. While the approach to data gathering was very much centred on the perspectives of the participants, it was deemed important to ensure that a sample of participants could document their experience from engaging in the OLC. Each interview typically lasted 45 minutes. Interviews were recorded and transcribed verbatim by the author.

The asynchronous forum postings and transcribed interviews were analysed using qualitative thematic analysis. Thematic analysis is a systematic approach to qualitative data analysis that identifies, organises, and offers insights into patterns or themes across datasets (Braun and Clarke 2012). Inductive coding was adopted as the predominant approach where the data was coded to capture the true essence and meaning within the data. Deductive analysis was also employed to ensure that the process of coding was relevant to the research questions. The process of coding also combined semantic and latent approaches, as endorsed in the thematic analysis literature (Braun and Clarke 2012). A semantic approach produces descriptive analysis of the data, while a latent approach goes beyond description, identifying underlying or hidden meanings (Braun and Clarke 2020). The process of analysis followed six recursive phases (Braun and Clarke 2012, 2020). Phase one involved familiarisation with the data. Phase two began with the process of initial coding, which entailed systematically working through the data sets and recording succinct labels that were relevant to the research questions. Phase three examined how the different codes were combined that shared similar features, in order to form potential themes. Phase four involved reviewing potential themes. Phase five presented the final two themes, which involved careful examination. It was important to ensure each theme was consistent with (a) the data, and the preceding phases of analysis and (b) the research questions. Table 5 provides illustrative examples of the analytical process. Phase six involved the write up of the themes, which is the overarching focus of the forthcoming section.

Findings

The findings are presented thematically in response to the two research questions. First, the presentation of findings illustrates how the OLC supported student teachers' professional learning. Second, the findings show how relationships with peers impacted the learning process within the OLC, how student participants perceived the role of tutors within the OLC, and the approaches that tutors took to support the learning process.

Learning opportunities within the OLC

Lesson planning

In relation to lesson planning, the student participants discussed why they sought such support, indicating that they were over-planning and failing to complete their lessons in their allocated time. Jane felt that she was 'doing too much in the lessons' (Interview). Grace believed that she was 'going down the wrong road' (Interview), citing time

Table 5. Codes, categories and themes.

Theme (Phase 5)	Category (Phase 3–4)	Description of Code (Phase 2)	Anchor Example
Learning Opportunities within the OLC	Student Teacher Challenges	Identifying challenges in lesson planning	'I seemed to over plan a lot of my lessons and in turn overloaded them with content for the lesson' (Forum Posting, Week 2)
		Identifying challenges in facilitating groupwork	"I raised the issue about the group work learning and my concern around the noise level' (Interview)
		Concerns with perceptions	'I was taking the negative aspects out of it [children talking in groups] because you don't want to think that somebody thinks your teaching is bad' (Interview)
	Seeking Support	Responding to questions	'What I liked was that we were given focused questions. We could share what was going well and not so well' (Interview)
		Posing questions to peers and tutors	'I started to think about the sessions in my day-to-day teaching if I wanted advice on how other students were doing something' (Interview)
	Collaboration and feedback	Sharing challenges of practice	'Línte taught me that everyone is going to face challenges and it is important that you face them and share them'. (Mike, Interview)
		Sharing of approaches to support peers in addressing challenges	'It was nice when something worked well for you to share with another person who might be finding challenging (Jenny, Interview)
		Affirmation	'It was great to say I am doing this well and give examples and then after giving yourself a confidence boost, you went on to talk about wasn't working' (Paul, Interview)
	Evidence of New Learning	Evidence of new learning from the OLC	'I was overusing rewards, and my tutor advised me to use just praise and positive phrases instead of just good or very good. This was really helpful and something I had not thought of before' (Lisa, Interview)
		Sharing examples of enactment	The tutor advised me not to stop doing groupwork because the children were noisy. Set expectations, and conference with them. I kept doing that and I certainly noticed that the children engaged much better in the group work. (Jenny, Asynchronous Forum, Week 2)
Influence of Professional Relationships on Learning within the OLC	Role of the Tutors in Fostering Professional Relationships	The Cooperating Teacher as Tutor – Practitioner Knowledge	'They are real teachers who work in real classrooms and are very much in tune of what is going on in modern day classrooms which I think is important too' (Andy, Interview)
		The HEI Teacher Educator as Tutor – The Link Tutor	'You might need a nudge to go back to your coursework and then you think oh I can go back to this module, and it is nice to have someone reminding you there'. (Ross, Interview)

(Continued)

Table 5. (Continued).

Theme (Phase 5)	Category (Phase 3–4)	Description of Code (Phase 2)	Anchor Example
	Relationships with Peers	A Shared Purpose	'It just felt like we were all there for the same purpose, we knew what was expected of us, and it was very open'. (Lisa, Interview)
		Overcoming distance	'The fact that we were all distant and isolated and were not in the College for a while, I thought it [OLC] was good (Fiona, Interview)
		Accessibility	'It [the OLC] was more beneficial than completing a written reflection because this (OLC) was more communicative and more interactive whereas a reflection means you can't talk to anybody or interact with anybody' (Paul, Interview)

management as the primary factor. Lisa felt that interruptions in the school were having an impact on the timing of her lessons: 'One thing I'm struggling with, is that there are often unforeseen reasons in the school/class which results in my lesson being cut short' (Asynchronous Forum, Week 2).

Through dialogue, and providing examples, student teachers were encouraged to revise and amend planning if lessons or aspects of lessons were not completed. Andy felt that he was 'dwelling too much on an activity or aspect of a lesson'. He explained how he raised this concern with his tutor: 'Our tutor said simplify the lessons, plan two or three learning activities that can be done successfully within the time and not to overload the lesson or complicate the lesson where it doesn't need to be complicated' (Interview). Following this advice, he commented how the advice supported him in his planning: 'I felt that I wasn't as caught for time or watching the clock, which is great, that the children were doing quality activities, and that we had time to discuss properly' (Interview). As the placement progressed, concerns around planning became less common in Linte. Paul felt that experience in classrooms and in planning for the children in the classroom 'came a lot easier' and 'we were gaining experience and life was getting easier' (Interview). Mary (Interview) felt that this issue was alleviated because this was raised as a common issue 'in the first week of the placement', and student teachers received support in addressing these challenges within the OLC.

Managing groupwork

Student teachers also sought support around managing and facilitating groupwork. Niall expressed how groupwork was a 'stressful' experience, (Asynchronous Forum, Week 2). Avril highlighted similar issues with facilitating groupwork: 'there were some problems with the noise levels in the first two weeks as this was a new experience for them, they were excited, as a result the noise levels had risen, and I am not sure what my cooperating teacher thought' (Interview). Initially, Ross had a negative perception towards groupwork, as he felt that he needed to have a 'solid position in the class and 'found it hard for the groupwork session', as the children were 'very loud and it was hard to get used to' (Interview). Ross (Interview) was concerned that others in the school, including his cooperating teacher, would think his teaching was 'bad' due to elevated noise levels in the

class. To support student teachers in addressing this challenge, they were encouraged to revisit their HEI coursework, particularly drawing back to coursework learning around facilitating and managing cooperative and collaborative learning. Participants who encountered this challenge welcomed this advice. Jane felt that the children were initially 'very competitive and found it hard working in teams' and when 'I got this advice from the tutor, I got the children to work in pairs and smaller groups, and then they got used to this' (Interview). Within the forum posting in Week 4, Mike also commented on how he enacted advice from the OLC: 'One of my group members said to use "think-pair-share and square" as that will ensure the kids will take part. I used this in History yesterday and it worked really well. My class [cooperating] teacher was really impressed with this' (Asynchronous Forum, Week 4). These findings provide insights into how student teachers found value in the learning opportunities within the OLC, and also how engagement supported their school-based practice.

The influence of professional relationships on learning within the OLC

Influence of student-student relationships on professional learning

Ken (Interview) felt that the online sessions led student teachers to develop professional relationships with each other: 'it just felt like we were all there for the same purpose, we knew what was expected of us, and it was very open'. Despite being 'close enough' and knowing 'most people in the group', Mary believed that if she had not engaged in LÍnte, she may not have opened-up or discussed the experience with her peers: 'Now if the online sessions weren't there, I wouldn't have thought in my head to contact them (other student teachers) and encouraged you to think they are in the same boat as me' (Interview). Avril (Interview) felt that 'everybody was in the same boat and there were all similar ideas among the group so we all just kind of felt that we were helping each other'. Mike found that he became more open about this practice: 'I think the online engagement taught me that challenges, everyone is going to face them, and it is important that you face them and share with others' (Interview). Student teachers also reported that they found the OLC helpful, due in part to being at a distance from their peers: 'the fact that we were all distant and isolated and were not in the College for a while, I thought it was good as it was something that makes you talk to your peers' (Fiona, Interview). Paul also felt that the OLC was more beneficial than written reflection activities, due in part to the interactive and interpersonal nature of the sessions.

Influence of student-tutor relationships on professional learning

Student teachers also reported that the encouragement of the tutors was important in developing relationships with the tutors, and in sharing their experiences. Mike believed that the encouraging comments from the tutors made student teachers 'feel more confident and comfortable in sharing'. Fiona (Interview) felt that her tutor 'knew where we were coming from' because she 'was in the same boat as us'. Lisa (Interview) pointed out that her tutor allowed student teachers to engage in natural conversation and 'popped in with good suggestions, feedback and encouragement'. While student teachers valued the practical guidance that the cooperating teachers offered, they also felt that the HEI-based teacher educator enabled student teachers to make connections between school placement and coursework. Ross described how the HEI-tutor would help student teachers 'to bring the

experience back to coursework as you would often forget about certain things, and you might need a nudge to go back to your coursework'. From the perspective of the two cooperating teachers, Caoimhe described herself as 'the friendly teacher' who gave student teachers 'help with ideas and validate their own ideas and to help them interact with each other and give feedback to each other ... a listening ear ... sometimes they needed a little bit of extra encouragement' (Interview). Jenny spoke about the importance of understanding the placement experience, from a student and cooperating teacher's perspective: 'You do need experience in phrasing things and how to say things properly to them as it is a sensitive time for them ... you get to know the issues'. The findings evidenced that professional relationships were of real importance in student teachers' motivation to engage and participate in the OLC.

Discussion

The support that student teachers sought within the OLC was very much indicative of the learning challenges that student teachers encounter on school placement. First, the challenges that student teacher participants encountered in planning is a common issue for student teachers engaging in placement, as they lack 'contextualised knowledge ... which explains why the lesson plan as "script" is so dominant in the early stages of the development of many teachers' (Mutton, Hagger, and Burn 2011, 412). While student teachers may have specific pedagogical knowledge, they require further support in planning as they respond to the 'problematic nature of practice' (Nilsson 2009, 254). The management concerns of facilitating groupwork also commonly features as a challenge for student teachers. Where student teachers don't receive support in addressing this, it can potentially impact their approaches and practices, resulting in more teacher-oriented tasks and greater control and surveillance over children's learning (Emmer and Stough 2001; Furlong 2012; Sugrue 1997). Within the OLC, student teachers felt reassured that such issues were not unique to their own context, as their peers shared similar experiences. This reassurance was further strengthened by the tutors' empathy and encouragement, alongside an opportunity to make connections between coursework learning and the placement experience. Thus, Linte provided a space that 'brought practitioner and academic knowledge together in less hierarchical ways to create new learning opportunities for prospective teachers' (Zeichner 2010, 92). It also presented an alternative approach to the hierarchies that are very much entrenched within existing models of HEI-based models of supervision (Cochran-Smith et al. 2015; Zeichner 2010).

Linte was an illustrative example of Zeichner's conceptualisation of a hybrid space (Zeichner 2010), where a learning environment bridged the coursework and school placement learning experience. The process of student teachers sharing practice provided an appropriate context for their knowledge of and for practice to be refined and developed (Cochran-Smith and Lytle 2009; Cochran-Smith et al. 2015; Korthagen 2013, 2017; Korthagen et al. 2001). Student teachers were encouraged to engage in public sharing of practice through critical dialogue, a hallmark pedagogy of teacher professional learning (Parker, Patton, and O'Sullivan 2016). This OLC provided an alternative form of learning to school-based onsite mentoring. In most cases, student teachers were geographically dispersed countrywide with limited or no other student teachers in their schools. Thus, Linte afforded student teachers the opportunity to avail of structured peer and tutor support within an OLC.

The pedagogical approaches, endorsed in the Col, have also been of critical importance in designing and implementing this OLC. In relation to 'cognitive presence', the adoption of the 'practical inquiry model' (Garrison 2017) provided opportunities for student teachers to make enquiries into their own practice, through raising and posing questions that related to their own classroom experience. Careful considerations around 'teacher presence' was also important, whereby the role of the tutor was to prompt student teachers' thinking and affirm and encourage them to partake (Arbaugh and Hwang 2006). In relation to 'social presence', social cohesion was fostered by allowing student teachers to interact with their peers and tutors, to share their experiences and gather a repertoire of ideas. By the end of experience, student teachers maintained that they could be more open about their practice with their peers and furthermore, recognised the value in sharing practice with others (Dunlap and Lowenthal 2009; Szeto 2015).

Conclusion and implications

Línte was a new departure when introduced to the student teachers as they had little or no familiarity with synchronous or asynchronous technologies, and this had to be factored in when planning. With the move to full online teaching and learning in the past two years, this has been an unprecedented development and a myriad of challenges have arisen with this provision (Moorhouse 2020). Thus, Carrillo and Flores (2020) have called for more research on non-emergency approaches to facilitating online teaching and learning in teacher education. This paper answers that call by providing an insight into the design and enactment of an OLC in ITE. Drawing on this research, the paper concludes by offering two key design principles that can support the future development of online hybrid spaces for student teachers. First, a partnership dimension, for the facilitation of the OLC, should be central to the experience where HEI tutors, cooperating teachers, and student teachers are working in a collaborative space. Such OLCs can afford cooperating teachers with opportunities to engage further in initial teacher education, extending on their expertise of classroom-based one-to-one mentoring. Second, the online hybrid space should promote dialogic reflection (Garrison 2017; Korthagen 2013, 2017; Korthagen et al. 2001). Teacher educators should enact enquiry-oriented pedagogies, where student teachers are encouraged to use their classrooms as learning sites and make enquiries into their own practice (Cochran-Smith and Lytle 1999, 2009). Línte provides an illustrative example of the development of an OLC within an ITE programme, which narrows the school placement-coursework gap, and supports student teachers to generate knowledge of practice.

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Statement of ethical approval

This research was reviewed by the first author's University Research Ethics Committee. Case ID: Ref: SPD REC AG D1. The Research Ethics Committee was satisfied that the application complied with its ethical standards.

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