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Research Article

Peer Mentoring for First-Year Pre-Service Teachers via a Blended Community to Support Literacy Development

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Abstract: This article investigates how the second-year pre-service teachers mentored first-year pre-service teachers to develop their literacy skills via a blended community. While some researchers have investigated blended learning, such research has not focused on how face-to-face and online modes work together to support student learning. Using a qualitative approach, the cohort, consisting of 164 first-year pre-service teachers and five second-year peer mentors, participated in the study. A blended community was found to be significant where peer mentors were able to provide both face-to-face and online support to assist in literacy development. It was observed that within the community, that Non-English-Speaking Background (NESB) and English as a Second Language (ESL) pre-service teachers had particular needs which could be addressed by mentors.

***Keywords*:** peer mentoring, pre-service teachers, blended learning, literacy, community of practice

1. Introduction

The transition from high school to university can be daunting for many students, because of the many changes in processes and practices. One of the big changes faced by students concerns the expectations regarding competency in academic literacy. According to Casanova et al. (2018), a reason that students withdraw from university relates to a lack of academic success.

Universities offer a variety of programs to support pre-service teachers (PSTs) with their literacy needs as a way of ensuring success (Sellings et al., 2018). Specific programs are provided by faculty-specific literacy support officers and lecturers in each subject, as well as drop-in sessions within academic units or services provided by university libraries. Another area of support being adopted by some universities, as suggested by Curtis (2016), is the involvement of more experienced students in providing literacy assistance via peer tutoring.

While students have access to support services as discussed above, peers provide another layer of support. According to Colvin and Ashman (2010), peer mentoring focuses on more experienced students helping less experienced students improve academic performance. This support can be provided through the provision of advice, support, and knowledge to the mentee (Hogan et al., 2017). Such peer mentoring can be offered at an institutional level (Beltman & Schaeben, 2012), or a more localized level (within the faculty).

The importance of high levels of literacy for PSTs has been highlighted in Australia as elsewhere, for some time. As stated by the Australian Institute for Teaching and School Leadership (AITSL), having a high level of literacy

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is important to help PSTs cope with the academic program at university, and subsequently meeting the intellectual demands of teaching (2014). This has been in response to poor national levels of literacy skills amongst the Australian school-aged population in comparison with some countries as evidenced in the result of the Programme for International Student Assessment (PISA) (Thompson et al., 2015). With an increased expectation of high literacy skills for PSTs, ways of supporting them must be examined.

The concept of literacy is an area that has many interpretations. As outlined in the PISA results (Thompson et al., 2015), there is science literacy, mathematical literacy, and reading literacy. The literacy that is of interest in this article is what Moon (2014) describes as Professional Literacy. This includes the ability to access and present information in a variety of forms, comprehend what is read and communicate ideas clearly.

When focusing on the needs of PSTs, it is important to recognise that they are not one homogeneous group. One such sub-group comprises PSTs who come from a Non-English Speaking Background (NESB) and English as a Second language (ESL) backgrounds, who can struggle with literacy at university level. Supporting these PSTs is significant in multicultural countries such as Australia where 21 per cent of residents speak a language other than English at home (Australian Bureau of Statistics, 2016). Similar statistics can be found for other countries such as the United States and Britain.

Given that PSTs need to have a high level of literacy, an understanding of how this can be facilitated via peer mentoring support is important. Additionally, understanding ways that technology can support this process is paramount. This article evaluates a peer mentoring scheme for the first-year PSTs facilitated via a blended community in an Australian university. The research focuses on how literacy support can be provided through a blended Community of Practice with an emphasis on the needs of NESB and ESL PSTs.

Accordingly, the research questions are:

How can peer mentoring be supported through a blended community?

How can the literacy needs of the first-year PSTs be supported by peer mentoring?

2. Literature review

Various definitions of peer mentoring exist in the literature. In this article, the following definition developed by Davis et al. (2012) is used: "Peer mentoring entails the informal sharing of information or expertise from people of the same or similar rank as well as colleagues across rank" (p. 446).

It is reported in the literature that there is a broad range of advantages in mentoring, both for the mentee and for the mentor. Some of the benefits for the mentees include enhancing the sense of belonging and identity with the university (Hollaway-Friesen, 2019), access to information about resources on campus (Clark & Crome, 2004) and importantly, academic success (Supiano, 2018). Significantly, as recommended by Hall and Jaugietis (2011), supporting first-year PSTs through mentoring programs increases their likelihood of academic success.

There are several benefits identified for mentors in the mentoring relationship. One such benefit is that mentors learn more when supporting someone else (Casale & Nduagbo, 2021). Another benefit is the development of leadership skills (Toklu & Fuller, 2017). Both skills are important for PSTs to become advocates for students and support their colleagues once they enter the workforce.

Though a good deal of research exists focusing on the role of the teacher in mentoring PSTs (Ambrosetti, 2014; Britton & Anderson, 2010), research on PST peer mentoring focusing on academic support is limited. Where such investigations have been conducted, (Heirdsfield et al., 2008) it has been found that senior university students, rather than academic staff, may be more effective mentors because first-year students can be reluctant to approach or question academic staff and may have difficulty relating to them.

Karo and Petsangsri (2021) identify that an important aspect to support PSTs' peer mentorship is a professional learning community. This feature of interactive reciprocity draws upon a social constructivist view of learning as noted by Bruner (1996) who stated learning is "participatory, proactive, communal, collaborative, and given over to the construction of meaning" (p. 84).

The focus of this article is on how blended learning was able to contribute towards successful mentoring outcomes in supporting first-year PSTs' literacy needs. A definition of Blended Learning is defined by Bonk and Graham (2006) as a learning system that "combines face-to-face instruction with computer-mediated instruction" (p. 5). In examining

blended learning for the study, one of the platforms used was Facebook, which can be a valuable pedagogical tool (Voivonta & Avraamidou, 2018) to enable interactions between mentors and mentees. It is considered by learners as a source of learning (Arouri, 2015) and as suggested by Asterhan and Rosenberg (2015), facilitates learning between students.

At university, Facebook is an ideal platform to use for a blended learning environment as it is one of the most used platforms on a personal basis by university students (Nagel et al., 2018). Moreover, research has shown that where it is used in universities, it provides for ongoing collaboration where students can ask questions and exchange information with each other (Henderson et al., 2017). However, some of these students have philosophical or other reasons for not wanting to have a page (Maher, 2019), which limits its effectiveness as a learning tool.

Whilst there has been some research on blended learning in PST education courses, the focus has not been to explore the mechanisms and benefits of blended learning. For example, a quantitative study by Leidenfrost et al. (2011) examined peer mentoring styles through a blended learning environment but did not distinguish between online and face-to-face interactions. One qualitative paper explored blended learning and peer mentors in teacher education (Vaughan et al., 2016). The author did investigate the benefits and challenges of using online space but did not explore the blended environment from a holistic perspective.

A particular focus of this article is to explore the needs of PSTs whose first language is not English. Given that Australia is a multicultural society, the mix of PSTs is also multicultural. This is consistent with other multicultural societies such as the United States (Yeh, 2020). This multiculturalism is both a result of the diverse mix of Australian PSTs and the fact that COVID notwithstanding, there is an increasing number of overseas students who are enrolling in English-speaking universities. In Australia for example, it is reported by ICEF Monitor (2019) that there was an 11% increase through 2019, with students attending from countries such as China, India, and Nepal.

A difficulty that is reported by university students whose first language is not English is difficulty with English, both written and spoken (Siu, 2021). Additionally, international students whose English is limited tend not to mix with English-speaking students (Jackson & Heggins III, 2003) and vice versa. This can further limit opportunities for English language and literacy development. Given the diversity of Australia's culture, it is also vital that peer mentors reflect the diversity of the student population. This aspect of diversity is investigated in this article.

3. Theoretical framework

In focusing on the notion of community, the concept of Communities of Practice (CoP) (Lave & Wenger, 1991) is drawn upon. CoPs are defined as "groups of people who share a concern or passion for something they do and learn how to do it better as they interact regularly" (Wenger, para 4). The focus of the community revolves around the production and understanding of domain knowledge. Such knowledge is an in-the-head phenomenon and being constituted in and by cultural practices (Cole & Engeström, 1993; Rogoff & Lave, 1984). The focus of this article regarding domain knowledge is knowledge based on literacy practices associated with academic writing with the community of first-year PSTs.

One significant aspect of CoP is legitimate peripheral participation. This concept is used to "explain how newcomers enter, learn from, and contribute to an established community of practice over time. Whereas existing members in the community are full participants, legitimate peripheral participants are those who are apprenticing into the community" (Cuddapah & Clayton, 2011, p. 63). It is through their peripheral participation that newcomers undergo identity transformation into full participation (Wenger, 1998). Thus, a newcomer learns how to think, act, speak, and be a full participant of a community through guidance from mentors.

A CoP approach is "consistent with Vygotsky's (1978) sociocultural perspective, whereby cognitive functions are largely facilitated by social interactions, where learning communities… facilitate interactions such that individuals can learn to do things with others that they cannot learn on their own" (DeSchryver et al., 2009, p. 330). A further consideration is studying how an online community is facilitated through a social lens is social presence. Social presence is defined as the degree to which people perceive each other as in real mediated communication (Gunawardena & Zittle, 1997). Garrison et al. (1999) suggest that social presence is essential to any educational experience. The aspect of social presence was important in this study where Blackboard was used as the university's online platform in addition to Facebook and email.

4. Methodology

The methodology underpinning the research is a qualitative approach where learning is observed occurring in a natural setting (Lincoln & Guba, 1985), which helps shed light on the day-to-day lived experiences of the participants. Qualitative research has a descriptive component and the data collected are typically in the form of words and pictures. The data were analysed inductively (Babbie, 1986), in that there is no attempt to prove or disprove a hypothesis, as is customary in quantitative research.

The participants comprised 164 first-year undergraduate education PSTs (five tutorial groups of approximately 33 PSTs in each group). Approximately 50% of the PSTs were part of the Facebook group so received messages from the mentors. The other half were able to engage with mentors via the university Learner Management System (LMS), email and in face-to-face settings. Five second-year mentors also participated. The degree to which the mentors interacted online depended in part on the requests made by the first-year PSTs.

Data in this project were collected through a variety of methods including an online questionnaire and focus group discussions. The questionnaire was completed by 164 first-year PSTs, which was 99% of the cohort, and consisted of 23 questions, which sought information regarding students' prior education, their language proficiency and English proficiency. Results of the questionnaire indicate that 142 (86.6%) of PSTs were female and 22 (13.4%) were male. The majority of the PSTs (66.7%) were 20 years or younger.

Five focus group sessions were conducted. The first focus group included first-year PSTs. The second focus group included only PSTs from a Non-English-Speaking-Background (NESB) and English as a Second Language (ESL) background. The third group comprised peer mentors. In semester two, further focus group discussions were held with the first-year PSTs.

Peer mentor selection was based on staff knowledge and recommendations. The PSTs were required to have a CREDIT average or higher as it was felt that these PSTs would have the necessary academic skills to support the mentees. Another factor that was deemed necessary was good communication skills as determined through discussion with tutors.

One second-year mentor was assigned to each tutorial group. The second-year mentors undertook the mentor role to develop their teaching skills as well as support the mentees. A certificate was provided to each mentor by way of appreciation. Ethics approval was provided by the University and all participants cited in this article agreed to be involved in the study. The study was voluntary, and participants were aware of the purpose of the study and informed they could withdraw at any time without having to provide a reason.

All mentors undertook a formal induction and training program to develop their skills and familiarise them with the responsibilities of the role. This was deemed important, because, as noted by Holt and Fifer (2018), official training enhances the effectiveness of the mentoring process. During the 90-minute induction, lecturers provided information about tasks required to be undertaken. Additionally, a peer mentor from the previous year addressed the incoming peer mentors about her experiences and what they might expect.

Peer mentors were then allocated to work within tutorials as a tutor's assistant, leading some lesson content and initiating discussions where required. In working outside of tutorials, the mentors could be contacted and communicated with the mentees via the subject Facebook page, email or in person. The mentees and mentors were not directly paired in the scheme but rather the mentor became available for mentees by providing contact details so that they could be contacted independently.

4.1 *Analysis*

The data were analysed using a thematic analysis approach (Boyatzis, 1998). The audio recordings were transcribed and then coded. The codes that were developed included: mentor/mentor comments, online/face-to-face interactions, cultural/language background of mentees and literacy. To diminish the risk of subjective interference with the emerging results, several measures were adopted, including cross-checking of codes emerging from the student responses by the authors and other members of the research team and discussion among team members of emerging themes. To ensure the reliability and validity of the questionnaires, several steps were undertaken. First, once the questionnaire was developed, it was piloted with several staff members. The administration of the questionnaire was carefully recorded to ensure reliability. The data were analysed by several assessors, which, drawing on Rosenthal and Rosnow's (1991)

notion, enhanced the interrater reliability.

5. Results and discussion

In this section, the results of the study show that the notion of community was important via a blended community. The blended aspect was supported via whole group and individual face-to-face contact as well as through the use of email, Facebook and the university system. Through this community, the mentors were able to provide literacy support to the mentees. In focusing on literacy, support for NESB/ESL PSTs was seen as important where students from language groups could discuss aspects in their home language.

5.1 *The importance of community of practice*

One important aspect in investigating peer mentoring was the importance of building a community of practice to provide literacy support for the first-year PSTs. This was undertaken and developed in several different ways, which included face-to-face and online support.

Firstly, in a new initiative undertaken during the orientation week, the tutors and peer mentors met with approximately half of the first-year PSTs (orientation week was not mandatory and so half of the cohort did not attend). This meant that already the half that did not attend had missed out on important information regarding literacy expectations and contacts.

During the orientation, peer mentors explained their roles and the points of contact which were Facebook, email and face-to-face. Having the cohort meet the mentors was seen as important by them as explained by one of the mentors during a focus group discussion: *The whole group needs to see who is representing them and whom they can talk to. For instance, if I was walking along where the study area and they saw me, they could come and ask me a question.*

The student's statement above emphasizes the importance of social presence in building a community of practice. As suggested by Burns (2012): "It [social presence] is needed to create a level of comfort in which people feel at ease around the teacher/facilitator and other class participants" (p. 1). In this instance, having mentors and mentees to get to know each other meant that the mentees might feel sufficiently at ease and familiar with the mentors to approach them for support.

A second way that the community of practice was built was through the work carried out each week in tutorials where the mentors supported learning as stated by one of the peer mentors in a discussion: *My presence there weekly was important because I was able to build the relationship with the students. In building these relationships, I was able to support the students with their literacy.* This was reiterated by another mentor who stated *what is important is building that exposure little by little and knowing we are there. We are there to help them and they remember us.*

As noted by Patton and Parker (2017), teacher educators' learning is facilitated in collaborative cultures as teachers learn with and from one another. This is also applied in this pre-service context where the PSTs were learning with each other in a collaborative culture that was developed through built relationships in the tutorials through a community of practice.

The mentors valued the opportunity for discussions with the mentees. This was highlighted by a peer mentor during a focus group discussion: *Having that face-to-face discussion helped them and me as they were students instead of teachers or tutors.* This statement indicates an understanding that students often feel comfortable with mentors as reflected in the literature (Heirdsfield et al., 2008) but it also reveals an opportunity for developing a community of practice.

One of the successful contributions of the mentoring and the development of the community was that PSTs often felt more comfortable working with other PSTs in their own age groups. One reason for this was shared language as noted by one mentor: *I think we are coming from a student perspective and using more colloquial language. I was able to use my examples.* Having a shared language is seen as an important motivator of knowledge sharing (Chiu, et al., 2006) and this can support mentees' literacy development. This shared knowledge also supports a clearer understanding for mentees in understanding the domain knowledge as there is less misunderstanding of language used to help develop such knowledge.

Online the peer mentor role became a sounding board for clarification and feedback. As one peer mentor noted:

When I first joined the Facebook group, a lot of students messaged me. A lot of the students replied as well and said that was great.

During one of the tutorials focusing on games, discussion was raised on suitable places to find information. A mentor in the class stated she would look into this and post on Facebook which was: *This blog post articulates that interactive games in the classroom are beneficial for facilitating a student's learning. After witnessing the impact of games during my school visit, I can say that I wholeheartedly agree with the sentiment of this blog post.*

This episode demonstrated how the use of Facebook was able to be used to follow up on a face-to-face discussion on one tutorial which all PSTs in the cohort could then benefit from.

One peer mentor focus group discussed how the use of Facebook might be further refined to extend the social presence of the mentors which might then lead to enhanced interactions between the mentors and the mentees. One suggestion was that the mentors *post some information about themselves at the beginning of the year* and then ensure that they *communicate regularly on Facebook posting material and replying to students' posts*. This is important because a sense of community online can be enhanced by the frequency of interactions (Dawson, 2006) thus building a social presence.

The email was also found to be a useful online resource. The use of email resulted in some PSTs following up with the peer mentors in a face-to-face setting as stated by one of the mentors: *One of the students I had would email me ask questions in the class and sometimes I would spend time after class with her.*

Having a blended learning environment to support both face-to-face and online interactions was important where mentees could contact the mentors and then the mentors could follow up most appropriately. This allowed the members within the community to operate in different ways where time and space were limited. Blended learning thus represents a fundamental reconceptualisation and redesign of the educational experience where the goal in higher education is to provide students choice and flexibility (Owston, 2018) and active learning opportunities.

5.2 *Literacy support*

The focus on the domain knowledge for the PSTs was academic literacy, which as indicated in the literature, is a major concern for university students. The PSTs were asked about their English language proficiency in the questionnaire, both for university learning and for teaching, as shown in figure 1:

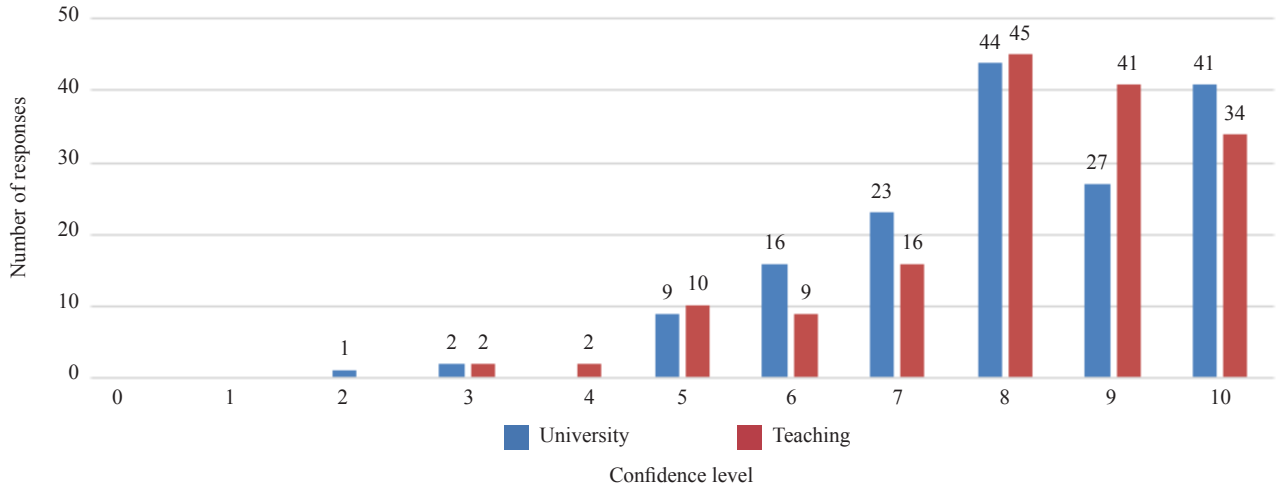

Figure 1. PSTs' English proficiency levels

Reasons listed in the questionnaire by PSTs for limited academic knowledge were lack of self-esteem (21 mentions), lack of practice (20 mentions), and lack of language skills (7 responses). Additionally, there was limited

awareness of literacy expectations by the PSTs as in the questionnaire nearly 46% of them stated that they received no advice at all at high school regarding university literacy expectations. A further 42% couldn't remember receiving advice or didn't respond to the question. These figures indicate that a large percentage of PSTs came to university unprepared for the literacy expectations required of them.

In talking with both the mentors and the mentees, it was clear that there were benefits for the mentees by having support from the mentors in their literacy development. As noted by a mentor during a focus group discussion: *When they were doing assignments they would ask if they were on the right track and that type of thing*. A second peer mentor added: *A lot of students emailed me about referencing. I sent them a referencing guide that I use. A lot of the students replied as well and said that was great.*

A mentee noted during a focus group discussion concerning literacy: *The academic language was different from the main issue being the formality of the university essay writing. I contacted a mentor who was able to provide help during a face-to-face session.*

One of the key reasons the mentors stated that they were able to provide support was that they had recent experience in writing the assignments and understood what was expected. A mentor made this comment: *A lot of the questions they had were questions I had as a first-year.*

The instance illustrates that the experiences of the mentors are important factor in supporting the first-years. As existing members of the community, the mentors were able to provide ideas based on their prior knowledge, experiences, and success through the process of legitimate peripheral participation for the mentees. Becoming a full member of a community of practice is a gradual process and for the mentees and mentors, it is never complete and always ongoing. In the situation where second-year mentors support first-year mentees, the mentors are not full members, as stated by Cuddapah and Clayton (2011). This situation is one of the strengths of the peer mentoring model where the mentors understand the demands of literacy and so can relate to the mentees, being supported by university staff who are full members. Additionally, the first-year PSTs could then choose to become mentors and support new members of the community the following year. This illustrates the instance where "newcomers enter, learn from, and contribute to an established community of practice over time" (Cuddapah & Clayton, 2011, p. 63).

Another important aspect that was identified in supporting the PSTs' literacy development was the notion of confidence. During a focus group discussion, one mentee explained *peer support gave me the confidence to understand, plan, write, and submit my writing.* As suggested by Zimmerman et al. (2014), many PSTs do not feel confident in their writing skills. If they are reluctant writers and lack confidence in their writing abilities, they are not likely to do well in assignments or to provide quality writing instructions as teachers, which is an important component of teachers' work. Mentors were able to provide support in such a way as to boost the confidence of the mentees throughout the first semester.

The aspect of critical feedback by mentors was also raised by one group of PSTs during a focus group discussion where they discussed how this helped support their literacy development. One mentee noted: *Most useful was to have a mentor who could provide critical feedback.* It was this feedback that comprised much of the practice within the community that was supported by dialogue. This process was dependent on relationships, to some extent.

Kochan and Trimble (2000) have developed layered phases of mentoring/co-mentoring relationship model where they suggest four phases of a mentoring relationship. These phases comprise Groundwork, Warm-up, Working and Long-Term. It is in the working phase that critical feedback comes into play. It is in this phase where discussions take place and for this to occur it is important that participants feel comfortable working with each other which comes about through establishing some type of working relationship. The disclosure that PSTs discussed feedback suggests that there was a healthy community of practice where useful literacy support was being provided by the mentors to the mentees.

5.3 *Support for PSTs from Non-English Speaking Backgrounds (NESBs)*

As noted in the literature review, Australia is becoming increasingly multicultural and this was reflected in the cultural composition of the PSTs (via the questionnaire) with 39.6% speaking another language at home, either fully or in conjunction with English as indicated in figure 2:

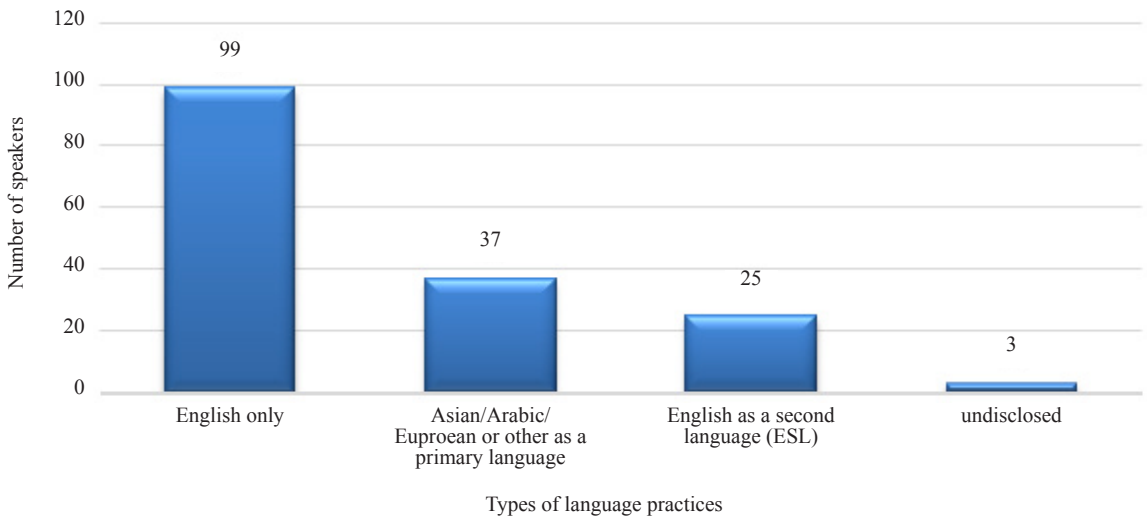

Figure 2. Languages spoken as a proportion of the cohort

In discussing the notion of literacy support with the mentors, it became clear that the needs of NESB and ESL PSTs were more pronounced than the rest of the cohort. One of the key observations by mentors was that a majority of NESB/ESL PSTs had difficulties with their written English as stated by a peer mentor during a discussion: *I found there was a gap in their ability (literacy) and what was expected. It was a big gap as well.* This was also an observation made by the teaching staff.

About domain knowledge construction and cultural considerations, some NESB/ESL PSTs from overseas were impacted by two levels of cultural shifts. The first one was the move from high school to the university. The second cultural aspect revolved around differences associated with a non-western cultural way of knowing compared to western culture.

Mentors from a similar cultural and linguistic background were particularly useful in supporting NESB PSTs in their literacy development. In a peer mentor focus group, one of the PSTs who spoke Chinese was asked if she spoke Chinese to her Chinese mentees: *To the students who did not speak much English at all, I would be explaining things to them in Chinese. Supporting the student in her first language, this was able to benefit her in developing concepts and ideas that she could then apply to using English.*

The importance of using the first language (L1) to support the second language (L2) learning has been recognised in the literature. According to Ellis (1994), learners' prior linguistic knowledge is an important factor in L2 acquisition. Additionally, having a structural and grammatical understanding of two languages by the mentor can be useful as learners often apply the rules of the first language when learning a second language. The mentee can explain the differences between the two languages which can support literacy development for the learner.

The mentor added in the focus group discussion: *I tried not to speak Chinese because I felt it would benefit her if I continued to speak English.* However, as noted above, it can be useful to use both languages which can facilitate understanding more deeply. An understanding of the importance of training mentors to support NESB PSTs is an outcome of this project and this aspect will be embedded into the mentor training session for next year's cohort.

One aspect that emerged from talking with the mentors and NESB mentees was that NESB PSTs generally felt less confident to approach the lecturers. One of the international PSTs who was having difficulty with her written work stated she was too shy to come directly to the tutors for support even though she had been provided with feedback on her writing. This aspect of shyness was also noted by the mentors.

In the current system, mentees are given the option to make contact with mentors. However, given that some NESB/ESL PSTs are reserved, there is value in mentors being more proactive towards contacting targeted PSTs who may be struggling. A change to the program next year therefore will be to link mentors with NESB/ESL PSTs identified as needing support early in the semester rather than rely on these PSTs to take all the initiative. Lankau and

Scandura (2002) note that mentors should be proactive in managing and initiating the relationship, particularly with NESB students. It is important that if NESB/ESL PSTs are to become apprenticed into the teaching profession via legitimate peripheral participation that they are supported by mentors who understand both languages and can ensure the newcomers don't remain on the outer edge.

Wenger (1998) argues that everyone belongs to multiple communities of practice simultaneously e.g., work, home, school, etc. However, one outcome of the research was the identification of sub-groups within a single community of practice. PSTs are not a homogenous group with identical needs. NESB PSTs were identified as one group, as were mature age and male pre-service teachers.

The challenge is to encourage second-year PSTs within these groups to become mentors whilst also mentoring the whole cohort. Helping PSTs to establish and find sub-communities and/or supporting existing ones helps to improve the learning and knowledge exchange within a community of practice (Müller, 2007). This is an important responsibility of members of a community including teaching staff, mentors and mentees.

6. Conclusions

The first research question was: How can peer mentoring be supported through a blended community? One of the important findings of the research was that from a CoP perspective, a blended approach was able to support interactions and thus, support the mentoring process.

The blended community was established through tutorials, whole cohort face-to-face meetings, as well as through the use of Facebook, emails and the university LMS. It was through the building of the blended community that PSTs were able to develop relationships which then facilitated support. From a social presence perspective, having the mentors introduce themselves in person and interact with the mentees in tutorials meant that the mentees were more likely to approach the mentors online for support.

The second research question was: How can the literacy needs of the first-year PSTs be supported by peer mentoring? The mentors were able to provide specific information to support academic literacy development for the mentees, such as how to set out their writing, reference their ideas and write critically about their practice. Mentors were also able to support the mentees to increase their level of confidence with academic literacy. Being similar in age and experience to the first-year pre-service teachers, the mentors were able to draw on their own learning experiences to provide critical feedback and support.

The article has also highlighted that there are sub-groups within a community of practice who have different needs from the rest of the cohort. The mentors were able to provide targeted support for NESB pre-service teachers. In looking at this group, it has been noted that they had two layers of domain knowledge to navigate, which did add difficulties relating to their learning. From a CoP perspective, it was found that the mentors were able to successfully lead the first-year newcomers into an established community of practice through the process of legitimate peripheral participation. As was found, the NESB mentees started in different places compared to native speakers and their journey needs to be guided by the mentors in a slightly different way.

6.1 *Limitations of the study and future research*

The study was conducted with a small number of participants, which limits its application of findings to other settings. Although all PTSs completed the questionnaire, not all participated online through Facebook, emailed the mentors, or sought face-to-face support. The study was conducted over one semester, which limited the amount of data that were collected. Given the timing of university obligations, some data were not collected, which included the number of emails shared between mentees and mentors. Whilst some content of emails was shared, a more extended process would have yielded more data.

There are several areas for future research. One area that could be investigated is a focus on older pre-service teachers as well as a focus on gender. Another area for further investigation is to more fully understand how relationships might be better established and maintained both online and in a face-to-face setting. A closer examination of the interactions between the the mentees and mentees and how these then translate into outcomes for the mentees would provide a greater understanding of the mentoring process. Additionally, more research is required to more fully understand how

NESB mentees are supported with their learning.

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