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A model for nurturing a networked academic community: #ASCILITEMLSIG mobile learning special interest group

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ABSTRACT

This paper explores the development of a special interest group bound by common interests, experiences, and access to opportunities in mobile learning as a model of a networked academic development community. With core members spanning eleven educational institutes across three continents, the Mobile Learning Special Interest Group (MLSIG) was established to facilitate mobile learning praxis to enable authentic learning and learner agency through a networked community of academic practitioners and researchers. The paper identifies critical elements of the MLSIG networked community through an autoethnographic narrative from 14 self-nominated participants. These are woven into a proposed framework and model for nurturing networked academic development communities.

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Connectivism; communities of practice; networked communities, heutagogy

Overview

In this paper, we begin by describing the establishment and makeup of the networked community under discussion, before expanding on how three theoretical foundations have informed the development of the community. We then describe the autoethnographic methodology used to evaluate the impact of the community on the members. Finally, we propose a model for nurturing networked academic development communities based on our experiences.

The goals of the ASCILITE (Australasian Society for Computers in Learning in Tertiary Education) Mobile Learning Special Interest Group (MLSIG) were established in a foundational statement in 2016:

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The ASCILITE mobile learning SIG will explicitly explore the boundaries of current knowledge and approaches to mobile learning, and develop a global collaborative network of mobile learning researchers interested in exploring and implementing the frontiers of mobile learning. The SIG will specifically explore the unique affordances of mobile devices for student-generated content and experiences via such technologies as collaborative media production and sharing, VR, AR, geolocate and contextual sensors, drones and wearable technologies. (Cochrane & Narayan, 2016a)

After initial activities in 2016 to connect interested members and establish a core community contribution to a webinar series ([accessible link](#)), the membership expanded to over one hundred global academics in the first two years. The activities of the MLSIG have since evolved and have been refined with a focus on providing members opportunities to explore, develop and situate the community into their respective practice and wider professional contexts. This allowed all the initial members (>100) time and autonomy to decide how they wanted to connect and contribute to the MLSIG. The membership naturally filtered into two categories: (1) to be an active (core) member (joining the weekly MLSIG meetings to guide the community), or (2) to attend the webinar and other sessions as needed to gather resources from MLSIG (peripheral members). This self-filtering process over the first two years resulted in the formation of the MLSIG core group made up of 18 academics (28% females and 72% males) from institutes in Australia, New Zealand, Japan and the Pacific. The MLSIG is open for new members to attend and join and is prompted by the monthly ASCILITE society newsletter. As a result, the core has also had visitors attending some of our meetings and new members joining the community – with one new addition last year. Over the last four years, the core group has had an active focus on the scholarship of mobile learning in higher education – underpinning practice with scholarship through collaborative research. Some recent examples of applied and collaborative scholarship from the MLSIG core group include:

- guest edited special issues of journals (Cochrane, Birt, & Narayan, 2020; Cochrane & Farley, 2017; Cochrane et al., 2018)
- conference contributions (Cochrane, Birt, Cowie, et al., 2020; Cochrane et al., 2021; Cochrane & Sinfield, 2022; Narayan, Cochrane, et al., 2019; Narayan, Herrington, et al., 2019; Narayan et al., 2020; Narayan et al., 2021)
- collaborative journal articles (Cochrane et al., 2022), a registered systematic review (Cochrane et al., 2023)
- a registered evidence and gap map (Narayan et al., 2023)
- establishment of an annual symposium (<https://sotel.nz>)
- support for PhD students
- collaborative workshops and webinars.

The knowledge generated by the MLSIG core group is also shared with the periphery members, who belong to the broader ASCILITE society, through a monthly news bulletin, MS Teams site, webinar sessions and other social media platforms. The development and design of the MLSIG and the guiding frameworks and principles are discussed further in the section below.

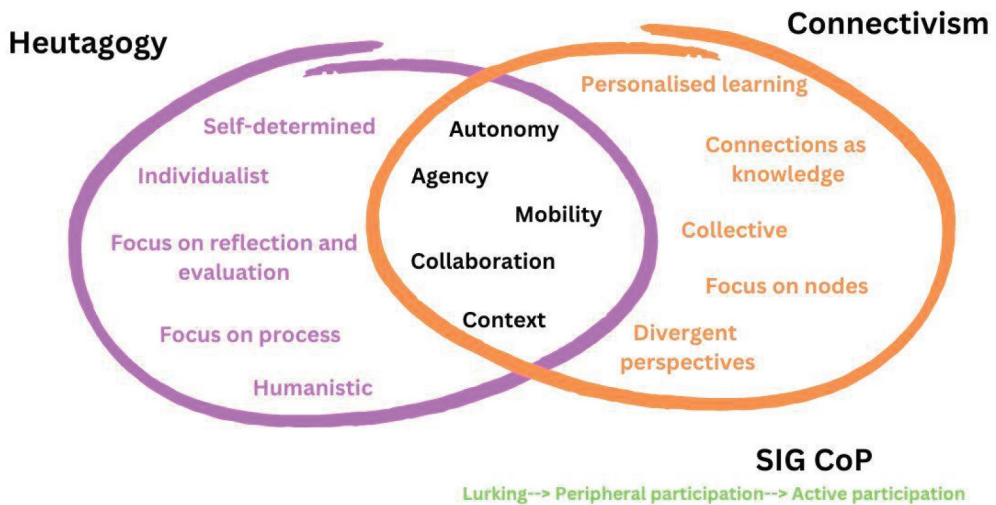


Figure 1. Foundations of the MLSIG.

Developing the networked MLSIG

Throughout the development of the MLSIG, the SIG conveners have drawn upon concepts from theoretical frameworks of connectivism (Blaschke et al., 2021; Cochrane & Narayan, 2018; Jung, 2019; Siemens, 2005), communities of practice (CoP) (Cochrane & Narayan, 2016b; Heather et al., 2021; Wenger, 1998; Wenger et al., 2009), and heutagogy (Hase & Blaschke, 2021; Hase & Kenyon, 2001, 2007; Narayan, Herrington, et al., 2019). The foundational values from these frameworks, which have facilitated engagement and a sense of community through the life of the MLSIG, are encapsulated at the intersection of the three concepts illustrated in Figure 1 and discussed in the following section.

Communities of practice

Wenger (1998) describes communities of practice (CoP) as groups of people who share a common domain of interest. The fundamental domain of interest of the MLSIG is exploring and critiquing the boundaries of how mobile learning can be utilised to transform educational practice and society. CoPs have been implemented as a form of professional development within educational contexts (Cochrane & Narayan, 2012; Jameson, 2011). Wenger, however, argues that CoPs can be intentional (Langelier, 2005) and within an educational setting, this intentionality can take the form of professional development similar to a Community of Inquiry (CoI) (Chambers, 2019; Head & Dakers, 2005). In this sense Kennedy's (2005, 2014) three lens framework positions CoP/CoI as a 'transformative' form of PD that is framed as Action Research and Communities of Practice. Desimone (2009) builds on Kennedy's transformative PD concept, characterising it with reference to active learning, coherence, longitudinal experiences and collective participation. These are fundamental characteristics of the MLSIG. Wenger elaborates on the impact of a CoP not only on the participants, through legitimate peripheral participation drawing lurkers into

active participation, but also on the wider community, through the brokering role of the reified activity of the CoP as boundary objects. In the case of the MLSIG, these boundary objects have taken the form of research publications, open access webinars, sharing of resources, and best practices during COVID lockdowns, consultations, and collaboration across institutional partners. This experience of the MLSIG participants and the broader impact of the MLSIG on the global educational technology community are reflected upon in this paper.

Heutagogy

Heutagogy draws upon educational psychology and complexity theory to extend the pedagogy-andragogy dichotomy to a continuum from teacher-directed pedagogy and learner-centred andragogy, to learner self-determination (Hase & Kenyon, 2001, 2007): the Pedagogy-Andragogy-Heutagogy (PAH) continuum (Luckin et al., 2010). The MLSIG is a group of higher education academics, designers and educational technologists who share a common belief that education should be transformative and facilitate learner agency. We fundamentally agree with the tenet of heutagogy that education should build learners' capacity to navigate the unknown and that technology can be an enabler in the process (Hase & Blaschke, 2021; Moore, 2020).

Connectivism

Connectivism (Blaschke et al., 2021; Jung, 2019; Siemens, 2005) focuses on personalised learning, connections as knowledge, collaboration, the development of core nodes, and the sharing of divergent perspectives. Connectivism draws upon the rhizomatic learning concepts of decentralisation and democratic community building (Cormier, 2008; Mackness & Bell, 2015). The MLSIG is a distributed community, spanning participants from Australia, New Zealand, the Pacific and Japan. Members draw in guest participation from their global networks and the activity and outputs of the MLSIG are amplified through social media to a global network (Deneen et al., 2022). Twitter/X and LinkedIn facilitate connections to this global network and are key channels through which the MLSIG has a wider impact on academic development beyond their physical institutions.

As an online community, the MLSIG utilises a variety of web-based platforms to facilitate community and sharing of practice. A core value of the MLSIG is facilitating open educational practice (OEP) and open educational resources (OER) that influence the platforms we use for collaboration and dissemination. The ecology of resources (Luckin, 2008), adopted to facilitate the MLSIG as a networked CoP, includes:

- A WordPress blog <https://ascilitemlsig.wordpress.com>
- A social media hashtag #ASCILITEMLSIG
- A YouTube playlist
- A Figshare public project
- A Google Drive folder
- A weekly webinar (Initially via Google Hangouts, then Zoom)

In the following section, we explore the impact of the MLSIG on its core members by analysing the ethnographic narratives of the members' lived experiences of the reified activities of the community.

Methodology

We used a collaborative autoethnographic research approach (Chang, 2013) to capture the stories of the MLSIG core group ($n = 18$) through short 500-word reflections guided by a set of questions and two focus groups. Members who attended the weekly MLSIG Zoom meeting in the first week of February 2023 were invited to participate in the study. A follow up email invitation was sent to all core members with the prompt questions to use as a guide when composing their lived narrative for the study. The same questions were used as a guide to facilitate the two focus groups. The two focus groups were an open and organic reflection and conversation between the participants about the impact of the MLSIG on their practice and professional development.

Following the invitation, 14 core members shared their ethnographic narrative with all participating in one of two focus groups (eight and six members respectively).

For analysis, each participant's data in the study were assigned a unique pseudonym, for example SIGM15R, with an incremental number value. An R postfix was added to denote data that were captured through individual stories, and an F postfix to denote data collected through the two Zoom focus groups.

The focus group audio recordings were anonymised and transcribed and were imported along with the anonymised narratives into NVivo for analysis.

Data were analysed using the first two steps of Miles and Huberman's (1994) process of data reduction, data display, and conclusion drawing and verification as the overarching approach. The data at this stage were coded using the tenets of the informing frameworks of community of practice, heutagogy, and connectivism, as shown in Figure 1. An initial codebook was created by the lead author using NVivo, which was confirmed by two other members. Moderation of coding was confirmed by blinded coding of one narrative, with the remaining then allocated between the three members for coding. The coded data were then compiled and merged into a single NVivo file before being analysed further using a constant comparative method (Glaser & Strauss, 1967) to identify the themes that were subsequently integrated by grouping similar themes into broad categories.

Results

In this section, we present the broad themes resulting from the two-tiered analysis approach. The verbatim quotes are purposefully selected from the data to capture the essence of the themes discussed, and to ensure a wide variety of voices are shared.

Practice, research, and identity

The data suggests that the members were able to formulate their own learning path and process to grow their practice and research. These were based on their engagement, reflections, and learning of being part of the community:

... offers professional development opportunities ... provides members with the latest research and advancements ... , which can be applied to their own research and teaching practices. ... allows for collaborative journal writing and editorial opportunities on special issue journals. ... I think, is a better understanding of educational technology and pedagogy. (SIGM1F)

[and]

the discussion on the moving tides of technology, such as ChatGPT has proven to be very beneficial in how I plan my lessons and how we are to live with such changes. (SIGM2R)

The members also commented on how the ideas and knowledge from the SIG formed the basis for them to experiment and enact practices for their own learning and in their teaching:

... individual teachers are given a great deal of freedom to manage lessons ... as a result it is a great environment to try out digital technology ... This personal journey of experiment has been helped enormously by attending the MLSIG meetings ... (SIGM3R)

The shared knowledge co-created in the community also helped the members to innovate within their own practice. For example:

The MLSIG gave me an opportunity to connect with like-minded people ... providing unique perspectives on topics close to my heart such as the student experience, collaboration, student agency and authentic learning experiences. This alone allowed me ... to think outside the box and add value to projects I was working on. (SIGM9R)

The unique opportunities created by the SIG grounded in discourse, sharing, and collaboration also helped members inform and enhance their academic identity:

Specifically, my reputation for my work in educational technology and computing has been greatly enhanced by the SIG. (SIGM1F)

Support, confidence, and professional growth

Several members commented that the MLSIG provided them with support and a safe space that helped build their confidence:

I've built a greater feeling of confidence and freedom to reflect and to 'fail' – partly by operating within the safe space of the SIG, I was able to articulate my own challenges in developing TEL initiatives and even to publish these ... (SIGM4R)

The MLSIG played a substantial role in increasing the confidence of some members, in terms of research and connecting with researchers and networks external to their institute. For example:

... [the] SIG has been instrumental in my own career goals and outcomes including being a major component of my two national teaching awards, academic promotions from lecturer to Associate Dean and giving me the confidence to publish in high impact Q1 journals (SIGM1R)

[and]

Thanks to the MLSIG, I have been able to disseminate my research on an international level and connect with a wider community of EdTech researchers and practitioners. (SIGM8R)

The reified MLSIG activities and tasks as a community also helped members gain an appreciation and confidence to enact these principles in their practice – helping the members connect with peers internally within their institutions, and with individuals and groups externally. For example:

In part as a response to the network building enabled within the SIG, I have also found exceptional value in this community of practice and have been encouraged to form and support other CoPs both within the university and beyond. (SIGM4R)

The MLSIG has also served as a platform to connect its members with other like-minded individuals, groups, and communities, helping them connect with other networks and groups:

The MLSIG has attracted researchers, educators, and practitioners from all over the world and facilitated meaningful conversations and collaborations around innovative pedagogies and technology-enhanced learning. (SIGM1F)

[and]

Professionally, I'm building new networks and branching out beyond the core ML-SIG, taking up collaborations with individuals and other groups. (SIGM4R)

Unique collaborations – collective knowledge and idea generation

Collaboration within the community was a key factor and facet that members benefited from the most. The collaboration resulted in, and had a direct impact on, the outcomes achieved by the members. For example:

It also led to opportunities for collaborative reflection, research, presentations and publications. Being a part of the MLSIG has given me the opportunity to learn about many concepts and approaches that I would have been unlikely to discover in my own field. (SIGM3R)

Furthermore, the different discipline knowledge and expertise of the members in the MLSIG informed the collaborative process and created unique opportunities for co-creating nuanced understanding and knowledge:

Since each member has unique experiences and areas of expertise, it would be a valuable opportunity to share our knowledge and skills with each other. By doing so, we can leverage our collective strengths and address areas where some members may need further development. (SIGM8R)

Building on this, the multidisciplinary nature of the MLSIG created meaningful tensions that allowed the members to ideate – to pull away (divergent thinking) and pull together (convergent thinking) – in the process creating artefacts and pathways for further development of knowledge and understanding:

... [the] group is a combination of like-minded people within the areas of new and emerging technologies for pedagogical ... members have a unique range of skills specifically offered within their disciplines. This enables the group to collaborate within the same area but offer

different approaches and ideas, and at the same time, be able to discover new areas of interest and to learn different methods/technologies from each other. (SIGM2R)

One member explained the effect of networked learning and collaboration within the community capturing the relationship between complex, serendipitous, and organic interactions resulting in innovative outcomes:

In the community model, this evolves beyond a paired sharing of practice. It extends into a networked phenomenon, with people interacting in complex, often unexpected ways, which in turn lead to new opportunities and outcomes that, without the network, might not have been conceived of. This, to me, is the value of MLSIG. (SIGM11R)

Our place, our voice – the MLSIG community of practice

Members agreed that they found a sense of belonging to the shared space, regardless of their role and the contributions they made. Further comments were shared about the governance of the MLSIG where the lack of a hierarchy helped members find their place and voice, and created a space for shared conversations:

... everyone has an equal voice ... we have absolutely zero hierarchy. Everyone is on an equal footing. (SIGM1F)

[and]

So in some ways, I'm not a great fit for this SIG ... So I, you know, I like to think that I can just observe and have my little place in here as well. (SIGM7R)

[and]

... one of the things that I find powerful about the group is the fact that we're willing to ask questions, ... turn things into a discussion. ... just ask questions, and just get that conversation going each week and, [get] different perspective[s] ... (SIGM6F)

The organic nature of the regular MLSIG meetings helped facilitate rich conversations among the members. The open and ongoing conversations resulted in several mutually agreed upon tasks and activities between the members:

... the regular being much more about just a generative discussion, to brainstorm ideas with the core group. And then coming out of that, out of those sort of brainstorms, was things like our various research outputs, systematic review, start offs, etc. (SIGM10F)

Members also shared the role technology and tools played in the community. This included tools that were used to create the digital MLSIG community and the emergent tools that aligned with mobile learning and inevitably got woven into the weekly conversations. While the tools used to create the MLSIG space connected and provided opportunities to collaborate, share and communicate, the emergent tools were the key points of discourse for members on a weekly basis. The latter forms the fabric of the MLSIG in conjunction with pedagogy, effective design for learning and teaching, and scholarship.

The turmoil created by the pandemic brought significant losses to the established routine and culture within institutional workspaces. This impacted the everyday conversations academics had and the different communities they engaged with in their

daily role. The lockdowns deprived us of access to physical spaces on campus and members commented that the resilience of the MLSIG, and being able to connect to other members during the uncertain times, was critical to their wellbeing and practice:

We lost our community of practice . . . For me and many others, MLSIG stepped in and helped fill the gap . . . MLSIG was resilient to the unpredictable, rapid, systems-level changes that pandemic responses were creating. . . We were able to function according to the key precepts of a CoP, induction, networking, mentoring, learning, and sense of community. (SIGM11R)

Some members also provided suggestions for the future practice and organisation of the SIG. This included the co-creation of a shared MLSIG etiquette to ensure all members had equal opportunity to participate, the need for data generation by recording the MLSIG sessions, and ensuring diversity in gender and professional staff.

Discussion

Our dual-layered analysis approach allowed us to understand the workings of the MLSIG and the impact it had on its members. It also allowed us to generate relative themes and categories that helped us understand the dynamics of the community. We began our MLSIG with the foundational values outlined in [Figure 1](#), and the analysis and reflections on the findings enabled us to understand the links and relationship between the core tenets, reified in the activities of the MLSIG.

Reflecting on the findings and building on the work by Parkinson et al. (2020), we propose a Relational Networked Community Framework (RNCF) and two dimensions: the Community-Member (y-axis) and Practice-Collaboration (x-axis) continuums. The two sides of each quadrant outline the key processes within the quadrant that supported the members with their engagement and interactions in the networked community.

[Figure 2](#) provides an overview of the RNCF framework; the themes from the study are mapped to each of the four quadrants and discussed later in the section.

When plotting the themes from the study onto the framework, we find that the top half of the RNCF highlights the self-created or selected formal contexts beyond the community the members engaged in to inform their practice and scholarship. The interactions in these formal contexts are enabled by the member's autonomy and agency, due to a lack of institutional structures and expectations (Land, 2001) and support from the community (Kennedy, 2014). The bottom half of the framework outlines the informal co-created contexts within the community the member interacts with. These interactions are grounded in discourse, collaboration, and collective knowledge generation (Orland-Barak, 2006; Wenger, 1998). We view the quadrants as authentic contexts or rich sociocultural spaces, inclusive of physical and digital entities and constructs (Loads & Campbell, 2015), that a member can continually navigate, interact and connect in, enabling self-determinism for professional learning and development (Blaschke et al., 2021).

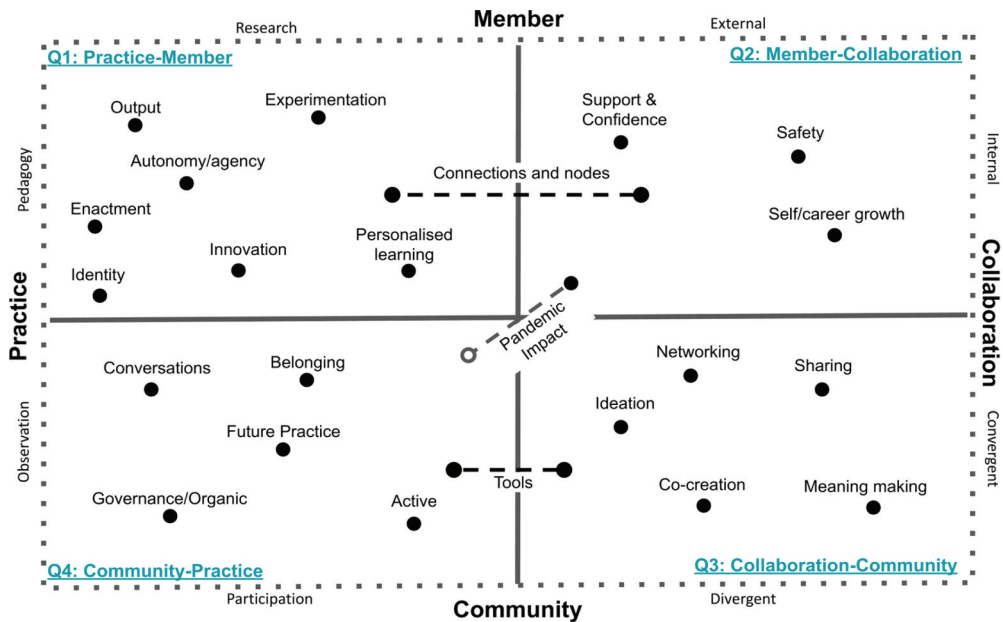


Figure 2. The relational networked community framework (RNCf).

In proposing a framework for continuing PD, Kennedy (2005) has positioned professional autonomy and agency at the core of achieving transformational change. In an updated proposition a decade later, Kennedy (2014) stated that ‘autonomy is only ever transformative if it is translated into agency; that is, it must be enacted in some way to make a positive change to practice’ (p. 693). In our study, we observed that autonomy and agency played a key role in the first quadrant (Q1: Practice-Member). This helped members enact their learning and understandings developed from the SIG, including innovative practices that impacted pedagogical practices and the scholarship of technology enhanced learning (SoTEL) (Wickens, 2006).

The members commented that the community provided a safe and supportive space for them to explore their practice and build their confidence – the second quadrant, Q2: Member-Collaboration. This helped with building connections within their institute and externally. The new connections further influenced their practice and contributed to their research. The support and confidence also helped the members with self and career growth. Wilding et al. (2012) reported a similar finding in their study and coined the phrase ‘professional confidence’ (p. 317). They elaborated that this is a result of autonomy and discourse within the community with like-minded people, leading to invigorated practice, coherence, and passion for the profession. This benefited both the members and helped with the functioning of the community.

Knowledge in a CoP is generated by its members through multifaceted and complex interactions grounded in discourse, resulting in artefacts: digital and conceptual (Wenger, et al., 2009). The MLSIG members come from multiple disciplines, and shared ideas, knowledge and expertise that were otherwise unique and new to others

(the third quadrant Q3: Collaboration-Community). The new meanings and knowledge created in the CoP were observed to be a direct result of these divergent and convergent conversations. A divergent conversation allowed a member to consider the opportunities external to their context and ‘to explore, compare and make connections across practice’, while the convergent conversations allowed them to consolidate their understanding from the interactions to enact possible solutions (Orland-Barak, 2006, p. 20). A mediating conversation eventuates between the divergent and convergent discourse when a member has a conversation with self to generate ideas, which in turn influence their practice and belief system (Orland-Barak, 2006), instigating an ontological shift (Thompson, 2011). This perhaps creates a new thirst for knowledge, helping the members seek and connect with other like-minded individuals and groups external to the SIG.

Hierarchy and structure in professional development communities impact the autonomy and agency of their members. These ‘squeeze out autonomy and instead seek and reward compliance and uniformity’ (Kennedy, 2014, p. 691). This in turn limits the transformational affordances and the value proposition of a CoP (Land, 2001) and the ability to co-create a shared agenda with its members; ‘to focus on the “common interests” of the practice’ (Parkinson et al., 2020, p. 197) – the Q4: Community-Practice quadrant. The open, organic, and co-governance of our CoP created a shared space and a sense of enhanced belonging. It helped create a CoP in its true sense: the coming together of a group of people with shared interests and passion (Wenger, 1998), which for us was mobile learning. The lucid nature of the CoP empowered the members to transverse between active and peripheral participation when engaging in co-designed tasks and activities within the community (Wenger, 1998; Wenger et al., 2009).

Reflecting further on our study, we present the quadratic entanglements and characteristics of the RNCF framework, as discussed in the [Table 1](#) below.

The quadratic entanglements enable the formation of a dynamic community and guide member interactions that have a direct impact on practice, scholarship/research and networking, ultimately informing the growth and evolution of the SIG.

Table 1. Quadratic entanglement helping create the networked professional community.

Quadrant entanglement	Reciprocal relationship
Q1–Q2	The knowledge and ideas from the new connection and networks inform practice and scholarship.
Q4–Q3	Co-governance of the community leads to collective co-creation and improves cohesion.
Q3–Q1	Outcomes from the collective tasks (conversations and activities) inform practice and scholarship.
Q4–Q2	The community acts as a support mechanism for enabling internal and external networking and connections.
Q1–Q4	Members’ discipline knowledge and practices inform the community tasks and activities.
Q3–Q2	New knowledge and meaning build professional confidence and support networking.
Q3:Q4–Q1:Q2	Members’ ability to interact in informal contexts (community orientated) and to create formal authentic contexts to enhance practice and scholarship.
Q1:Q4–Q3:Q2	The community and members’ identity enable multifaceted layers of collaboration enabling internal and external networking and connections.

Conclusions

Many CoPs exist within institutional boundaries and are driven by expectations and policies, unlike the discourse in the MLSIG that is driven by the common interest shared between the members: the scholarship of mobile learning. Using the core principles from connectivism, communities of practice, and heutagogy, we have successfully functioned as an eclectic group for over seven years. In this paper, we collected the voices and lived experiences of the core members to investigate and understand the impact of the MLSIG. We found that autonomy and agency played a key role in enabling transformative professional development for the members; that conversation, open praxis, and co-governance were the key proponents of co-creating a safe, supportive and authentic space for engagement. Along with this, the formal and informal spaces the members engaged with provided impetus for improved practice, scholarship, and networking. The findings from the study also enabled us to develop the Relational Networked Community Framework (RNCF). We anticipate that this framework will be a useful tool for other community conveners when designing and reflecting on the transformative and interactive patterns in a networked community.

Limitations and ethics

The data for the study were collected from the core members of the MLSIG, some of whom are also listed as authors of this paper. The data, and hence the findings, represent the voices of those who have an invested interest in mobile learning and the productivity of the MLSIG community. While adhering to professionalism and personal ethics, it is at times difficult to separate emotions and feelings in an ethnographic study like ours. We acknowledge that in some instances this may have influenced the composition of the individual ethnographic narratives, and how data were analysed and reported.

Ethical consent was given by all participants as co-authors of this ethnographic study.

Disclosure statement

No potential conflict of interest was reported by the author(s).

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Data availability statement

An open dataset for the study is available at: https://melbourne.figshare.com/projects/Open_Data_from_the_ASCILITEMLSIG/167573.

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