

# Newcomers' Experiences of MERGA 36

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This paper reports on the experiences of newcomers at the 36th Annual MERGA Conference. The paper applies Wenger's (1998) social learning theory to explore the kinds of feedback that might assist newcomers. Questionnaire responses to describe the experience of ten newcomers and interview responses from five of the ten are reported. The participants identified the stimulating presentations and being immersed in an environment conducive to rich dialogue as important factors that contributed to a positive experience. The newcomers felt welcomed by the MERGA community and were able to contribute, particularly those who had previous experience in research or at other conferences.

Teachers have a major role in the development of mathematics teaching and students' learning and as key stakeholders in research. However, as Kieran, Krainer and Shaughnessy (2013) describe "in much mathematics education research, teachers are viewed as recipients, and sometimes even as a means to generate or disseminate knowledge, thus conserving a distinctive gap between research and practice" (p. 361). One way of addressing this concern is through analysing the interactions of teachers and researchers at mathematics education research conferences, where both groups can engage and interact with each other in the intellectual and social practices of teaching and research. This study focuses on the experiences of newcomers at the 36<sup>th</sup> Annual Conference of the Mathematics Educational Research Group of Australasia (MERGA) conference 2013, viewed through the lens of Wenger's (1998) Community of Practice.

The importance of linking research and practice is evident in terms such as action research, evidence-based practice, problem based inquiry, reflective practitioners, and inquiry learning, which are commonly applied to classroom practice. The New South Wales Department of Education encourages teachers to engage in practitioner research because it is perceived as a powerful means of investigating and improving educational practice (NSW Department of Education and Training, 2009). Practitioner research emphasises the importance of research that is "conducted by practitioners on site, initiated from the ground up, continuous and ongoing, focusing on local issues with the fundamental aim of improving practice" (Ellis & Armstrong, 2013, p. 2). This also indicates the need for a closer relationship between research knowledge, researchers, and classroom teachers.

The present study investigates newcomers' experiences at MERGA 36 to seek answers to the following questions: Did the newcomers' feel welcomed? Were they able to contribute actively in the conference discussions? What did they find most valuable in attending the conference? Do they intend to attend future conferences?

## Newcomers at Academic Conferences

The benefits of attending academic conferences are well documented with an emphasis on broadening one's ideas through preparation of papers and collegial discussion. (Begg, 2000 as cited in Anthony, 2004). Anthony (2004) describes the value of participating in conferences as,

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... not merely instrumental for one's work; it also accrues in the personal satisfaction of knowing colleagues who understand each other's perspectives, a sense of belonging, and a strong sense of professional confidence and identity. Thus, collectively participation in the community should result in developing new perspectives, practices, and approaches (p. 3).

Conferences can also provide a pathway for newcomers to become part of a learning community by observing, participating and developing a professional identity and some degree of recognition (Meyer, 1985; Chapman, Wiessner, Morton, Fire, Jones & Majekodunmi, 2009). Meyer (1985) identifies three main means for newcomers to maximise their conference experience: making contacts, giving a presentation, or volunteering to assist the organisers. She claims the latter is the most overlooked and encourages newcomers to assist in this way. Meyer also offers suggestions for experienced conference delegates, which include introducing newcomers to others, recommending sessions, and supporting new presenters. She concludes that allowing newcomers to establish a professional identity and take on roles in which established professionals engage is the ultimate goal. Similarly, Morony (1999) suggests that participating in professional associations such as the Australian Association of Mathematics Teachers (AAMT) can be a valuable way to enable the professional growth of teachers.

Other authors have investigated newcomers' experiences at conferences but found there were barriers. Chapman et al. (2009) studied the experiences of four doctoral students attending a conference and showed that their expectations, approach and personal characteristics, such as shyness, affected their experience. Other challenges include entrenched attendees who do not allow newcomers to express their ideas until they are seen as experienced members and feelings of disempowerment (Hay, 1996, as cited in Chapman et al., 2009); a lack of time for interactions and reflections owing to heavy scheduling of conference sessions (Valez, 2009, Chapman et al., 2009). Some of these challenges may be ameliorated by creating dialogue among delegates and varied levels of participation in both private and public spaces (Hilliard, 2006, as cited in Chapman et al., 2009). Allowing sufficient time for questions at the end of sessions and gaps between sessions for discussion about what has been learnt could also help to improve the level of participation at conferences (Graham & Kormanik, 2004; Chapman et al., 2009).

## Communities of Practice

Lave and Wenger (1991) proposed that learning involves a process of engagement or *active participation* in a community of practice (CoP), which in turn generates *meaning* and *constructs* the group's *identity* as a group of people who learn from each other as *co-learners* in *shared* activities. New members of the CoP may begin on the outskirts, but as they learn, they develop new skills and the tools to participate more fully in the norms and practices of the community. This takes time and sustained interaction. Wenger (1998) describes the initial stage as *legitimate peripheral participation* to emphasise the process of how participation changes and how a person's identity is transformed from newcomer to full participant in a CoP. Identity transformation is a key principle of CoPs and can only be accessed if peripheral participation is seen as a legitimate activity (Avis, Kendal & Parsons, 2003).

For Wenger (1998), there are three crucial elements in distinguishing a community of practice, which he describes as *the domain*, *the community*, and *the practice*. MERGA is made up of a group of practitioners who share a common interest in mathematics education research (the domain). The MERGA website <[www.merga.net.au](http://www.merga.net.au)> states that "MERGA is an association that aims to promote, share, disseminate, and co-operate on quality research

on mathematics education for all levels particularly in Australasia” (the community). MERGA members come together regularly to share ideas, tools, and ways of addressing problems via discussions, presentations, and publications (the practice).

The MERGA website highlights the increasing number of subscriptions from higher degree research (HDR) students and classroom teachers in a statement on its website. These groups were strongly represented among the newcomers attending MERGA 36. Anthony (2004) analysed MERGA conference presentations to compare session topics, what was researched, and who was cited to describe MERGA’s emerging identity as a CoP over time. Anthony emphasised the importance of addressing gaps in knowledge, providing opportunities to explore in non-confrontational environments, asking hard questions, addressing contradictory findings, and following up on smaller research studies. She suggests, “Opportunities such as MERGA Round Table and Special Interest Group discussions may go some way to enhancing productive exchanges” (p. 10).

## Method

### *Sample*

The participants in this study were sourced from the group of 27 conference delegates who attended the Welcome Meeting for newcomers in 2013. All 27 newcomers were invited to participate in the study and eight of these participants plus an additional two newcomers who did not attend the welcome volunteered to complete the questionnaire. Of the 10 participants, seven were working in the tertiary sector with extensive teaching experience in schools prior and three were classroom teachers completing higher degree research (HDR) studies. In other words, all participants were either working or studying in the tertiary sector. The ten participants who completed the questionnaire were also invited for interview and five agreed; three were university academics and two were secondary mathematics teachers. Two of the academics had been to a MERGA conference before but still considered themselves newcomers at this conference.

### *Data Collection and Analysis*

Ethics approval from Macquarie University and permission from the conference organisers were obtained prior to the commencement of this study. The questionnaire consisted of 10 statements with a 5-point likert scale from strongly disagree to strongly agree. Statements included: I felt welcomed; I was given opportunities to contribute to sessions; I will incorporate ideas presented into my practice; The conference has increased my interest in research. Four open-ended questions were also included to investigate newcomers’ reasons for attending, the likelihood of attending future conferences, and suggestions to assist newcomers in future MERGA conferences. The open responses were read carefully and common themes were identified.

Telephone interviews were conducted with five participants. Each interview lasted approximately 30 minutes and was audio-recorded and transcribed. The interview schedule was semi-structured and focussed on further investigation of the common themes that emerged from analysis of the questionnaires. Interview transcripts were analysed and a comparison made with the frequency of issues from the open-ended questions on the questionnaire. Wenger’s framework proved useful in analysing the questionnaire and interview responses in terms of the shared interest in mathematics education (the domain) between teachers and researchers (the community) involving discussions that focused on conference papers and presentations (the practice).

## Discussion and Results

The newcomers described the conference as “highly stimulating and rich with discussion” and the MERGA members were said to be “friendly and supportive” or as one participant stated, “It is quite true about the ‘MERGA family’”. The variety of quality presentations was of major significance when describing benefits of attending, resulting in overwhelmingly positive comments, also evidenced by a majority (98%) of agreed or strongly agreed responses to the ten statements listed in the questionnaire. The results are presented in terms of key themes about newcomers’ experiences: the extent to which newcomers feel part of the CoP; giving a presentation; obtaining feedback about their research; and the importance of the Newcomers’ Welcome.

### *Becoming Part of the CoP*

Newcomers’ attended MERGA 36 principally because (i) they were HDR students seeking further knowledge about mathematics education research; (ii) they were encouraged to attend by their academic supervisor; (iii) presenting at conferences was a requirement of their employment or provided a way to gain feedback on their research.

The results show that greater prior experience in mathematics education research helped newcomers to make connections and form collaborative relationships within the CoP. These past experiences allowed for high levels of engagement and rich post-session conversations as typified by the following newcomer’s comment, “Every session was stimulating; you just wanted to discuss it with others ... conversation happened by chance because you were in the same session.” While experienced researchers make these interactions seem easy, for newcomers this required greater effort and a certain level of confidence. Encouragement from experienced MERGA members and supervisors assisted newcomers in making their overall experience a positive one. However, early career researchers and classroom teachers did not report the same level of interactions. Teachers in the beginning stages of HDR studies appeared to have the greatest need of support. Two such newcomers indicated that their participation was constrained by their lack of confidence in their knowledge of research: “The only time I commented was when I had a good knowledge and not just anecdotal comments”. Despite this, they did take part in engaging conversations with fellow attendees, both during and after the sessions, and considered these informal interactions to be valuable learning experiences.

### *The Value of Presenting*

Newcomers acknowledged the significant role that their supervisor played in providing the encouragement to attend the conference and in “encouraging them to read before the conference”. Supervisors were also important in introducing the newcomers to others, supporting them as co-presenters, and encouraging them with the confidence that they are “good enough to be part of MERGA”.

I am not sure they treated me differently from anyone else – I have always found the people friendly and supportive. This was the first time I presented a paper on my own, I had presented part of a paper in previous years with my supervisor (tagged along) people know her and people talked to her. It was nice of people to come and talk to me about my paper this time. Presenting a paper gives an opportunity to create an identity; people connect you to a presentation.

Other presenters felt that presenting a paper as a first time participant helped to accelerate the process of moving from newcomer to “creating your own identity”, making stronger links to the MERGA community. There was also a clear sense among the

newcomers of taking personal responsibility for engaging with other participants independently, “you have to make the effort” to speak to others. They also identified that personal characteristics such as shyness could hinder their interactions but taking on additional roles, such as presenting or even chairing a session was seen a good way to promote a greater sense of belonging and identity.

### *Feedback and Artefacts*

All first time presenters reported that they valued the feedback they received. First time presenters felt that presenting had assisted them in networking with others working in similar areas; a source of helpful feedback. They also identified that general feedback given in the room following presentations and written feedback given through the early bird process was helpful. The presenters described feedback as generous and helpful, and the presenters were very appreciative and sometimes amazed by the opportunity to share with such highly respected experts. However, one presenter hoped for more, “I would like some more critical feedback, a few searching questions, more challenge, everyone is really very nice and says really nice things”. Another presenter was relieved that it was “not as daunting as [she] initially thought”.

The early bird review process was considered to be a very good opportunity for obtaining feedback. The reviews were described as “affirming and positive, clearly trying to be encouraging”. Other presenters were disappointed to have missed the early bird submission date owing to time pressures. Navigating the formatting template required for submitting a paper, although necessary, was considered to be fairly time consuming and they hoped this process could be simplified in future.

Results suggest that reviewing the conference program to identify appropriate sessions and following up with people who attended your presentation worked well in identifying others with similar interests. All participants felt satisfied by the connections that they had made during the conference, not just in their own research areas but also in a multitude of interesting areas. There was not a strong sense that seeking out other researchers working in similar fields was necessary given that presentations generally brought those with common interests together and allowed for discussions.

In contrast to the positive responses above, one new presenter was disappointed not to receive any feedback because his session had been poorly attended: “I guess I need to publish to get feedback, but it would have been nice to get it on the day.” For this researcher, the lack of feedback created a degree of uncertainty about whether MERGA valued his research and whether a diverse range of research methods was welcomed in the way that Gloria Stillman challenged MERGA to be open to accepting of a wide variety of ideas and methods (Keynote Address, MERGA 36, 2013). Other factors may also have contributed to the low attendance: the last session of the day, towards the end of the week, in a non-central location. Giving new presenters more ideal scheduling for their presentations could assist.

The views of Graham and Kormanik (2004) about the difficulties of the conference forum were not reflected in the participants’ comments in the present study. They did not indicate that lack of time during presentations and between sessions was an issue; however, several participants stated that the physical layout of the conference was an obstacle for finding people and they thought that two separate food areas was problematic.

### *Welcoming Newcomers*

A CoP that allows for collaboration and dialogue, particularly pertaining to the understanding of teaching and learning is an effective way to produce change (Laksov, Mann & Dahlgren, 2008; Cobb, McClain, de Silva Lamberg & Dean, 2003). Those who attended the Newcomer's Welcome thought this meeting was highly successful in allowing newcomers to actively participate in the discourse of mathematics education with other attendees: "Without the newcomers welcome I would not have got to talk to you and many others". Some thought that a second gathering for newcomers later in the conference could build on this positive experience.

Learning about MERGA and asking participants to share research questions in a non-threatening way created much discussion; participants saw MERGA as a community that allows participation, and therefore learning, to take place (Fuller, Hokinson, Hokinson & Unwind, 2005). Reassuring comments expressed at the welcome about what to expect and how to get the most out of their conference experience were valuable. It was suggested by one of the participants that including a newcomer as one of the presenters at the welcome meeting could also be beneficial in helping new teachers as they try to align multiple identities (Smith, 2006).

The colour coding on nametags to identify first time participants was considered helpful. Newcomers recognised that experienced members were going out of their way to talk to them and make them feel welcome. Those who had missed out on a colour coded nametag because they had not gone to the newcomers welcome also thought that this would have provided them with an extra opportunity for meeting people.

One area of concern for newcomers, particularly classroom teachers and early career researchers, was that they were surprised to find that a divide existed between researchers and classroom teachers.

I felt that throughout the conference I was there more as a teacher than as a researcher as my research is at the beginning stages and in that sense I was surprised to feel there was still this enormous gulf between mathematics education researchers and teachers. It didn't feel like there were a lot of opportunities to share but on the other hand I didn't make the effort to go to the dinner etc. It was only in the break out sessions that I could converse.

Another participant remarked that the notion of partnership between researchers and teachers, while "clearly articulated in sessions was not always evident that this relationship was highly valued in individual interactions and in presentations that included teachers" and it was unclear as to whether this was in fact the perception of the teachers or the researchers.

There are definitely two hats that need to be worn. As a teacher you ask why are you doing that or I have an experience that contradicts what you are saying but as a researcher it is completely different you can understand that researchers need to collect their data

Some first time attendees commented on what they perceived to be a hierarchy among some MERGA members ranking researchers more highly than classroom teachers. Comments by participants described the conference as, "not for school teachers but for researchers" and "being a research conference this demands a certain level of professionalism".

It sometimes felt like a club to catch up with friends and past colleagues and therefore not always inclusive but understandably in 20 years time would I be any different? There are fantastic role models and he would be very surprised if it was in the minds of the MERGA members that they were being exclusive.

Changes in identity were noted in the comments of teachers who said, “At the beginning I was definitely more of a teacher by the end I felt like a researcher”. It was suggested by newcomers that greater opportunities to discuss research with experienced researchers within areas of interest, but aimed at allowing new researchers to voice their ideas, could help to develop stronger identities. Seeking the experience and knowledge of classroom teachers in presentations and smaller round table discussions where everyone gets to participate may help to model the importance of teachers as partners.

The participants were unanimous in thinking that the presentations were valuable for anyone interested in mathematics education and you do not need to be a researcher to attend MERGA and access its benefits. Further to this, they felt that maintaining membership in the MERGA community as well as their school community created opportunities for professional growth (Redman, Brown & Sheehy, 2011) and would welcome additional promotion of MERGA to other classroom practitioners. If the stated aim of the organisation is to promote quality mathematics education at all levels, further consideration needs to be given to balancing the representation of teachers and researchers highlighted by Dr. Yoshinori Shimizu’s question, “Where are all the teachers?” (Keynote Address, MERGA 36, 2013). Only two out of ten participants in this study were classroom teachers and noting that all eight MERGA executive positions are filled by academics from tertiary institutions, perhaps the Association’s aim of influencing education at all levels needs clarification. In particular, what teacher needs could be addressed by MERGA? How could MERGA better balance representation across all levels, especially when all first time participants reported the conference to be extremely worthwhile, saw established members as incredibly supportive, and all were set on returning the following year?

## Conclusion

This paper has investigated the experiences of first time participants in attending the 36<sup>th</sup> Annual MERGA Conference, their sense of identity, and the issues they saw as contributing to or hindering their conference experience. Lave (1991) stated that “developing an identity as a member of a community and becoming knowledgeably skillful are part of the same process, with the former motivating, shaping and giving meaning to the latter, which it subsumes” (p. 65). This statement was true for the newcomers in this study. The importance of being immersed in an environment conducive to rich dialogue and being allowed to establish a professional identity and engage in the activities of experienced members were significant for newcomers who stated they were keen to attend future MERGA conferences. Academic supervisors, researchers, and all members who engage in dialogue with newcomers should be made aware of their influence in developing a valuable community of practice for not only newcomers but experienced participants, who may also be first time attendees.

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