behaviour to a more positive relationship where I was praising them more regularly. I had also become more proactive and began to anticipate difficult behaviour and have systems in place to prevent misbehaviour from occurring. (T15)

Overall, the online discussions have been a valuable tool. They have directly aided my teaching, thanks to a lengthy series of original and insightful ideas that are specifically tailored to the classroom. More importantly, though, in the long term they have made me confident about seeking advice, about trying new things, about believing that there is never any need to abandon attempts to teach higher order skills. (T16)

The last online discussion improved my understanding of pedagogy and the key factors that should be considered. My focus at the beginning of the year was on what and how I was teaching. I believe my focus has changed during the course of these online discussions. My focus is generally upon the learning taking place rather than my teaching. I have become aware of the different variables as described by Kyriacou. I now consider these variables when planning, teaching and evaluating lessons. (T17)

... it was one that really stuck with me, it really helped me, because it was the first time that, people had given me advice about this year ten class, do this, do that, and little things to keep them on task, but it was the first time that something had really worked, and worked to the level that I wanted it to work, it wasn't just a trick that meant they were silent for ten minutes. I could actually see that things were changing and moving on. (T18)

It is clear that features one would expect to see as a community starts to evolve are happening here. There is trust, support, shared identity (being part of something) and empathy (understanding each other's situations). This qualitative data points to what is special for new teachers on the MTeach is that they have a space separate from work where they can raise issues of concern and interest and this is in a community of equals or peers. For example, they can question school policy or micro-community practice without feeling vulnerable, judged and compromised. They can also be honest and explicit about their progress, what they fear, what has gone wrong, what has gone well, what they find frustrating and other challenges. In the ODs they are 'listened to' and receive feedback about issues specific to them and their context which provides a supportive community with a semi-cathartic role. This community forming process is underpinned by the way the ODs are designed, where participants initially present to the whole group classroom practice issues that are of contemporary interest to them. They subsequently receive feedback from others with threads of discussion often developing. What makes this process more empowering (and perhaps less

threatening) is that the online group has the added dimension of an inter-subject and inter-phase collegiality, with participants benefiting from understanding beyond their school or subject micro-community. By developing their criticality in this way at this early stage of a teaching career, teacher professional judgement is allowed and valued. What happens is participants' critical engagement with practice becomes integrated into their school contexts and communities. Participants explained how the development they gained via the MTeach was different from their experiences at school. They were often complimentary about aspects of school support, feeling that the MTeach supplemented this and gave them wider perspectives: neatly summarized by one participant as the 'why' not the 'how'.

It is apparent this MTeach online community encourages the development of Wenger's 'dimensions of practice'. There is a strong presence of 'shared repertoire' and 'mutual engagement'. Key elements of 'joint enterprise' exist in a more embryonic form. For example, 'interpretations' and 'mutual accountability' are clearly present whereas 'negotiated enterprise' is less developed. Interestingly the participation is rich in reification. Arguably the pedagogic design aims to foreground the situated experiences of teachers. By making the sharing of experiences key to the ODs reification occurs. The processes of making their teaching situations real to others will require for example representing, describing, using, reusing, perceiving and interpreting. It was important that participants could raise and discuss practical teaching strategies and problems in an open and honest way. The combination of the use of their own experiences along with readings made them think about their situations in a less restricted way. The multiplicity of practical suggestions and ideas allowed participants to experiment within their own context on their own terms and move from reactive to proactive strategies. As with the development of community this centrality of thinking about practice incubated aspects of confidence building and empowerment.

Yandell [19] when discussing student teachers' school experiences also draws on Lave and Wenger's [12] work explaining how peripheral participation and overlapping communities of practice can be difficult but provide a 'privileged vantage point'. 'These are not necessarily comfortable relations, and there are frequently tensions and contradictions both within and between intersecting communities of practice.' [19] He goes on to say '...peripheral participation can also be a privileged vantage point, a position from which to make sense of the hurly-burly...' [19]

This resonates with what is happening for the MTeach participants, they are new teachers and they are subject to competing pressures and expectations

within their school communities (where they are novices). They also are undertaking the MTeach and becoming part of that community, which is facilitated by the ODs (between peers). The participation within this overlapping community of practice gives them both support and the confidence to look at what is happening in their schools and classes in alternative and critical ways. Their participation in the MTeach strengthens their school roles, giving them the self-assurance to suggest and introduce new ideas; contributions which were often recognized as valuable and acted upon. Thus, the community formation and practitioner focus are intrinsic parts (and are outcomes) of the MTeach ODs that gives credibility to the new teachers in their school communities.

4. The Role of Technology

There are a number of ways technology assists what happens on the MTeach. For example, participants have flexibility to access materials and work on activities from a distance when it suits them (within certain structures and timelines). The technologies used influence the pedagogic design, for instance it was decided to use an asynchronous discussion forum for the ODs. These asynchronous discussions work within the overall aims of what the ODs aim to achieve: allowing participants to utilize their own and each other's professional teaching experiences as a critical 'way in' to the topics and issues covered by the course. It is the course team that makes decisions as to how to use them (timings, structures, requirements) and these are pedagogic decisions. This research has confirmed the importance of not being constrained or pushed in a particular direction by the technologies. Rather, there is a need to develop approaches that utilize the affordances technology offers to achieve the desired pedagogy.

More specifically with teachers in mind Fisher et al [5] explain how teacher learning is complex, multifaceted and 'resistant to standardization' but there are 'affordances' digital technologies can offer to enhance teacher learning. They provide a framework for categorizing and describing these concepts and activities.

The MTeach uses technology to facilitate the ODs by providing a forum (the online tutor group) and various digital artefacts and resources. What is evident from the research is that the ODs achieve to varying degrees purposeful activities from all clusters. It is the community and communication cluster that features strongly and this facilitates the development of activities in the other clusters. For example, the way the ODs are set up requires teachers to participate within a community, to share and exchange information, which in turn leads to activities such as 'adapting and developing ideas'

and 'writing, composing and presenting' from the other clusters.

Table 1. Clusters of purposeful activity with digital technologies [5]

Knowledge building	• adapting and developing ideas • modelling •representing understanding in multimodal and dynamic ways
Distributed cognition	• accessing resources • finding things out •writing, composing and presenting with mediating artefacts and tools
Community and communication	•exchanging and sharing communication • extending the context of activity •extending the participating community at local and global levels
Engagement	• exploring and playing •acknowledging risk and uncertainty •working with different dimensions of interactivity •responding to immediacy

Fisher et al [5] suggest that professional development will benefit by 'designing in' (author words) community and communication. 'The community and communication affordances are exploited as teachers reflect upon their practice within a wider community. They can use communication tools to engage in reflective analysis of materials and experiences with colleagues and mentors, and such opportunities for reflection, both on general practice and the use of ICT in their teaching, need to be built into and prioritized in the design of professional development schemes and innovations.' [5]

This concurs with what this research has found on the MTeach. The ODs use the technology to allow participants to share their reflections and experiences. The pedagogic design behind the OD considers carefully where these teachers are situated and the pressures they are under. Providing communication tools in itself is not enough; the communication expectations need to be realistic. Early in their paper Fisher et al encapsulate what they feel is needed for teacher learning to be successful. 'Teachers learn and develop their professional knowledge best when the aims and purpose of activities are relevant and authentic to their own lives; when they can use a variety of tools to help them realize and express their goals; and when they are in relationship with others in the wider community which shares rules and ways of working' [6]. Again, this resonates strongly with the pedagogic

design that enabled such processes within the MTeach ODs.

How far what happens in the ODs represents collaborative knowledge construction is more difficult to assess. To gain a sense of what is happening it is useful to revisit ideas and concepts from literature that concern learning within online forums and are not specifically about teacher learning. The community aspect of the ODs certainly facilitates 'the social dimension of learning (the discussion of theory, the exchange of ideas, negotiating meaning)' [10] and there is evidence of 'the practice of discussion and argument in order to develop theory' [10]. It is important to note that theory development is not a specific aim of the ODs as they are about gaining a critical understanding of practice, seeing the connections between knowledge, understanding, theory and practice. Rather than participants trying to achieve a collaborative outcome the ODs are designed to be a collaborative process where 'learner participation leads to multiple perspectives on issues, a divergence of ideas, and positions that students must sort through to find meaning'[8]. The nature of this joint process reminds us that what is happening within the ODs is akin with the concept of a 'community of inquiry' [6] [7]. This enquiry is encouraged by each OD having an overall focus to which participants bring their own views and situated accounts of professional practice. The ODs could be described as having a formative role in knowledge construction where participants are in 'a community where individual experiences and ideas are recognized and discussed' [6]. This formative role appears to offer support and direction for participants to follow both in developing their practice and their understanding (theoretical or otherwise) of what is happening within their own and wider contexts. Thus ODs construct a collaborative process but 'it is the individual learner who must grasp its meaning or offer an improved understanding.' [6]

5. Conclusion

What is important in the way the ODs operate is that they endorse an engagement with the 'complexity of the classroom' [17] and in doing so question simplistic solutions or strategies. They foster an enquiry approach, which by its nature is forward thinking and moves away from the immediacy of presentism. This future orientation means strategies become longer term, more holistic and grounded in why things happen as opposed to adopting approaches which are judgmental, formulaic and over focused on the negative. This forward thinking and enquiry although concerned with participants' own contexts, are assisted by the community and by the artefacts that make up the online activities. These have an important formative

role and demand engagement with theoretical concepts and wider perspectives that go beyond their subject, phase or school context. The way the ODs are designed, the way they operate, the multi-faceted contexts of participants and the actual outcomes (the discussions) are all important in making them work in a way that counters short term reactive approaches [9]. This combination of factors encourage a questioning a 'reflective skepticism' towards new initiatives, policy and best practice models rather than a passive acceptance. They were experiencing a 'pedagogy of discomfort' [1] where their educational assumptions were challenged by themselves and each other. There is a sense that their evolving identities as teachers were linked and shaped by the MTeach and the ODs.

This paper is titled 'Community of Practice or Practice Communities: online Teacher Development'. Participants certainly valued the community made up of similar (all new) but different (schools, phases and subjects) teachers, where they felt they could be honest and open. The practitioner focus was important with the starting point for the ODs being their own classrooms and issues of concern and interest to them. This practitioner focuses along with the structure and timing of the ODs made it manageable in the very busy first year of teaching. Wenger explains how his use of the term reification is more than the dictionary definition of making something real or concrete. It has a relationship with participation that includes a range of processes (e.g. representing, describing, using, reusing, perceiving, and interpreting) which become central to the community of practice. This work recognizes that the situating of the online tasks in professional practice leads to reification. The participation required and reification that developed are intrinsically linked. The role community plays is important in enabling this process and functions at various levels in what are overlapping communities of practice. The teachers' experiences in these multiple communities of practice are shared and feed off each other to enrich their critical understanding of educational practice issues at an early career stage. One would argue thus an initial practice community over the space of a teaching year develops into a rich CoP.

6. References

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