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Brisbane Australia

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Adie, Lenore E. (2011) Learning as identity and practice through involvement in online moderation. *Educational Assessment, Evaluation and Accountability*.

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http://dx.doi.org/10.1007/s11092-011-9132-4

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Title page

Learning as identity and practice through involvement in online moderation

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Abstract

For teachers working in a standards-based assessment system, professional conversations through organised social moderation meetings are a vital element. This qualitative research investigated the learning that occurred as a result of online moderation discussions. Findings illustrate how participating in social moderation meetings in an online context can support teachers to understand themselves as assessors, and can provide opportunities for teachers to imagine possibilities for their teaching that move beyond the moderation practice.

Keywords

Standards-based assessment; professional communities; social moderation; professional learning; professional conversations; teacher identity

Introduction

The relationship between teacher professional conversations and improved teaching and learning is difficult to ascertain. The discussion in this article describes one way that this relationship could be investigated and analysed within the context of standards-based assessment and synchronous online social moderation meetings. The online context of the moderation is viewed as a space that connects teachers from diverse geographical locations and sociocultural contexts in which the dynamics contribute to teachers' identity and practice within a standards-based assessment system.

Online moderation, as used in this article, refers to the synchronous online meeting of teachers with the purpose of reaching agreement on the judgements made on common assessment tasks graded on an A – E scale. It is understood that the contributions made by the teachers in the moderation discussions exist in relation to understandings that have developed through other historic, social and cultural contexts (Bakhtin 1981). These different understandings may be of assessment, judgement-making, achievement standards, or pedagogic practice. The discussion is based on the belief that through involvement in

conversations participants will position themselves and others in regard to a practice as they come to recognise similarities and differences in practice (Holland, Lachicotte, Skinner, and Cain 1998). The online moderation meeting is a place where teachers can hear other interpretations of the standards, and how to work in a standards-based assessment system, through the negotiated practice of the meeting. It is through the discussions and negotiations that spaces exist for the development of practice and identity within this assessment system. However, it is also understood that what teachers take from each meeting will translate to different instantiations of the negotiated meaning developed through the moderation discussion.

Data used in this article is drawn from a large-scale Australian Research Council (ARC) Linkage project that studied how standards inform and regulate teacher judgement of student work in the middle years of schooling (Klenowski and Adie 2009; Wyatt-Smith and Klenowski 2010; Wyatt-Smith, Klenowski and Gunn 2010). The discussion in this article focuses on the data collected from fifty middle school teachers in the state of Queensland, Australia. Synchronous online moderation was a new practice for these teachers in terms of both the online moderation context and the moderation process used for the middle years of schooling.

The discussion in this article is framed within a sociocultural view of learning informed in particular by the work of Lave and Wenger (1991) and Wenger (1998) on participation and learning within a community of practice. The focus is on how the teachers involved in the online moderation positioned themselves within the practice of standards-based assessment, and imagined possibilities for their teaching that moved beyond the moderation discussions. After an overview of the context and design of the study, how teachers 'become' (Lave and Wenger 1991) within a system of standards-based assessment is analysed through recourse to the teachers' use of language in the meetings. Following is an

examination of the learning that occurred through participation in the online moderation, and as a result of the conflicts and uncertainties of being new to a practice. This includes a discussion on what may be considered 'learning' in the moderation meeting. In this study, learning as a result of involvement in a moderation discussion was not observed as an automatic outcome. This has important implications for education authorities who adopt moderation as a part of their assessment practices. In the final section the importance of teachers imagining themselves as professionals who work in a system of standards-based assessment, which includes the visualisation of meeting discussions as pedagogic practice, is discussed in terms of 'becoming' and 'belonging' (Lave and Wenger 1991) in a practice.

Context

Standards-based assessment systems have been introduced as a part of educational reforms in many countries as a way to address the needs of learning and working in the twenty-first century while also responding to systemic requirements of accountability (Centre for Educational Research and Innovation 2005). For Queensland middle school teachers, standards-based assessment was a new way of working. Previously, teachers had been working in an outcomes-based system that did not include standards of performance, or formal, policy-driven models of assessment. The shift to a standards-based system required teachers to be able to justify their judgements of student work based on established standards, and to consider assessment as an integral aspect of the teaching/learning process.

In this article, social moderation is proposed as a practice that promotes professional dialogue between teachers and involves sharing their knowledge about assessment. Research has shown that professional dialogue and professional learning communities can work to support teachers new to the profession to become immersed in the language and pedagogy of teaching (Haggarty, Postlethwaite, Diment and Ellins 2010; Priestley, Miller, Barrett and Wallace 2011) as well as to sustain effective practice (Kirton, Hallam, Peffers, Robertson and

Stobart 2007). Furthermore, professional dialogue when conducted with others beyond the local boundaries of the school can work to extend and promulgate practice (Yandell and Turvey 2007). The research findings described in this paper contribute to filling a gap in the international assessment literature with regard to how teachers 'become' and 'belong' (Lave and Wenger 1991) within standards-based assessment practices, and the role of online social moderation in this process.

Research design

This paper draws upon a representative selection of data regarding teachers' participation in online moderation meetings, conducted between 2007 - 2009. Qualitative data was gathered through observations of the online moderation meetings, pre- and post-moderation interviews and a survey. Included in the study were 50 Queensland middle school teachers at different year levels (years 4, 5, 6 and 9), in different curriculum areas (English, Science and Mathematics), in diverse geographic locations, and in a range of sociocultural contexts. The data was triangulated and analysed through methods of constant comparison (Charmaz 2006) that involved initial coding, categorising and progressive refinement of theories.

Teachers in this study met online to moderate student work using the WebEx® online meeting centre. WebEx® allows for audio, video and text to be incorporated in meetings through the sharing of documents, applications and desktops. Only the audio and text were available for this project. Teachers were invited by email to participate in the online moderation meeting, and communicated during the meeting via telephone while interacting with the materials online. The teachers met in real time to view or annotate student work samples using highlighters, text or pointers. Software features like the hands-up icon allowed participants the opportunity to contribute to the discussion. Participation in an online

moderation session required access to a phone (preferably hands-free) located close to a computer.

The author was involved in setting up the meetings and supporting the teachers with use of the technology throughout the meetings. This role did not involve the moderation of student work samples even though the moderation practice was new for the majority of middle school teachers involved in the study. Each online meeting involved up to eight teachers from between two and four schools discussing common assessment tasks. At times, a number of teachers from one school were clustered around one computer.

Table 1 is a summary of the data collected and lists the number of meetings that were run and the number of pre- and post-moderation interviews that were conducted. In addition to this data, six follow-up interviews were conducted in 2009. These six interviews were conducted with three teachers (two interviews each) whose progress as an assessor was followed after involvement in the online meetings. Of the two interviews with each of the three teachers, one was a telephone interview and the other involved a school visit.

Pseudonyms are used in the following analysis for all participants.

[Insert table 1 here]

"I probably would maybe change it": Language as evidence of moving into a new practice

This article is based on the assumption that developing shared understandings occurs within a social and cultural context in which involvement in a practice is related to the negotiation of an identity (Wenger 1998). This is an active process in which participants make choices and respond based on a number of factors, and in which participants decide what they will give and take from a context. Eisenhart (1995) states that "identities can be

claimed, modified, rejected, or ignored; they can be developed to a high level of expertise or left unrealised and undeveloped" (p. 5). Exposure to a new situation or idea, on its own, does not necessarily result in learning, or a change in identity. When meaning is developed through interactions, identities and practices emerge and continue to be transformed in processes of negotiation. When participants recognise the different activities and tools of a practice as aspects that they have in common with other participants, the possibility that the participant will identify with that practice is strengthened. This facilitates the development of an identity that is framed by the practice.

The speech patterns used by participants can provide evidence of learning within a practice (Vygotsky 2003). In this section, three examples are examined to illustrate how the language used by the middle school teachers positioned them as newcomers within the practice of standards-based assessment.

The process of learning new practices often leads to conflicts with familiar practices and identities. This conflict was evident in the language used by the teachers as they made judgement decisions on other schools' work samples. For example, in one of the online moderation meetings, a teacher, Sue queried a judgement on a criterion that was graded at a C standard when the response to a question appeared correct. Sue's choice of words provides evidence of her developing understanding of how to work in a standards-based assessment practice which involves matching student work to a description of a standard.

So those calculations are correct and clear. So, yeah, I probably would maybe change it. (Sue, Online moderation meeting, Year 6 Mathematics, 2008)

The string of words "probably would maybe" that Sue used indicates her uncertainty about making a decision on the standard of this work. The discussion that followed Sue's statement showed her searching for further evidence. Sue's choice of words positioned her as moving

into a practice of standards-based assessment. She was willing to make a statement but not yet to commit to a decision. The need to have sufficient evidence to back up her decision about the quality of a response is apparent through the ensuing discussion. Sue's indecision is a significant point in her development as an assessor in a standards-based assessment system. In many of the meetings observed, teachers were very quick to agree and form a judgement based on minimal evidence. Sue's hesitation indicates her awareness that this evidence on its own was insufficient to make a decisive judgement. Standards-based assessment entails looking at the quality of the evidence provided. At this stage in her development as an assessor, Sue did not make a clear statement that she required more evidence. Her choice of words positioned her to be correct whatever the final decision. Indeed after the teachers' consideration of the evidence in the student's work, it was agreed to keep the standard originally awarded for this work sample and not to change the grade. In comparison to the quick agreements observed in other moderation discussions, Sue's hesitation and search for evidence indicates her developing understanding that assessment judgements and standards need to align.

Further examples of this type of speech pattern were found in other online meetings. For example, in the 2008, Year 9 English online moderation, the participants discussed the marking style used by some teachers. In each task there was often a group of questions that contributed to a criterion grade. Some of the teachers graded the criterion by assigning individual marks to each question and then averaging these marks to determine the grade for the criterion. Other teachers looked at the responses to the group of questions in a holistic way to determine the grade for the criterion. Sharon asked Steve whether discretely marking each question is recommended as a new practice for marking this type of English task, as historically high school English teachers, guided by the Queensland Senior English syllabus, have marked holistically (Queensland Board of Senior Secondary School Studies 2002).

Steve replied that he "possibly wouldn't recommend it". Again this speech pattern indicates a particular view of a topic that is developing and not fully reconciled. Steve did not think that this was the way that English tasks should be marked but he hesitated to state this firmly. By introducing new assessment practices (in the middle school) into an established assessment practice (English teachers mark holistically), the connections with historic knowledge structures, whether these are systemic or personal ways to assess, are destabilised. Steve's comment indicates his uncertainty as he moves into this new assessment practice. His next statement provided further evidence of his apparent confusion as he worked through his thoughts on the topic:

It's sort of difficult with a holistic overview by sort of putting marks there, I don't know, I personally wouldn't do it. You need to get an overall feel rather than trying to mark each individual product like that. (Steve, Online moderation meeting, Year 9 English, 2008)

Insight into Steve's history as an assessor within a discourse of secondary English further clarifies his actions. Steve is the head of his school's English department, and he has acted on state and regional senior English moderation panels, and so is very familiar with the holistic style of marking used in this curriculum area. The struggles involved with moving into a new assessment domain were apparent in Steve's statements where he indicated his knowledge and position, but hesitated to make a firm stance.

A final example of teachers' hesitant movements into standards-based assessment involves their narrated identity and their positioning within a collective school/year level identity. In this extract a young teacher is providing feedback to another school on why the teachers in her school group did not agree with the standard awarded to this narrative writing sample.

So well it was a good job, and um, yeah there were a lot of good aspects about it. We looked at it quickly and, this is kind of what we thought about it just quickly, but feel free to disagree

with us. We just thought that for the introduction for the orientation it describes one fine night and she went to the beach and it's good that she used words like um "crashing on the sand" so that was good vocabulary. But for us, compared to some of our samples, we probably would have only given it a C for the introduction because she doesn't really describe Emily, um, and she doesn't really give us much information about the orientation. So she tells us that it was "one night" and that it was "at the ocean" but we wouldn't have said it was properly introduced, because that was on the, um, rubric. (Online moderation meeting, Year 5 Writing, 2008)

The teacher starts by speaking about the positive aspects of the task, and then moves onto the area of disagreement. She lets the other teachers know that she is open to discussion through her statement "feel free to disagree with us," and creates *a crack* to retreat into if the others do disagree. Her indefinite statement "this is kind of what we thought about it just quickly" provides more cracks to retreat into, if necessary, through her use of "kind of" in relation to their decision process, and her use of "just quickly" in relation to the time spent on the decision. The teacher establishes herself as part of a group through her use of "we," "us," and "our," to support the comments that she is making. She also uses the rubric to back her judgement decisions. This discussion positions the teacher as part of a group and part of a historic practice that assesses in a particular way (the necessity of a good introduction, and the use of the rubric to inform their judgements).

From this illustration, it can be assumed that this teacher, who is new to the teaching profession, is still legitimising (Lave and Wenger 1991) her position within this practice. She relies on the support of the only school context of which she has been a part. This sociocultural system gives meaning to her actions. Her response is modelled on the practices in which she has participated in her school, and her professional identity is tied to these practices. Meeting with teachers from other schools provides an opportunity to try out this identity from within the safety of the group, and perhaps compare her story with those told by

others from different schools. It is anticipated that these experiences will support her in learning about, and understanding, her place and identity as a teacher working within a broader education system of standards-based assessment.

An important consideration here is the interpretation of the standards in relation to identity formation. Teachers' hesitancy to critique another's judgements is understood in relation to new practice which involves developing an understanding of the standards. In these early moderation meetings, teachers were required to act, in one sense, as experts critiquing others' judgement decisions; yet they were also newcomers to the practice of standards-based assessment. This tenuous positioning of the teachers inhibited learning about the practices of standards-based assessment for some teachers. This article explicates how others developed through the opportunities to learn that the online moderation presented.

Developing in a practice

Opportunities to learn about assessment practices occur in the moderation meetings, as participants interact and negotiate their judgement decisions. While individuals can choose which opportunities they take, and the degree to which they engage in a practice, feedback from others about their developing knowledge and skills can also act to encourage or inhibit future opportunities for engagement.

Conflicts in the meeting regarding the interpretation of a standard can interfere with the teacher's identity as a particular year level teacher who understands the standard of work required for that year level. The following extract from a Year 5 moderation meeting is taken from a point in a meeting in which Rachel's judgements have been consistently contested and rejected by the teachers from the other schools involved. When Rachel is invited to contribute her judgement on a work sample from another school, her response "you won't want to know" indicates her withdrawal or desire to withdraw from this moderation process.

However, she finally does contribute, but does so by stating her difficulties and confusion with this form of judgement making, and stresses that these decisions were only made at one "point in time" and so do not necessarily align with her "personal opinions."

Like I was saying before it's really...I find this type of marking from this type of rubric really difficult because from my personal opinion I don't agree with...I had some questions there with regard to how they put their paragraphing and even how do they, how they might, I'm trying to think of the right word, you know if you've got an E in one place and an F somewhere else and a B somewhere else, what is the overall mark? Is there some weighting? ...See I don't know how they make the grade. But all I can do is tell you what I thought in that point in time. (Rachel, Online moderation meeting, Year 5 Writing, 2008)

Rachel's statement acts to position her within the practices of the other teachers in the meeting. She doesn't agree with the way the task is being assessed through the criteria sheet; and she is uncertain how an overall grade is awarded. These are not her 'standards' and she finds them confusing. However, as required in this practice, she has used them to reach her judgement decisions, and at "that point in time" this was her interpretation. The lack of reconciliation of the judgements made by the teachers from different schools in this particular meeting did not initially show any shift in thinking about how standards may be used to support judgement making. At the conclusion of the meeting, standards were viewed as confusing and contradictory to historic personal knowledge of year level standards.

Newcomers to the teaching profession are particularly vulnerable to such disagreement. When identities are still being established, disagreement over judgements and the process used to make judgements may be viewed as failure. Gee (2000) understands identity as "being recognised as a certain 'kind of person' in a given context" (p. 99). The "Yes!" followed by a sign of winning by a newcomer to the teaching profession, as described by an observer of one online moderation meeting, may be viewed as a response to a perceived successful move into this practice. Although this is not a literal transition, the

teacher is still, at some level, acknowledging that her judgement decisions have aligned with the more experienced members of her profession. Figuratively the online meeting acts as an initiation ceremony for this new teacher, and her victory signal is demonstrative of her acceptance into this practice. A similar experience was also described by Belinda, another first year teacher involved in an online meeting. Belinda described the moderation process as valuable for her identity within this assessment practice. As a teacher new to the profession, she questions her skill in identifying and matching evidence to a standard of work, as she does not have experience in this practice from which to draw.

But I think the overall moderation process that we've done this afternoon and so forth, I found it very valuable, and really, as a first year teacher, I find it very reassuring that Margaret, who has more experience than me, is looking at things the same, you know, along similar lines as I am. So, I find that good, because, I guess, in the first year, there's always that little doubt in your head, "Am I doing it right?" (Belinda, Post-moderation interview, Year 9 Science, 2007)

The agreement of other participants with the judgment making of the newcomer works to legitimise their participation in the practice of standards-based assessment.

The online moderation provides a context for dialogue about teaching and learning between 'newcomers' and 'old-timers' in the profession. Such a context responds on one level to calls for a culture of continuing professional learning (Haggarty, Postlethwaite, Diment and Ellins 2010), as, in a sense, all participants were newcomers in the online moderation. The legitimising role enacted within this online meeting was also apparent in the comments made by the experienced teachers who were now also working in a new assessment practice. Margaret, a teacher for seven years, describes how she is encouraged to find that others, including Belinda, agreed with her understanding and her application of the standards.

I think it's really good to get another perspective. And it's really encouraging too when other people find the same that you do. (Margaret, Post-moderation interview, Year 9 Science, 2007)

The shift to the new context of standards-based assessment caused experienced teachers to question their skills and knowledge. In an educational system that is moving into a new practice, teachers can be both old-timers and newcomers, depending on the practice in which they are involved.

Becoming an assessor within a standards-based assessment system requires a reexamination of aspects of professional identity. In an investigation into professional learning
(Brock et al. 2006), the concept of displacement spaces was used to examine the reactions of
people when their perceptions or understandings are challenged. Displacement spaces were
conceived as "places we move into (either by force or choice) whereby we see things
differently" (Brock et al. 2006, p. 38). Teachers involved in a new way of assessing need to
recognise this as a new assessment system that will involve changes in historical assessment
practices.

The online moderation meeting presents as a space where teachers are able to discuss and negotiate meaning. In the process new ideas about practice may develop. This context is not a formal learning environment, nor does it need to be for learning to occur as sociocultural theories of learning illuminate. Through the discussion, teachers may gain a sense of what is considered to be sound evidence of a standard, as well as what is considered to be good assessment practice.

But is this learning?

Problematic for the discussion so far, has been the tacit assumption that the shared meaning of the practice of standards-based assessment negotiated by the teachers will align

with the practice as intended in policy. In the early stages of the implementation of standards-based assessment, quite often the teachers arrived at an agreed interpretation of how to work in this practice that did not align with the policy as intended. For example, in some meetings teachers weighted criteria, and combined marks in different ways which were not part of the policy discourse. In these cases, can it be claimed that learning has occurred, even though a shared (but incorrect) understanding has been reached? Does 'learning' necessarily imply correctness, or can learning be understood as a change in understanding, albeit, if this is an incorrect interpretation?

Wenger (1998) views learning as belonging to a practice. Based on this understanding, learning involves developing expertise in the actions and language, that is the ways of doing and being which are recognised within the practice as a part of that practice. It follows then that sometimes participants may need to 'unlearn' other historic actions and behaviours to progress as participants in a practice.

Learning in the online moderation meetings occurred through a process of negotiation with other participants. Future online meetings will more than likely involve the introduction of different participants. By enacting this practice in an online context, that connects teachers from diverse locations and sociocultural settings, it is anticipated that teachers' understandings of standards-based assessment will continue to be challenged and refined.

The role of imagining an identity

Sociocultural theories of learning highlight the many factors that impact on the development of shared practice. Yet within this diversity there exist similar ways of acting such that those within the practice recognise others as belonging to the practice. The online moderation meeting involves the interaction of a diverse range of people, histories, motivations, values, philosophies, artefacts and spaces. Online moderation can only be

understood in relation to the historic practices which have contributed to its development.

The potential for learning and developing shared ways of acting is related to how the various elements, for example, histories, people and artefacts, come together in the meeting.

New ways of performing assessment may appear in different schools and classrooms, as variations of the shared meaning developed in the online moderation meeting. Evidence of learning is seen in the new ways of talking about assessment which may materialise as new identities, new relations and ultimately, new practices. Acknowledging the multiple histories converging within this meeting, it is evident that multiple meanings will be taken by participants from the same experience.

As teachers leave the online meeting and return to their various school contexts, uptake of resources and assessment practices may occur in a variety of ways. The reshaping of these meanings for each participant is viewed by Wenger (1998) as a process of imagining. By understanding this process from a sociocultural view of language as proposed by Gee (2003), an online moderation meeting would be regarded as a particular type of semiotic domain. It contains distinctive practices that participants need to know how to *read* and perform within. To be an active participant in a new semiotic domain involves both learning to perform the practices of the domain, and seeing the possibilities for future action within and outside of this domain. From their involvement in online moderation, there is a possibility for teachers to imagine (Wenger 1998) new ways of performing standards-based assessment as well as new ways of enacting its practice in their classrooms.

Meanings generated through collaboration in the moderation meetings become reflections and actions through the individual. As the teachers narrate their experiences of online moderation and other professional activities to others or to themselves as reflective practice, they are attempting to position these experiences into existing frameworks while

also imagining other identities for themselves. Engestrom (1996) describes the individual and collective development that occurs as a result of participation in a practice as a "horizontal movement across borders" (p. 1). Beach (2003) adopts this conceptualisation, viewing transitions between one context and another as consequential and involving "a new relation between individuals and social activities; not continuities or discontinuities, though these may be experienced by the participants at some points in the transition" (p. 55). In a similar manner, when teachers take a shared meaning, or their learning, from the online moderation to their classroom context, this may be viewed as a new location where meaning continues to take shape.

Wenger (1998) makes the connection between the different ways of imagining, based on the same experience as related to a sense of self. The progression of the moderation discussion to new pedagogic or organisational practices signifies a transformation of identity. A new identity materialises in these new pedagogic or organisational practices, or in teachers' planning documents and resources. For example, as a result of her involvement in the moderation meeting, Sue spoke of introducing a reflective mathematics journal into her classroom. The purpose of this journal was to develop the students' communication, thinking, and reasoning skills. In the online moderation, the teachers had discussed the need to develop these skills in their students. The reflective journal was Sue's response to this discussion. The introduction of the journal, as a tool that would support the improvement of this essential skill, positioned Sue within a practice of standards-based assessment, and acted as a mediational means (Vygotsky 2003) to support her developing identity within this practice. From this same moderation discussion, Dianna stated in the post-moderation interview that she intended to focus on developing mathematical literacy in her students, and Michelle spoke about introducing authentic mathematics tasks. These ideas developed through reflection after the meeting.

Michelle, Sue and Dianna all spoke of their intent to include more investigative mathematics tasks into their planning. Their developing identity within a practice of standards-based assessment is evidenced in their understanding that investigative mathematics problems would assist their students to develop thinking, reasoning and communicating skills, which are qualities evident in the higher standards statements.

In the year following the moderation meeting, the teachers were at various stages of implementing these ideas. Sue had started to provide some investigative tasks to her students by modelling the process for them. Dianna was still intending to, and on the day of my visit to her classroom had included such a task. While acknowledging the importance of such skills for her students, Dianna admitted feeling constrained by the structure of her school program which she believed necessitated her to cover too much content and did not allow time for student investigations. Michelle, however, had been able to implement investigative mathematics tasks into her own planning and had shared the knowledge and understanding that she had gained from the meeting with her staff. This illustrates the widening field of influence of the online meeting.

I did go back and discuss a couple of them [decisions] with the Grade 6 teachers, and basically we had a bit of a mini-moderation which was very similar to what I did online with the other two ladies. I talked to them about those areas of grey and the usefulness of the continuum.

(Michelle, Post-moderation interview, Year 6 Mathematics, 2008)

Michelle identified this discussion as important in supporting her teachers to work in a standards-based system of assessment. However, later in this interview she revealed that issues related to improving pedagogic practice still needed to be addressed. For example, as a result of reflecting on the negotiations and discussion of the online moderation, Michelle had reconfigured her understanding of standards-based assessment as a possibility for practice. This idea was then renegotiated with her staff as teaching and learning practices for the

classroom. In the following extract, Michelle explained the difficulty she experienced in convincing her teachers to align their practice with her new understanding.

I've got to get the teachers [in my school] to acknowledge the importance and value of it [investigative maths] for them to then be able to plan, and once they start seeing the value in their classrooms – and I've already got a few that are – that's going to be a key part of developing that into our regular weekly planning. (Michelle, Follow-up interview, Year 6 Mathematics, 2009)

Michelle had imagined an identity for herself and the teachers within her school, yet she acknowledged that encouraging others to share this vision could be a long and difficult process. Michelle's imagining involved having other school staff experience the value of such pedagogy by starting with discussions and sharing of experiences amongst staff.

As the result of another moderation meeting, Steve stated that he would be speaking to his staff about the problems associated with "allocating a mark to each question" (Steve, Post-moderation interview, Year 9 English, 2008). Whereas Helen who was involved in the same online meeting stated that she shared with her colleagues the need to search for, and match evidence with the standards descriptors, and not be influenced by the mark already awarded by the teacher. Steve and Helen, while involved in the same meeting, highlighted different learning from this meeting that they believed was important to share with staff to promote their movement into this assessment practice. Online modes of moderation provide a context in which to develop shared repertoires of practice, though as these examples demonstrate, these shared repertoires may be different aspects of a practice. The shared practice and negotiated meaning are renegotiated as the teachers enact these understandings within their local settings.

When these new understandings are shared, negotiated and taken-up by others in the local context, then the brokering or radiating effect of new ideas becomes visible. Wenger

(1998) refers to this radiating effect, as brokering and uses the term to describe the intersection of communities of practice, the place where the practices of one community are adopted into another through the participation of participants in multiple practices. When the concept of brokering is used in the context of online moderation, it is understood as the sharing of knowledge developed in the online meeting with others involved in the local practices of the participants. When participants interact online and then take what they have learnt to their local contexts, the brokering of their learning assists in building that assessment practice. To strengthen the developing practice, the teachers involved in the online moderation need to be good brokers, so that new connections across the boundary or border of the online and the local are clearly and accurately communicated to others. Wenger (1998) states that;

The job of brokering is complex. It involves processes of translation, coordination, and alignment between perspectives. It requires enough legitimacy to influence the development of a practice, mobilize attention, and address conflicting interests. It also requires the ability to link practices by facilitating transactions between them, and to cause learning by introducing into a practice elements of another. (p. 109)

While learning how to act within an assessment system may occur as the result of teachers' participation in the moderation meeting, it is erroneous to conclude that learning will occur. Learning was inhibited when teachers had negative experiences in the online meetings. The combination of new practices (standards-based assessment, and moderation) and a new medium of communication (online meetings) caused some teachers to resist or withdraw from the practice. The practice was alienating to such a degree that learning in this context was inhibited. For these teachers, the moderation meeting was considered to be an end in itself. These teachers made no connection between their involvement in social moderation and their teaching practice. Indeed, when asked in the interviews about any ideas that they had to implement in their classroom after the moderation discussion, many of the

teachers were either confused by the question, or stated 'none'. Of the sixteen surveys that were completed only five participants responded that there were implications for their classroom practice from the online moderation. Most participants left this question unanswered with one participant stating that there were no implications. For these teachers, the process of becoming assessors who work in a standards-based system was not supported by the online moderation meeting. For some of the teachers, the attachment to historic practices and the identity that is attached to that practice may be so strong that new practices are resisted and perhaps viewed as a threat. It was evident that some teachers needed support to make the connection between their learning about standards-based assessment in the moderation meeting and their pedagogic practice.

Moderation meetings work to make explicit, the practices that have become embedded and consequently unquestioned, but this is a challenging process for many participants. The online moderation meeting presents as an unfamiliar social and cultural context for teachers, but one which has the potential to support learning and growth. Changes in identity can be evidenced as teachers enact their understandings in new forms of pedagogic practice.

Conclusion

The imagining (Wenger 1998) and positioning (Holland et al 1998) of oneself as a competent assessor within a standards-based assessment system occurs in the broader policy context in which teachers work. Becoming an assessor who works within a standards-based assessment system and experiencing oneself as belonging to this group are interconnected practices. In some cases, teachers' identities changed as they became immersed in practice.

This discussion has shown that the value of the online moderation is bound in the complex relations between the historical, social and cultural contexts of which the

participants are a part. By participating in the practices that constitute an online moderation meeting, possibilities exist for teachers to learn through their negotiations and discussions about how to become a knowledgeable assessor and teacher in a standards-based assessment system. These understandings may then be reconstructed within their own local, sociocultural context. The challenge for education authorities who advocate the incorporation of moderation as a means to support teachers' development in a standards-based assessment system is to support teachers to see the links between the moderation discussion and their pedagogic practice, and to view online moderation as an opportunity to extend their practice, and development of identity within this practice.

Acknowledgements

The author wishes to acknowledge that the project from which these ideas are derived was funded by an Australian Research Council Linkage Program. I also wish to acknowledge the involvement and support provided by the Partners in this project, the Queensland Studies Authority (QSA), the National Council for Curriculum and Assessment of the Republic of Ireland and Queen's University, Belfast, Northern Ireland. Peta Colbert is also acknowledged for her work in the project, including the initial work with the author in establishing the IT-mediated moderation meetings.

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