Online Communities - Vehicles For Professional Learning?

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Presented to BERA Conference 2002, Exeter

Abstract

The use of online communities for professional learning is an emerging field, particularly in education in the UK. Do the benefits claimed for their use manifest in learning gains, when considering the school improvement agenda? How far are we able to turn the rhetoric into some form of reality and how are we trying to do that?

This paper reports findings from our experience with online learning communities in three contexts. The first relates to the Department of Education and Skills (DfES) and National College for School Leadership (NCSL) Talking Heads Community, which has been established over the last two years. The second involves online learning programmes such as the National Professional Qualification for Headship (NPQH), which we have supported in collaboration with the NCSL. Lastly, the third context is our work on online masters levels programmes in a University.

In this work we explore some of the issues arising from our preliminary research and analysis of the different contexts in building online professional learning communities. Such issues that are emerging include developing participation, promoting supportive yet challenging tutoring/facilitation, structuring learning opportunities, connecting formal and informal learning and overcoming isolation.

Learning, community and technology.

In developing our models of learning online, we have drawn on the work of writers in the fields of learning, community and communications technologies. Our work is at the conjunction of these three fields. In this section of the paper we identify key literature and influence it has had on our work.

The use of new technologies to promote learning in professional contexts is growing and changing. Brown identifies a profound shift in the way we are using technology reporting "a shift between using technology to support the individual and using technology to support relationships" (Brown, 1999). The potential of the use of technology as a means of enabling distributed learning has lead to an explosion in the number of online courses, many evolving out of the traditional distance learning methodology successfully developed by the Open University from the 1970s.

It is our belief that for this technology to be exploited to the full, it should not simply be used to deliver content, but to enable deeper understanding derived from truly participative engagement.

Salmon (2002) identifies four possible models for the future development of e-learning

- programmes based on the delivery of content
- programmes based on learning objects – chunks of content, tasks, assessment activities delivered to the learner a la carte
- m-learning - delivering learning to mobile devices
- learning through participation in online community

We see the content and learning objects models, popular in the debate on standards, as offering a resource-hungry approach relying on the transmission of knowledge. This would appear to us to be unsound for professional development, as it does not allow the engagement of the practitioner in the construction of the knowledge and their understanding of it.

M-learning is, as yet, a little understood option with potential, as the technology moves, on to link in a community model. Our view is in line with Salmon's analysis, that it is the community model that seems to us to offer the most potential as a vehicle for professional learning in the immediate future.

This view is based upon relating the use of technology to what we know of the best professional learning processes including learning through reflection on experience, constructing understanding in work-based and social contexts, and basing learning on the learners needs and priorities. These key ideas about learning are linked to a model of tutoring based upon creating, and 'facilitation' of, an environment where professional learning is enabled and

supported. Fundamentally, we believe that design of online learning models necessitates the use of communities.

Schön, (1983) introduces the concept of reflection-in-action (and as a passing and ill explained reflection-on-action) as a process by which professionals solve problems (*learn*) by using their 'intuition' drawing on their own past practical experiences whilst reflecting on what they are doing. Eraut (1994) raises many criticisms of Schön's work, but particularly pertinent is the lack of a significant temporal element to the process of reflection. Central to our work is the opportunity afforded to learners to take "time out" to reflect in asynchronous discussions. This is a particular strength of online communities, which offer us this ability to provide an environment that can accommodate reflection.

This is both as a metacognitive approach to learning, "the thinking about thinking which informs decisions about what to do next" (Eraut, 1994:144) - a theorizing about learning, and as a form of deliberation "interpreting and understanding cases or situations by reflecting on what one knows about them" (Eraut 1994:156). Table 1 below, taken from Eraut (1994), describes this continuum from instant recognition and rapid interpretation (Schön's (1983) reflection-in-practice) to deliberative analysis. For professional development in online learning communities, it is the deliberative analysis that is important. Through our use of online communities we provide the online learner with the opportunity for reflection-on-action.

	Speed		
Analysis	Instant recognition	Rapid interpretation	Deliberative analysis
Decision	Instant response	Rapid decisions	Deliberative decisions
Action	Routinized unreflective action	Action monitored by reflection	Action following a period of reflection

Table 1 From Eraut (1994), Analysis, Decision and Action in professional learning contexts

A social constructivist approach to learning is a key foundation in our philosophy, which is based on the work of Vygotsky and his notion of the zone of proximal development (ZPD) in which the tasks and concepts that are still being developed are within a learner's ZPD (Vygotsky, 1978). A learner progresses with concepts so that they extend their ZPD by dialogue with others and through self-dialogue.

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Palincsar (1986) is most explicit in considering dialogue: it is the means by which learners are provided with scaffolded and reciprocal instruction. Dialogue is structured by the use of four strategies: summarizing, question generating, clarifying and predicting. These are essential components in the discussions used for social learning in online communities.

The role of the facilitator / tutor in these discussions is essential. Research by Ultralab (2002) shows "We similarly observe that the role of the online "teacher" moves from directing to enabling online learners as they move from dependence to ownership." This approach is supported by research of Stephenson (2001) who developed a paradigm grid for online learning which illustrates the options available in an online context (see figure 1 below). A key finding is the importance of clearly aligning the expectations of learners with the intended pedagogical approach, if learners are used to or expect to work in the NW quadrant then a course designed for the SE quadrant will lead to less successful outcomes. How we use the technology, and the model of learning we adopt is vital in empowering learners to control and direct their own learning. Throughout our research projects, however, the role of the tutor or facilitator has remained key. Empowering learners is not the same as leaving them to their own devices.
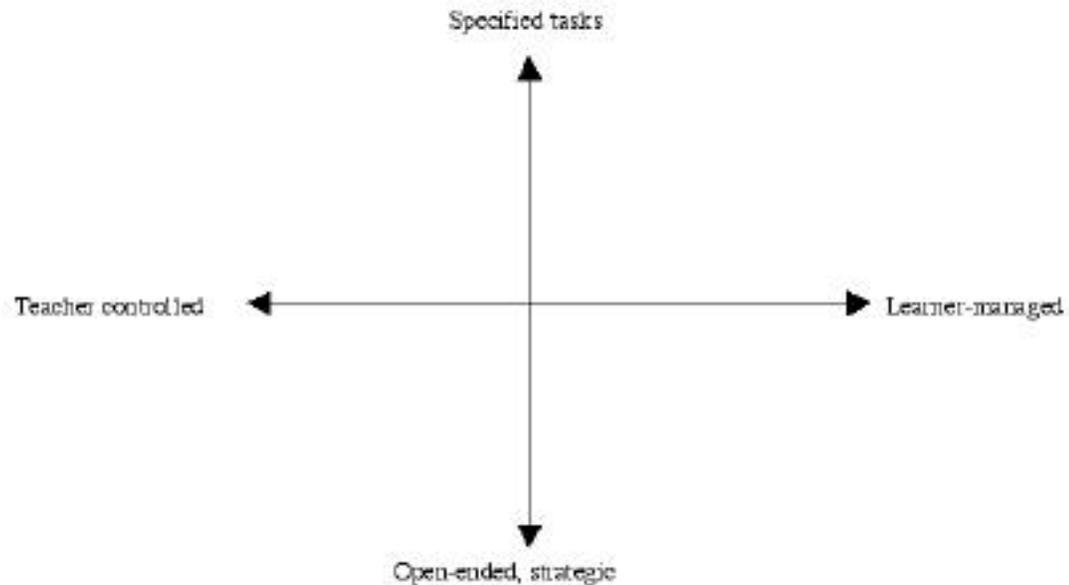

Figure 1 A paradigm grid for online learning
Coomey and Stephenson in Stephenson (2001)

Lave and Wenger (1991) use the concept of apprenticeship as a framework in their exploration of 'situated learning'. For them, situated learning is more than simply 'learning by doing', and it required the development of a theoretical perspective to clarify its meaning and make it explicit. This lead to

the development of the concept of "Legitimate Peripheral Participation" (LPP), where learning is seen as an "inseparable aspect of social practice" (Lave and Wenger 1991).

Lave and Wenger (1991) locate learning in social participation, not in the mind of the individual. They see learning as a feature of our everyday interactions or 'participation' with a world of institutions, norms, systems, developed as a history. Participation through established systems and practice leads to an ongoing construction or 'negotiation' of meaning, building upon our past experiences, developing the identity of the individual in the community.

Wenger (1998) developed the concept of communities of practice (CoP) using LPP as a theoretical model for the process of learning. As a new member of a CoP we engage around the periphery of a community and as our knowledge, skills, and understanding of its practice develop we move towards the 'core', becoming established in that community, evolving our identity. This process has the effect of bringing new experiences and ideas and an ongoing negotiation of meaning for members of that community. In trying to nurture learning, the key issue is how to promote the conditions for social engagement in an appropriate context. On a more pragmatic basis, Wenger (1998) identifies three key components of CoP:

- community - social interactions and relationships between individuals;
- practice – the means by which historical ideas and skills are talked about and developed;
- domain - the focus or purpose.

Wenger argues that by focusing on these three elements it is possible to create the conditions that will enable a CoP to develop. These are not seen as concrete rules, more as a pointer to what needs attention if a healthy CoP is to develop. A key distinction between this and other theories of learning is that it moves away from the focus on cognitive processes and conceptual structures. developing the "distributed intelligence" (Brown, 1999) of that community.

Learning is a social activity, with knowledge constructed through the active participation and engagement of learners. Learners must share the common domain for the learning community to be evident.

There is an important distinction to be made here between this theory of learning and that put forward by Vygotsky. Unlike Vygotsky who sees this social interaction as a purely benevolent relationship, Wenger explains that the relationship may be exploitative. For Bruner (1996:151), this situated learning is about knowing "how to do things long before we can explain conceptually what we are doing or normatively why we should be doing them".

Eraut (1994) sees this blend of experience in the form of tutors or mentors, and colleagues or co-learners as providing different perspectives, sharing resources, offering mutual support and motivation.

Knowles' (1984) model of andragogy has four strands that, he claims, underpin adult learning. This model states that adults learn best when learning is:

- based on solving problems not assimilating content;
- negotiated with learners, so that their expectations and needs are met;
- relevant to their immediate context, in their professional lives;
- experiential.

In developing online community and associated learning activities these principles have been adopted by Ultralab researchers. With the online medium being textually based, there is reluctance by some learners to move from the content and engage in the problem solving, experiential contributory discussions.

Hiemestra (1994) sees "self-direction in learning is a term recognizing both external factors that facilitate a learner taking primary responsibility, and internal factors that predispose an adult accepting responsibility for learning-related thoughts and actions." This definition recognizes that optimum learning conditions exists when the individuals motivation and ability to be self-directed is balanced with the opportunity to take control of their learning. Hiemestra points out that when questioned most people state a preference for this type of learning. For an individual this means into the ability to assess, plan, implement, and perhaps evaluate the effort. Hiemestra (1994) claims that when asked, most people, will proclaim a preference for assuming such responsibility whenever possible.

The theories of learning and professional development lead us to develop an asynchronous online learning community environment where collaboration, social and reflective learning, supported by tutoring or facilitation, are the key factors in its development. The rest of this paper describes the findings we have from researching the use of online communities in large scale professional learning projects.

Methodology, data and evidence base

At Ultralab we have been engaged in developing online learning projects since the early 1990s. Since January 2000, we have worked with the UK's Department for Education and Skills (DfES) and, after its establishment by the Department, the National College for School Leadership (NCSL) in the use of online learning communities for school leaders. As part of Anglia Polytechnic University (APU), we also run online modules in the MA in Education's CPD field and projects with serving teachers undertaking action research. These are also based wholly, or partly, in online community.

We adopt a case study, ethnographic approach. In establishing the value of any particular component to the learning of an individual, we are inevitably engaged in the collection of interpretive data as learners reflect on the impact of the components on their own learning. We cannot ever be absolute about the veracity of the data as the evaluative and reflective comments are necessarily the opinion of those canvassed.

Throughout these projects we have collected data through interviews, surveys, both online and in paper form, and external evaluation reports. We have also built in reflective activities to the communities themselves and the contributions to online dialogue provide evidence of the learning process in action.

Case Studies and Key Findings

Case 1: Talking Heads - an online community for headteachers

Talking Heads is an online community for headteachers established as a pilot project by the DfES in February 2000, developed into a working model and placed under the remit of the National College of School Leadership (NCSL) in August 2000. From its inception through to the current date, Talking Heads has been a research and development project based at Ultralab. The project has focused on developing and engaging in informal online learning community through active facilitation by educational professionals trialling a variety of strategies. The project's aims were to reduce isolation and to enable headteachers to share good practice.

The original pilot project began with over 1300 members, and developed into a phased introduction to large-scale use from 2001 onwards. At the time of writing membership of Talking Heads is approaching 6000.

The fundamental challenge faced was generating participation, without this there is no online community. The theoretical frameworks outlined in the literature review gave us starting points as to what conditions might generate participation. It is our contention that a multi-faceted approach – community, self-direction, networking, online events - building on the different models for learning and professional development produces the highest rates of participation. This case study report summarises our findings from working in and researching the Talking Heads communities.

Informal online communities are effective in enabling professional learning, but to make them successful is a complex task requiring a number of component elements to be put in place. It is easy to underestimate this complexity.

It is possible to generate a vibrant and relevant online community that also enables headteachers to generate and exchange insights regarding their practice, considerably assisting in building capacity for school improvement. For the individual at its most effective, this manifests itself in headteachers taking a self-directed approach towards their professional learning.

There are considerable practical time implications for active membership of communities. To commit to this level of participation, Headteachers need to clearly understand the philosophy and value of online community.

The technology employed means that online communities are easy to start. However, to develop and sustain new communities requires clear planning and design and central to this process is a clear community purpose or identification of a well defined domain that community members want to commit to.

The overriding factor behind building commitment and purposeful activity is the role and activities of the facilitator, who has professional educational knowledge and builds personable and purposeful relationships with headteachers. Facilitation is a complex, skilled, professional task.

Relevance and topicality of large community conversations are key – they work best when mirroring the external impacts on a headteacher's work at a given time in the year.

The development of online social relationships and a feeling of openness, trust and mutual support between headteachers is key to building participation in small communities. These small communities then provide an excellent support environment, especially when commitment to participation is embedded into the community's purpose and development. Comments from the longitudinal case study showed that the intimacy of the group of headteachers had reduced with larger numbers and that their participation had diminished.

It was also reported to be more difficult to find a way around the communities - clear navigation and a simple structure is a key factor to ensure re-participation.

Hotseats where external guests are brought into the community for a specific purpose and time are an effective and popular tool to facilitate a variety of expert/ headteacher interactions. They need to be scheduled and promoted in advance with careful closure and summary. In particular the case studies showed that hotseats were seen as useful areas to visit.

A significant amount of useful participation is not immediately apparent; the case records reveal that the overwhelmingly frequent participation was as a reader, browsing through communities that headteachers' had an interest without contributing, but instead communicate with each other via email and stickies. This does not diminish their sense of ownership of, or identity with, the communities.

Careful structuring of questions and conversation starters is likely to increase contributions to conversations.   The longitudinal case study showed that Headteachers were put off by questions that remain unanswered.

Case 2: NPQH and the Bursars' Programme.

The National Professional Qualification (NPQH) programme was remodelled and relaunched in January 2001. Aimed at teachers aspiring to school headship in England, the evaluation that led to the redesign emphasised the need to focus on learning and assessment through school-based activity, the practitioner as reflective learner and the use of ICT in delivering learning opportunities.

Ultralab were contracted to research and develop the use of online learning communities. Working with the Department for Education and Skills (DfES), and later the National College of School Leadership (NCSL),and the ten regional training providers across England, we established a three-tier model of community. A national community, named Virtual Heads; regional communities, for discussion with others enrolled on the same stage of the programme (access stage or development stage; and tutor communities, for candidates to share summaries of learning with their tutor.

Our preliminary findings were reported to BERA in 2001 (Bradshaw, Chapman & Gee, 2001):

- Candidates more readily engage in a direct question and answer with a nominated expert (the hotseat) than share their learning with peers.
- Summaries of learning presented to tutors often contain a richness that is not borne out by the contributions in public debate.
- Some candidates need to have feedback from, and presence of, their tutors in the community spaces to sustain the discussion.
- Moving tutors from 1-1 to community/group discussion requires both acceptance of the new technology and understanding of the new culture. Where tutors have problems, they often fall back onto e-mails with individuals.
- Candidates read 5 to 10 times as much as they contribute. This is in line with other online community projects run at Ultralab.

In the year since these findings, we have refined and developed the model of communities. Firstly, the regional discussion groups have been enlarged to include all candidates in a region. Previously there had been two or three groups per region, these were amalgamated to form one per region. Secondly, The tutor/candidate communities have been merged so that each tutor has only one community. All candidates' summaries of learning are open to all other candidates in the group. Previously each summary was private between the candidate and tutor. Finally, special interest pages have been added to the national community for candidates in special school settings and for those in church schools, or those of a particular faith.

Ultralab has also been engaged in the development of an online community for the Certificate of School Business Management Pilot. This is an NCSL

programme aimed at school bursars. One of the significant features of the programme has been the introduction of blended learning – mixing online learning community with a managed learning system. Unstructured feedback from learners is that they appreciate the community and see it is the centre of their learning – a place where they learn with others. The findings and experience from NPQH influenced the learning and community models used in this pilot project. The project and its evaluation are the subjects of a separate paper at this year's BERA conference.

We have undertaken research into the strategies adopted by tutors in online communities, through interviewing key informants and analysing community interactions. Since January 2001 some 500 tutors and 7500 candidates have been engaged in the NPQH programme. The current cohort consists of 2800 candidates working in over 250 learning communities.

There are two interlinked aims to our work in online community. Firstly, we are concerned that learning is demonstrated through impact on candidates and their practice schools. Secondly, we are promoting the use of online community for learning, and are therefore looking to maximise participation in those communities.

Here we discuss our key findings for effective strategies for online teachers, to address those aims.

The use of time-limited activities.

The first cohort of NPQH candidates had a structure in which each of 16 units was timetabled for discussion over a given two-week period. The discussions were only live during that time. We found that there was little participation as the use of online communities encourages learners to choose when they wish to engage and two weeks is too short a time frame. The second cohort were given an open-ended set of discussions, with all units being live at once. This had the effect of diluting contributions, with too many spaces to contribute in. The current cohort has a mixture of time-limited discussions, running to a less rigid timetable. Where tutors have matched this with explicit requirements for summaries of learning to be posted for those units under discussion, candidates have engaged more readily in the discussions.

Induction process for online learners.

Candidates have a one day face-to-face induction session. From cohort 2 in the Autumn of 2001, the expectation is that this session will be conducted at a venue that supports the use of ICT so that the use of online communities can be an integral part of the induction process. Where tutors set an expectation that the online activity introduced at induction will be continued in the weeks immediately afterwards, learners are more likely to log in into the online space

in the weeks immediately following the induction. In one region this has been most marked where candidates have been set specific tasks ('homework'), followed up by e-mail, for each of the first six weeks of the programme.

Encouraging participation by also using the online environment as an area for social interaction.

When engaged in any CPD activity, teachers often report that the social interaction and networking is as important as the formal sessions (Terrell, 2002). To engage learners in online community, opportunities for social interaction have been provided by some tutors. These allow for the informal networks developed at induction to continue and provide an online equivalent of the face-to-face meetings arranged by candidates.

Support for community discussion through reminder e-mails, telephone and synchronous activities.

The online space can be an isolating one, with comments made asynchronously and by individual remote learners. Candidates appreciate tutors who support the community through other channels of communication. In a survey of 60 candidates in July 2001, 32 mentioned this as a benefit. E-mail and telephone must only be used a supplement to community interaction however. In studying two tutors, one who fed back in community and by other means, and one who only used telephone and e-mail feedback, it was found that the former had almost twice as many contributions to shared summaries of learning than the latter. Some tutors have begun to explore the use of synchronous 'chat' sessions for online 'meetings' with students. It is too early to report on the effectiveness of this strategy in terms of increasing participation, but it is a tool that appeals to certain learners on other programmes.
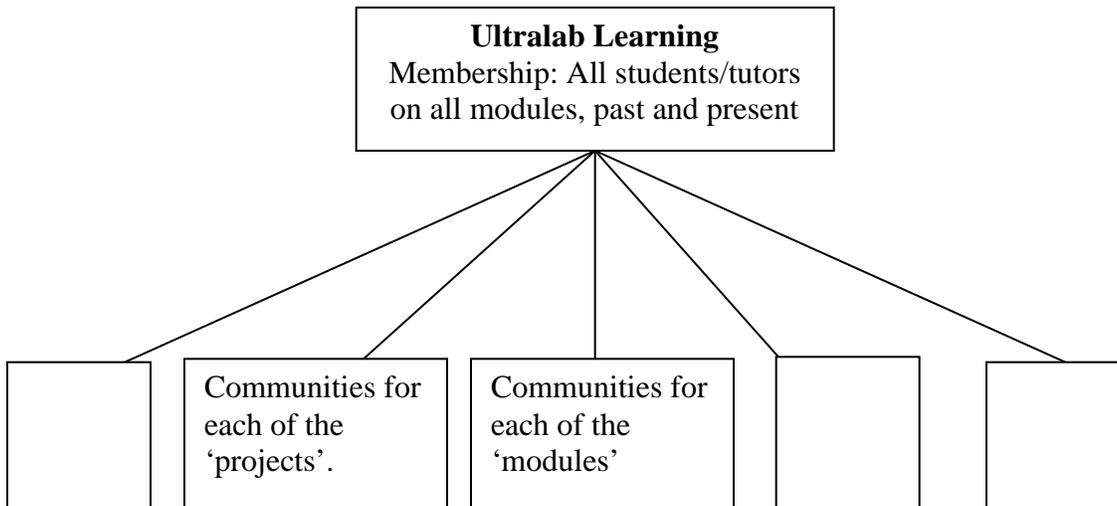
Modelling behaviour and presence.

The tutor above, who uses e-mail and telephone, is not modelling behaviour in the online space. Where tutors are overtly engaged in conversations, providing feedback, setting focuses, acting as either facilitator or expert, candidates are more likely to respond. Where the tutor is not overtly engaged, candidates are likely to focus on the barrenness of online space. It is also apparent that where a tutor or hotseat guest provides lengthy answers, this will invoke similarly lengthy future contributions. There is a fine line here between the desire for brevity for readability, and the need for in-depth responses for deep professional learning.

Case 3: Ultralab Learning

As part of its contribution to APU's MA in Education, Ultralab have been running online modules since 1996.

In 2001, the online space used for these modules was rationalised and an online community, Ultralab Learning established. Those enrolled on MA modules or other programmes such as the West Essex Action Research (WEAR) programme, are members of this community. The space is an overarching area, used for induction and social discussions. Students also use it to share thoughts and learning from their module in a more general context. The metaphor being used is one of a university social area. Online this, social, part of the space is known as The Shack, after a student bar at the former Brentwood campus of the university.

Students can download guidance material for and tutorials from the Ultralab Learning community. These are held centrally so as to remove the need for duplication, and to prevent valuable materials being locked in private community spaces. From Autumn 2002 this community will also house the cybrary, that is the resources and links used on the individual modules and programmes. Specific discussions related to specific modules, with links to appropriate part of the cybrary, are housed in the learning community spaces dedicated to particular to those purposes. Students are thus members of two communities – Ultralab Learning and that relating to their specific module or programme.

Ultralab Learning
Membership: All students/tutors
on all modules, past and present

Communities for each of the 'projects'.

Communities for each of the 'modules'

Also in 2001, a new module was developed aimed at those who are engaged in teaching, tutoring or facilitating online programmes. The module, Online Learning: Tutoring and Facilitation (OLTAF) provides a 30-credit masters level award. More significantly, maybe, is the fact that it puts those online teachers in the position of online learners. In doing so, we explicitly ask those enrolled on the course to reflect on how it feels to learn in this environment and how they perceive the impact of the learning on their role. One participant reported,

> *One of my first learning points has been to feel the pressure of having to make contributions in order to support the community. My response to this is to try to concentrate on the key points in discussion and support the insights of others. It will be interesting to explore the notion of community for learning as a learner without also being the tutor.*

The OLTAF module, is assessed in the traditional manner of assignments handed in at the end of the module. For one of these assignments, learners are required to submit an annotated portfolio. This consists of snippets from the module and their own practice, with reflections on the effectiveness of tutoring, styles of learning, space design, and evidence of learning.

Key findings and issues

Informal versus formal professional learning spaces

The Shack is used an induction space, and so all are encouraged to contribute there initially. When analysing the contributions in 'The Shack', it is clear that some students feel that this is as natural a place to discuss their learning as the more formal module space. Those who have contributed at least three comments in The Shack have also contributed at least three times to each unit's discussion in the module space. On the other hand, over a quarter of students do not contribute to the space after they have made their introductions, preferring instead to contribute in the more formal space. This reflects different attitudes to the use of social conversation, the nature of which is overt online. Three contributors to the Shack made no contributions in the formal module space, and withdrew from the module.

This concurs with findings from evaluation interviews and reports. Those engaged in CPD opportunities, whether online or face-to-face regard the social interactions and informal meeting places to be as important as the timetabled sessions (Terrell, 2002)

The contributions in The Shack are not all social in nature, however. The three most frequent social contributors also engaged in a discussion with tutors about the nature of asynchronous conversations and their role in learning. One of

these three was from a different module group to the others, illustrating the use of the overarching space for bringing students together.

> *The orientation time was useful, but I can see a need to balance the 'playing' and 'wanting to get on' according to different needs and experience. Welcoming comments in the Shack are good icebreakers…*

Formative versus summative learning.

There is a tension between the formative nature of learning exhibited during the conversations and the requirement for a summative report to be submitted at the end of the module. The structure of the modules relies heavily on the use of asynchronous discussions. Some students feel that they are repeating work by having to write an assignment at the end, and their main reason for enrolling on the module is for pragmatic practice-related learning wish they perceive as disjoint from the demands of the academic masters level criteria.

> *In honesty… I'm not really concerned about the assessed outcome of the unit. I'm working this course as a stand alone to experience online learning and to learn about its methodology. Hopefully this will help me to tutor on NPQH more effectively.*

This attitude often causes students to fail to submit work to the deadline or standard required as they have gained more from taking part in the course than from the demands of the formal assessment.

Accrediting contributions

Addressing the above, we have considered the accreditation of comments in the discussions. We have looked at models used elsewhere (e.g. Open University IET, Stirling) in which marks are awarded for the contributions of students during the asynchronous conversations. We have a problem with this being a driver for participation as we feel it could distort the authenticity of comments, with students contributing purely to gain marks. Developing this model, however, we have an assessment of student portfolio, supplementing the action enquiry report.

Practice knowledge versus propositional knowledge.

The portfolio is created through the collection of screen shots of conversations in the module, and comparative examples from the students' own practice or elsewhere. These are then annotated to make the learning explicit. For example, students are asked to look at the style of facilitation and tutoring used in the module and elsewhere and comment on its effectiveness. This assessment product allows second-level reflection. At the first level, students are reflecting on styles of tutoring as the asynchronous discussion proceeds.

They then reflect again on their, and others', comments when their portfolio is submitted.

Both action enquiry report and the portfolio are grounded in the students' own professional practice. We believe that professional knowledge is based in the students' own actions and the module is designed to make this tacit knowledge explicit. In doing so we provide a context of background texts. We have found that some learners prefer to base their learning in the reading rather than in their own work, devaluing the latter in the face of textbook knowledge. This effect is amplified by the learning style of some who prefer to read all resources before engaging in discussion. One participant reported that,

> *I am drawn to a theoretical base/models first so I prefer to read a paper/article first and then join a conversation. I suppose someone with a preference for action might join in a conversation first and see that as a stimulus.*

Impact of software and design

Some students use the CMC software as a barrier to participation. One group of students were averse to its use and preferred to focus on the technicalities of the environment rather than the interaction with others. To minimise this effect we have redesigned the interface to provide less need for navigation and providing more structure within the module. We have found that we have reduced the number of negative comments about the software by having

- fewer places to contribute
- fewer units per module (five, as compared to up to eleven in earlier modules)
- only one or two units live at any one time, with only one conversation per unit
- static pages with navigation to conversations remaining unchanged throughout the module

In the latest cohort we have only had three comments in the 'help desk'. This is the space for students to ask about structural and technical issues. This compares to an average one or two comments a week during the whole of the previous 12-week module.

Distance learning and e-learning

As stated above, some students will read all the resources made available to them before they feel able to contribute to discussions even stating that they are not prepared to discuss anything before they have learned about it. Individual preferences for learning styles play a part here as no doubt does past experience and expectations of what constitutes learning. Stephenson 2001

accepts that this should be both expected and worked with. However, this approach does undermine the importance of learning from experience and from practice. Hence finding the right blend and timing for learning from reading, reflection on experience and from discussion is a central facilitator problem.

We have found that by providing fewer resources at the beginning of a conversation, and focusing the discussion on students' own practice reduces the effect of this time-delay. We have also built in reading weeks into the programme, and made the conversations and activities more time-limited. Our experiences concur with those reported by Martin Owen (Owen, 1999) in that the use of conversations alone is not enough. They must be supported by resources, activities and support the recording of learning in portfolios.

Collaboration and community

Speaking at the UACe conference in Bath in March 2002, Mary Thorpe of the Open University's IET spoke of the 'rhetoric of collaboration'. Asynchronous discussions are by their nature not conducive to shared contribution, as members can post at any time. We have introduced activities that force students to work offline in pairs to come up with findings that they then post for others to comment on. This also has the effect of reducing the dependence on the online discussion, providing variety of activity and reducing the isolation of remote learners. This isolation is exemplified by a student reflecting at the end of a completed module:

> *I feel that the notion of an online learner is great, but the experience must not be too solitary. Even if there is only one student enrolled - I think lecturers, APU students from other modules, etc should be encouraged to engage in the debates. Learning in isolation can really narrow and constrain thinking, from my experience.*

It is to address this last point that the overarching space is open to lecturers and students from all modules. There is a tension here between the asynchronous conversation, which on a surface level consists of collaboration collaboration between learners, and the lack of direct interaction between them. This space is a genuine community of practice with members sharing the common practice of being engaged on a learning programme, within the domain of professional development. The community aspects of learning are touched on in evaluation feedback

> *The whole experience of online learning has opened up a developing interest in the whole ethos of online communities.*

This is despite the fact that we have not brought the community aspect explicitly to learners' attention, preferring simply to use the online community as a vehicle for learning about the subject matter of the modules, rather than

about online community per se. Indeed, we often have to stress the need for learners to participate in discussions throughout the programme, where they do not share the passion for community displayed in the quote above.

The Online experience of 'Time'

It seems to us that time in an online learning programme exhibits some unusual behaviours, at least in the minds of participants. In the MA modules, as in NPQH, we have experimented with having few or many units and conversations open at once. On the one hand, the asynchronous nature of the space allows time to be slipped and for students to contribute whenever they wish. This should be liberating, and is a theme that appears in evaluation comments from learners. One commented on this liberation of time:

> I have welcomed the opportunity to continue my own professional development within my own time without geographical constraints…

On the other hand, time slippage has meant that students typically look to deadlines to complete activities and without them, fail to participate. It is as if with no structure to time, students cannot structure their learning. We have moved to a set of time-limited activities with a clearly defined pathway through them. This has been criticised by some students who look to e-learning to provide open paths.

> Time restraints on discussions have been the greatest barrier to the action enquiry module, being ready to contribute to a discussion, only to find it ending two days earlier. It would help if all discussions were open until completion of the module.

Previous models of having all conversations open at any one time have resulted in little or no interaction, however, as the presence of learners in any one conversation is diluted.

Push v pull:

We have found that students appreciate regular e-mail updates on the developments in the module, even if they are regular contributors. As one student put it

> The weekly follow up e-mail was excellent as it helped keep me on task.

Conclusion

In this formative work we have outlined through an analysis of three different contexts for online professional learning both the possibilities and tensions in developing online communities as vehicles for professional learning.

Clearly the use of new technologies has considerable potential in developing professional learning possibilities. Such communities enable exchange and interaction, reflection on experience and the construction of understanding. They enable support networks to develop and are a means of talking about and developing practice. In this respect they provide and opportunity for the school improvement agenda. School leaders, and teachers engaged in action research are developing their own practice, while sharing and reflecting on that of others. The design of the learning communities and activities is such that solutions to problems are generated by, and elicited from, the learners, and not embodied in propositional knowledge.

However, much needs to be learned in terms of how to structure and facilitate such communities if their potential is to be fully exploited. The key to such professional learning communities lies in the interaction and at the heart of this is the participation and activity of the individuals in the community. This participation requires skilful facilitation in terms of managing some of the tensions we have outlined.

This facilitation focuses upon developing ownership, meeting needs, developing relevance to work place contexts, creating purposeful leadership, creating and sustaining online relationships, and developing individual and collaborative identities. This clearly goes beyond merely providing information and setting individual learning tasks and hence is more complex. Further work and research is clearly required in this developing field.

Bibliography

Bradshaw P, Chapman C, & Gee A (2001) *NPQH interim developments* accessed at http://www.ultralab.ac.uk/papers/npqh/bera2001paper.htm on 31 July 2002

Brown, J. S. and Duguid, P. (1999) *The Social Life of Information* Harvard Business School Press. Boston.

Bruner, J. (1996) *The Culture of Education*. Harvard. Cambridge, Mass.

Eraut,M. (1994) *Developing Professional Knowledge and Competence*. Falmer Press. Lewes.

Hiemestra, P (1994) *Self-directed Learning* in Husen, T. & Postlethwaite, T. (ed) *The International Encylopedia of Education*. Pergamon. Oxford.

Knowles, M. (1984) *The Adult Learner: A Neglected Species 4th Edition*. Gulf Publishing. Houston.

Lave,J. & Wenger, E.(1991) S*ituated Learning. Legitimate Peripheral Participation*. Cambridge University Press. Cambridge.

Owen , M (1999) *Technology Situated learning and the Professional Development of Teachers*. Accessed at http://rem.bangor.ac.uk/~mowen/reflect/profdev.html on 31 July 2002

Palincsar, A (1986) *Reciprocal Teaching* in *Teaching Reading as Thinking*. North Central Regional Educational Laboratory. Oakbrook, Illinois.

Salmon,G (2002) *Pedagogical requirements of VLE's: PETS & PLANETS The 24 hour university: Stretching the Limits*. Accessed at http://sstweb.open.ac.uk:8282/oubs/gilly/download/Salmonleeds.htm on 4 September 2002

Schön, D (1983) *The Reflective Practitioner*. Basic Books. New York.

Stephenson J (Ed)(2001) *Teaching and Learning Online*. Kogan Page. London.

Terrell, I (2002) *The Impact of CPD in HE on Teachers and their Institutions*. PhD Thesis in preparation.

Ultralab (2002) *Private development plan report to NCSL*

Vygotsky, L (1978) *Mind in Society*. Harvard University Press, Cambridge, Mass.

Wenger, E (1998) *Communities of Practice.* CUP. Cambridge.

Wenger, E (2002) *Cultivating Communities of Practice.* Harvard Business School Press. Cambridge, Mass.