Open Research Online

A report on the ULTRALAB's development of online components in NCSL programmes

Pete Bradshaw, Carole Chapman, Alison Gee

July 2002

Contents

Online programmes introduction

This report is one of two produced by ULTRALAB for the National College of School Leadership (NCSL). Here we discuss the research and development of online components of two NCSL programmes. The other report looks at the Talking Heads project, an online community for Headteachers in England.

This report considers our work on two NCSL programmes. The new model National Qualification for Headship (NPQH) had its first cohort of learners in March 2001. ULTRALAB was involved in consultancy with the DfES, the writers of the programme materials and the ten regional training providers, in setting up the online elements from September 2000. The online community aspects of NPQH were established using think.com software, with the name Virtual Heads chosen for the overarching national community.

The pilot for the Certificate of School Business Management started in February 2002. Our involvement here was to develop the online community and support the tutors in its use. The online community aspects were established using think.com software, with the name Bursars' Count chosen for the overarching national community.

This report consists of five sections:

1   Background and ULTRALAB's philosophy of online learning communities

2   The story of the development of online NCSL programmes

3   Lessons for online teachers, taken from the NPQH experience*

4   Lessons for online learners, taken from the NPQH experience

5   Key findings and recommendations

* throughout this report, the phrase "online teacher" should be taken to include online facilitators, mentors, coaches, tutors, mediators, trainers and moderators.

Section 1

1.1 Background

As this century unfolds social change makes it necessary for our education system to be dynamic, adaptable and creative (Brighouse, 2000). It is accepted that over 60% of the jobs that pupils currently in our education system will be undertaking by the year 2010 have not yet been thought about. This requires education leaders who can be flexible and adapt to the challenges the future brings (NCSL, 2002). One of these challenges will be the continually changing pattern of learning. For example as online assessed courses are developed across the world, learners will be able to study at their own pace, in their own timelines and opt for those courses best suited to their needs from any number offered across several countries.

Powerful online tools can support learning programmes by combining pre-existing or purposely designed course content with collaborative online learning environments and reflective dialogue. Methods of communication using asynchronous online conferencing allow us not only to extend learning beyond the confines of traditional professional institutions but also allow a loosening of the traditional course's time restrictions. The online elements of programmes offered by the National College for School Leadership (NCSL) were purposely asynchronous, enabling busy professionals to study at their own pace and in their own time.

Computer technology can be used as a conduit to deliver content (Information Delivery Technology) or it can help support the building of deeper understanding (Information Communication Technology) through participation and engagement (Heppell, 1999). How we use the technology, and the model of learning we adopt is vital in empowering learners to control and direct their own learning.

1.2 ULTRALAB's philosophy underpinning online learning programmes

Learning can only be truly successful when learners are fully engaged and able to explore their understanding by dialogue and negotiation with fellow learners. In doing this they test their learning, refine and develop it. Ultimately they control, own and pace their learning and its structure. This philosophy that empowers learners to control their own learning complemented the underpinning philosophy of the new National Professional Qualification for Headship (NPQH). The NPQH programme developed in 2000 was designed as a dynamic, flexible programme with an underpinning philosophy of constructivism and participation. The course enabled the learner to select areas of study, to be self-paced, and thus self-directed and to enable pragmatism to develop into a more reflective dialogue based on theoretical models of leadership. Empowering learners is a key foundation in ULTRALAB's research 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 move outside of the ZPD by dialogue with others and through self-dialogue. In both the NPQH and Certificate of School Business Management, the expectation is that learners will not only contribute through dialogue, but will reflect on the learning that takes place. In this sense both programmes fall into the constructivist model. Palincsar (1986) is most explicit in considering dialogue; It is the means by which learners are provided with scaffolded instruction. It is through this scaffolding that social learning takes place (Bruner, 1996).

In both the NPQH and Certificate of School Business Management, we have observed learners taking ownership of their learning through active participation in communities as

Module 1. Strategic Direction and Development of the School

Vision!

By **Jane Hewitt**

Be selective, succinct and inspired and jot down 3 key words that would feature in YOUR vision statement.

The latest entry is, *"Respect, Expect, Achieve"*

1.1 Determining the Curriculum

What values do you see as most important in underpinning education (reference Activity 1 page 9 in the unit handbook)? Are specific values made explicit in the aims and objectives of the curriculum in your school? If so, how? What structures are in place in your school for monitoring, evaluating and reviewing the curriculum to ensure that there is full curricular entitlement and high standards are achieved and maintained? What, if any, changes would you make and why? Who would be involved and how?

says, "I think that high expectations are an essential part of all schools, but that there needs to be high expectations of all members of the school community, particularly ourselves."

1.2 Vision into Action

How would you begin to develop a vision statement as a new headteacher? Who would you consult and how? In order to realise the vision what would need to be addressed in practical terms? What procedures would need to be established for monitoring and evaluation? Activity 1 page 7 of the handbook for this unit could be a useful starting point. Remember it is worth noting the links made to other units in this module.

says, "I have been considering just what the Vision Statement ought to say. It may be that it should sum up in one sentence, almost, the purpose of the school. The function of any school, surely, is to educate individuals. I suppose it comes down to what this means. It's arguable that the vision need not contain statements concerning the means. Obviously there are responsibilities to the stakeholders. However, the ways and means of ensuring that these responsibilities are met are really part of the development plan, the management structure, the routines. It seems to me that the vision ought to come before all of this. It is easy to sound glib about this but I have been wondering whether the vision statement should read, "This school aims to do everything it can to maximise the stakeholders' gain". By referring to the stakeholders, all parties are then included. It becomes an exercise in improving the 'gain' of all stakeholders. Clearly this leads to a balance. But surely this is what all schools are trying to do. There are, of course financial balances regarding how to improve the environment against the cost of new elements of the curriculum. Then there are 'goodwill' balances between what parents may require and what is possible to provide. A curriculum manager has to balance what the students are demanding against what the staff have to offer. The head balances the legal requirements, as demanded by the Governing body, against the best way forward for the school. It seems to me that almost everything that will be included in the development plans of any institution will be a direct result of trying to fulfil the statement above."

1.3 School Development Planning

What are the key elements of a good school development plan? As a new headteacher what factors would you take into account when reviewing and updating the current plan? Who are the stakeholders who should, or could, influence the plan?

says, "I have a clearer understanding of the structure of development planning. Within the module there were some good exercises and activities encouraging thought about the how and why of planning. I am concerned that may not be able to read OFSTED reports correctly since my priorities after reading the information seemed to be very different to those of the school. Did anyone else believe that an improvement to teaching generally would benefit a number of areas of school and that the report seemed to be crying out for a system of monitoring teaching and learning to be put in place? I feel that I may need to do more work on this."

1.4 Accountability for Improvement

Why are accountability, monitoring, review and evaluation so important? What successful strategies and procedures are established at your school for self-review, self-evaluation and self-development? Are there others you would adopt if you were the headtacher? Remember it is worth considering the links with other units as noted on page 3 of the handbook for this unit.

Image 1.1 An NPQH module discussion group, tailored from the printed activities

they move from a model of dependence and structure to one of initiating and leading discussions. This progression has been apparent even in the smaller shared learning spaces on the NPQH programme where online teachers 'set up' pre determined discussions. Learners soon take the lead role and have 'driven' the conversation by initiating discussions that concern their direct professional development. At the same time online teachers have used their expertise to break away from structured tasks to develop community spaces to fulfill the needs of their group of learners.

This is a necessary process if online teachers and learners are to take control of the communities and a necessary process for disengagement of the facilitation team. This mirrors what happens in a traditional classroom, with the effective teacher allowing learners to take control of their learning.

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 confirms the model posed by Chapman and Ramondt (1998) and is underpinned by Vygotsky (1978).

When establishing the online element of programmes, it is essential to determine its purpose and how it fits in with the rest of the programme. To be effective, it must be seen as an integral part of the programme – both by programme designers and learners. By integrating all components, learners are more easily scaffolded to take ownership of their learning. Development of understanding in one component can be applied in another.

It is also essential to consider the role of the online "teacher". This is a phrase that does not sit happily with the concept of the self-directed learner, and is used here merely to distinguish it from the learner. Those employed or adopting this role of "lead-learner" will have a different emphasis on their work depending on the needs of the programme, the needs of individual and groups of learners and on the point reached in the programme.

These emphases include:

- Tutor – the online teacher as guide, directing learning, suggesting resources
- Assessor – the online teacher as judge of performance, capability, understanding
- Coach – the online teacher empowering the learner, imparting and sharing knowledge and understanding
- Mentor – the online teacher as co-learner, supporting and developing learners
- Facilitator – the online teacher as the enabler of learning and guide of the discussions, summarizing and bringing in resources

These roles are not mutually exclusive. For the purposes of this paper, we shall use the term "online teacher" to cover them all.

1.3   Models of learning

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

There is some confusion when e-learning is discussed, where interaction and communication are emphasised. We should be aware that communication is not collaboration, just as choice is not participation. Learners need tools which allow both communication and participation to take place as effective learning requires both (Vygotsky, 1978).

E-learning has become something of a panacea and the term itself is unhelpful, concealing as it does a variety of paradigms. Salmon (2002) identifies four models for the future development of e-learning:

- Content model
- Learning Objects model
- m-learning model
- Community model

Content: from the beginnings of distance learning programmes, the dissemination of content to remote learners has been seen by many to be the key objective - "content is king". The problem with this is two-fold. Firstly, the resource needed to develop, store and maintain up-to-date content is huge. From large centralized servers through to armies of researchers ensuring that

information does not become obsolete. The model also implies a top-down source of content.

This is in contrast to ULTRALAB's philosophy of iterative development of content. In engaging with online learning communities, learners are synthesising knowledge and reflecting on their practice. This leads to the generation of new knowledge for future cohorts to use as a resource for their learning. Consequently the set of materials used on programmes required to aid and guide learning will be less necessary. This knowledge, from those who are practitioners must be seen as carrying as much weight as the theoretical and academic resources traditionally cited as references. The strategies learners will require is guidance on discerning the quality and utility of available information, and how to use these materials rather than rote learning and recall.

Learning objects: another approach, popular in the debate on standards (Cabinet Office, 2002) is to divide the content, and the assessment, into small chunks – learning objects. Learners can have the appropriate object delivered to their desktop on demand. This again requires resource to develop the learning objects. It is very much emphasizing the delivery model of learning and the acquisition of bite-sized pieces of knowledge. It does not provide a framework for reflective learning based on practice. This paradigm is the one behind the development of managed-learning systems (MLS). These are being used in some NCSL programmes, including the Certificate of School Business Management pilot, alongside the community.

M-learning: learning anywhere, anytime. A viable option as technology moves on and one in which ULTRALAB is engaged in research (ULTRALAB, 2002). It places an emphasis on the

technology, and this does not fit easily with developing programmes that are available to a mass audience, many of whom have had no previous experience of ICT as a vehicle for learning, and do not have access to the technology. ULTRALAB's research is into developing a micro-portal that may be accessed through conventional and mobile phone browsers.

Community: the theories of learning described above require that professional adult learners have an environment that allows for collaboration, social and reflective learning. Providing a community-based online space, with asynchronous activity, and appropriate facilitation, mentoring or tutoring provides for these dimensions. The use of such spaces allows the learners to develop their knowledge together, applying it to the real problems they face in their professional contexts. It does not pre-suppose that this knowledge is external to the learners, rather it provides a medium to synthesise and develop that which is already known.

The dissemination model sees computers as teaching machines and is based on a behaviourist pedagogy. The participative model is powerful because learners in a collaborative learning environment take ownership of their own learning, learn effectively from others, collaborate to construct knowledge. It regards computers as learning tools, which encourage learners to learn by engaging in authentic activities. The use of such tools enhances creativity and ownership of the learning. Community software is such a tool, and as such its use is grounded in constructivist educational theory. It optimises the possibilities for collective and collaborative learning.

Asynchronous conferencing in a community as a vehicle offers us entirely new opportunities to examine learning and to ignore these and concentrate on formalised assessment as a way to measure learning would be foolhardy. Formal assessment procedures carried out online measure little except recall, a written report of the course (or elements of the course) completed, or responses to a question bank about a course. For deep learning to take place reflection, which may lead to new insight, is required. Learning requires an examination of the process involved which enables an examination of knowledge

and understanding, not simply to test online learner's ability to report or be tested on predetermined information. This is a fundamental philosophical position. It is summarized in table 1.1 below.

ULTRALAB's considerable experience leaves us unequivocally wedded to the appropriate use of ICT as a means of communication and interaction between online learners and online teachers.

A paradigm grid for online learning
Coomey and Stephenson (2001:41)
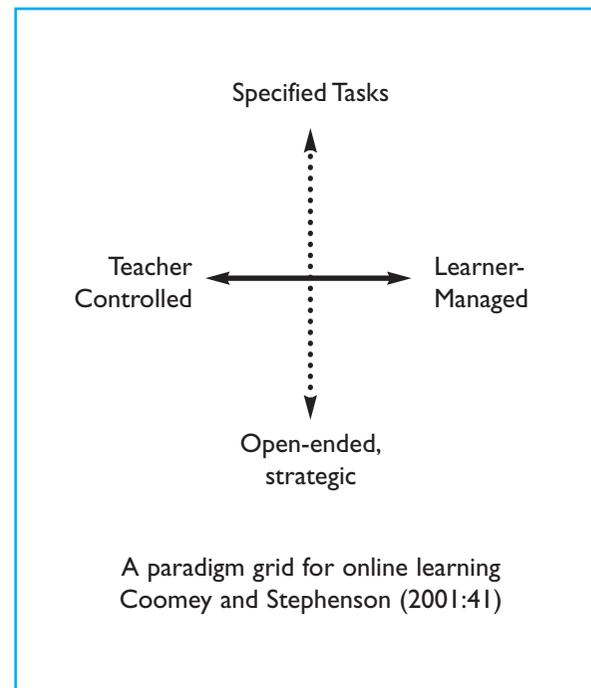
Image 1.2 Paradigms of learning

Coomey and Stephenson identify a paradigm grid for online learning and our philosophy is to aim for a learner-managed programme with open-ended tasks.

Managed Learning	ULTRALAB/ constructivist model
Dissemination model	Participation model
student tracking so that enterprises have students enrolment cards	student tracking so that students can revisit courses taken in the light of their new learning
chat rooms where students can discuss with mentors	chat rooms and a raft of asynchronous discussion tools where students can work with other students mentors and/or experts immediate issues
evaluation of courses offered	annotation of existing learning sites
assessment to evaluate learners' performance	portfolio of work
skills management to allocate students to appropriate courses	skilled facilitation

Table 1.1 Philosophies of learning

1.4 Community software:

the tools required

In designing the community software used for the NCSL programmes, ULTRALAB has worked with Oracle in developing think.com. This software was, in turn, based on the design of Spinalot (Smith, 1999), community software used for the Learning in the New Millennium project run by ULTRALAB with Nortel, bringing secondary school students into learning communities with adults from business environments.

At the heart of the design are four principles:

• The online elements must be embedded in the learning programme and not be an extra
• The pedagogy is more important than the technology, which should be accessible to anyone with an Internet browser
• Learning gains are made through participation in collaborative dialogue
• Learners have rights to publish new material in the online space, developing the content base as they learn

Think.com provides a platform in which software tools enable learners:

• To take part in conversations, linear or threaded
• To take part in anonymous brainstorms, for contentious or ice-breaking activities
• To engage in question and answer with experts or each other using a hotseat tool
• To publish their own material for others in a 'home' space or in shared spaces and access material posted by others. This material can be textual, audio, graphical or video
• To have a private space, controlled by password protected user Ids, with a known membership so that they may be frank and open with fellow learners and facilitators, tutors or mentors

The think.com environment continues to evolve and both ULTRALAB and NCSL are consulted by Oracle's design team to develop a generic, customizable space.

1.5 Theories supporting communicative and participative learning

The participation model views learning as a social process, involving both the active construction of new knowledge and the understanding, consideration, participation in and discussion about existing knowledge.

Within the use of community software there is no doubt that new knowledge is emerging. Within the NPQH programme of Virtual Heads the programme materials located on an external server are based on established knowledge. These could have an authentic flavour added by integrating the summaries of hotseat discussions that have taken place within think.com. These summaries and hotseats embody the emerging knowledge, provide case studies and scenarios which are based on the authentic experiences of senior managers in schools. These discussions are seen as relevant for those who accept that the knowledge resides in the experiences and expertise of the profession itself. We have noted that policy makers talking to NPQH learners initially feel that they are imparting knowledge only to find that learners themselves have much to offer in terms of their own research and become excited by the possibilities.

"The online learning community is the thin end of the wedge. I'm sure it will become a standard means for policy-makers to learn from experienced practitioners and to gather and disseminate best practice. The National College for School Leadership will lead the way, but government as a whole will follow. As we move into an era of transformation, policy success will depend on the capacity to learn from the front line." (Barber, 2000).

1.6 So why is collective learning so effective?

When participants collaborate, as they are encouraged to do in programmes like NPQH and the Certificate of School Business Management, they are involved in the active construction of knowledge which is combined with peer learning. This results in the development of different methods of problem solving and interaction and consequently results in motivated and considered feedback (Kaye, 1995).

> *"I can totally relate to feeling a sense of satisfaction at people taking on board staff ownership as mentioned by (name1) recently. It is so hard to appear non proactive in order to develop staff, at the same time ensuring progress is being made. I'd like to thank (name2) for his almost finite self appraisal in developing the selection process to recognise inspirational potential. Perhaps there are benefits after all linked to teacher shortage, more focused and allowing individualistic, not isolationist input...."*
>
> (Contribution in NPQH summary of learning discussion May 2002)

This consideration is especially emphasised where communication is asynchronous as in think.com. Empirical research demonstrates the strong positive effect of interactivity on learning (Bosco, 1986). Stafford in 1990 examined 96 learning studies which concluded that interactivity was associated with learning achievement and retention of knowledge over time (Najjar, 1995). Educational theory (Bruner, 1986; Vygotsky, 1978) has long established that people learn material faster and have a better attitude toward learning material when they learn in a participative learning environment. It is this very participation that is encouraged when programmes use online communities, such as Virtual Heads and Bursars Count.

1.7   Research methodology

For this research report we use interpretive (Denzin and Lincoln, 2000) and naturalistic (Robson, 1993) methods rather than quantitative research methodologies. In recent years, interpretive research has become widely valued as a research method because it collects qualitative data within naturalistic settings and can provide a depth of information often not available to quantitative research (Patton, 1990). Qualitative researchers do not believe that there is one objective truth but that there are multiple realities. These are accessed through observation and participant observation, case studies and written documents. Interview analysis is interpretive and relies on direct quotations from people about their experiences, understanding, feelings and opinions. Such observations provide detailed descriptions of people's activities, behaviours, actions and interactions as well as observable organisational practices. Written documents, such as quotations and excerpts from discussions, reports, learning journals and responses to open-ended questions are analysed (Patton, 1990).

The amount of participation can vary from the ethnographic (entering the world of the learner) to simply engaging in the learning context. Although participant observation has in the past required physical presence, it should be remembered that the community containing the researchers, online teachers and learners is online and asynchronous. Although not together in real time, all exist within the online community and can participate in the debates and discussions surrounding all stages of programme. The participative community has formed the basis for the iterative design and development of the community spaces.

Triangulation of methods draws the source of the data from both qualitative and quantitative data. Data triangulation requires the cross checking of data from different sources (Patton, 1990). In this report, the data collected from a phone survey carried out on cohort 1 of NPQH in July 2001, an analysis of learning which took place in eight of the Virtual Heads hotseats and one of the longer discussions which took place on the Faith page in Virtual Heads provides the material for data source triangulation when combined with unstructured interviews, observations, focus groups and documentation.

To carry out this triangulation we carried out an examination of learning and developed a taxonomy that sought to measure learning on a continuum. This analysis was carried out manually rather than through using discourse analysis tools.

Discourse analysis tools are best used for content analysis as in any dialogue examination there is an ebb and flow of discourse and a mass of interpretative information, for example the relationship of one comment to another, the tone of the comments. Only by examination of the whole discussion can comments be classified. Even using this method it is necessary to understand that the approach is limited. To understand the process of the learning for the online learner examination of comments needs to be followed through with an in depth interview (in much the same way as a viva teases out the learning and new understandings). This is time consuming and not always possible as many learners will view this in-depth discussion, which has no benefit for themselves, as an intrusion on their time. We therefore recognise that our analysis will be limited.

1.8 Towards a taxonomy

In our analysis of learning we have developed two continuum which allowed us to measure learning. With regard to the hotseats taking place in programmes we have used the following categories for comments:

- **Hotseat guest as expert** (case study): mainly Q&A - talking about the hotseat guest's own school or their expertise.

- **Me and my school:** the contribution is characterised by the learners repeatedly referring to themselves, their school or their colleagues.

- **Reflection:** of what has gone before (learning) - reference to other questions/answers. Mention of others, explicit references to learning.

- **Impact:** evidence through actions for example, "as a result of this I will/have". The hotseat has caused change to happen.

With regard to other discussions we used as a starting point Gilly Salmon's taxonomy (Salmon, 2000), which, developed as a model for business discussion, did not fit our learning outcomes. We therefore refined Salmons model to develop the following 'Evidence of Learning Taxonomy'

1. **offering ideas, resources, information, opinions, asking a simple question**

2. …**and** inviting critique of them

3. **asking** challenging questions (response or initiation)

4. **articulating,** explaining and supporting positions on issues (raising)

5. **exploring/critiquing** and supporting/challenging issues by adding explanations/examples or discussing and expanding others' ideas (feedback)

6. **negotiating interpretations**, definitions and meanings

7. **reflection**

8. **new insight/ conceptual change/ re-evaluation/ synthesis**

We also attempted to measure impact which we defined as proposing/ taking actions (change based on developed ideas). We would expect to find evidence of impact rarely. Many online learners are not in the position to make change happen even though they may be aware of the changes which need to be made.

Section 2

The story of the development of NCSL programmes

2.1 Theoretical/philosophical foundations of the NPQH programme

The old models of programme delivery were based on information dissemination. This meant that information became dated, and so continual information updates were necessary. In the old model of NPQH for example, the materials to accompany the programme were supplemented by weekly updates to ensure online learners had the latest information.

Thus any online programme needs to be sensitive to, and respond to, change. Such change will come about during a learners' period of study. ICT enables this to be incorporated and enables the qualification to remain relevant to the needs of future leaders. Implicit in the new model therefore was the need to change the culture amongst tutors and course providers from one of using a static body of knowledge to a dynamic exchange of viewpoints supported by the latest evidence. This cultural change would then be transferred to learners.

The driving forces behind this radical rethink were not only political, but also educational. Anecdotally, the traditional course had a reputation for being disjointed from reality and perhaps, more fundamentally, hard to access as learners were expected to travel to seminars (in some cases these were very remote) once every three weeks. It was also rooted in old educational theory (learning by receiving information). As the NPQH review process discovered many learners felt that tutors simply passed information to learners and expected them to comment and critique the information. Feedback on the old model emphasised the value for learners of meeting other learners and sharing views and ideas in the lunch, coffee breaks or pub after the course ended.

For the redesign of NPQH two key characteristics, collaboration and participation, require a more complex model than simply

placing the content of units of study online, and the generation and transmission of content of knowledge. The value of these characteristics is supported by ULTRALAB's previous work on online communities (Talking Heads - communities of serving Headteachers, Chestnet - a community of health professionals). ULTRALAB has developed and researched the use of community for school students and adults as a vehicle for learning and for small and medium enterprises (Chapman and Ramondt, 1998). ULTRALAB believes this course delivery model without appropriate facilitation, collaboration and delight will not lead to the necessary increase in learning and engagement that will sustain the e-learning market that analysts envisage (Ramus, 2000). Internet based e-learning must add value to traditional methods, building on what works well in classrooms if it is to succeed.

The online teachers for all programmes are expected to be responsible for this scaffolding but this requires a change of philosophy. We have observed this change in both NPQH and Bursar tutors. Wenger (1998) has developed pedagogical theory to apply it in an online context. He states that learning is only possible when the acquisition of skills and behaviour is combined with the understanding of meaning. Thus the position of language and dialogue is central. By articulating a shared terminology, Wenger argues learning moves from the abstract to the concrete in the minds of the learner. This is one of the aims of the new model NPQH, and specifically the online element of NPQH, Virtual Heads. Learning in this way is a social activity.

To develop an online course with agility and flexibility provided a challenge. In designing the learning in NPQH, Pat Collarbone (2001) emphasised its reflective nature. The learning opportunities and activities are grounded in practice with prior assumptions, knowledge and understanding being tested with colleagues and fellow learners. She describes a double loop in which primary learning is then developed, reframed and reapplied. Learners reflect on their learning and on that of others in the first loop and then reflect again on the synthesized learning. In NPQH this second loop is most often manifested in the summative school-based assessment and tutor visits.

2.2 Development of online learning programmes

The new NPQH includes an online element which combines the programme materials and an online learning environment. The programme materials were put onto a dedicated web site. Learners were also provided with 32 paper based units that formed the primary content. The web site has been developed by ULTRALAB to eventually become the sole distribution channel of the content.

The content within the web site was produced by a dedicated team of writers led by Dame Pat Collarbone (Director of the London Leadership Centre). It was linked to an online learning community, Virtual Heads, facilitated by ULTRALAB facilitators. This community space also provides localised communities (online tutorial groups) in which NPQH tutors encourage and orchestrate meaningful debate between learners and give shape to the learning.

Access to the course materials was via a hyperlink from within Think.com communities. This allowed learners to use one ID and password (that used to access the community software) and emphasised to learners the importance placed on the community and discussion elements of the course because the online course materials could only be accessed by passing through the community space.

2.3 Hotseats

Hotseats are a tool, which enable learners and tutors to engage in dialogue with guest speakers. Until December 2001 at any one time there were two hotseats, each serving different needs. One guest was a subject expert, often a DfES policy leader; the aim here was to allow online learners to gain insights from those responsible for implementing policy and test their own understanding and context against a national picture. The other hotseat guest was a serving headteacher, providing online learners with a case study of another school and leader who is in some way an exemplar. The first hotseat guest in Virtual Heads was Michael Barber who wrote an article 'From Improvement to Transformation' and then answered questions. Other topics have included: Team Leadership and Teamwork, Governors as Critical Friends and Teaching and Learning. Guests have included Tim Brighouse, Dame Pat Collarbone and Gill Tween, a headteacher in her first year of headship. As we move into the third cohort, many hotseat guests are returning to run more sessions, and we are able to build on the previous summaries to develop the shared learning.

All hotseat discussions are summarised and archived by ULTRALAB facilitators, although the original links into the biography, starter article and hotseat are maintained in the summary to allow online learners access to the detailed conversations. Over a period of time these hotseats will constitute a considerable resource. The asynchronous nature of the hotseats means that high profile and busy individuals can reach a wider audience and contribute at a time and place convenient to themselves.

Greater democracy is emerging, triggered by the hotseats with policy experts and officials from the Department for Education and Skills officials. Policy amendment bears testimony to the fact that the dialogue with informed practitioners is proving invaluable in informing policy design and understanding. We are seeing a shift from Policy makers delivering policy to headteacher, to a consultative mode as the realisation is dawning that they are speaking to key informants within the profession who have a body of knowledge, which can be used to form and inform policy design. There is no doubt however that the increased transparency can also be very challenging to these experts.

2.4 Overarching space

A consistent approach was adopted in the national overarching space of Virtual Heads, few changes being made. From January 2001 the area contained a noticeboard, where both online learners and teachers could raise issues, links to documents and external sites (including the NPQH materials web site) and the hotseats.

As the number of hotseats increased the archive page began to expand and in December 2001 the page was restructured to link each hotseat to the relevant module. The rationale for this re-organisation was not only to aid navigation but also to clarify the link between all the online elements in the psyche of the teachers and learners.

The two specialist pages (faith and special schools) were added in September 2001 following a criticism in the TES that the new model NPQH largely ignored faith schools.

In February 2002, following the graduation of the first cohort of NPQH in January 2002 the NPQH graduates' page was established. This gave graduates a specific place in the community until they achieved headship and were thus eligible to join Talking Heads.

Finally, following navigation concerns expressed by participants, a graphic interface was added to the Virtual Heads' front page in April 2002.

2.5 Other community spaces

After tutors had received their initial training they were invited to join the 'Good Practice' community. This space was where the ULTRALAB facilitators could communicate directly with all tutors. Advice on using the tools and examples of a Module Discussion Group and Summary of Learning Group were provided. Tutors could question the facilitation team, initially these queries were mainly technical but soon addressed other issues such as participation. Some regions also had their own tutor communities and so many tutors will have used these areas to further their professional development.

All learners were joined to a Module Discussion Area. These were designed so that discussion could take place with a large number of online learners. Discussions in these areas surrounded the four programme modules, were regionally based and managed, were cross phased and occur with approximately 54 fellow learners. These communities aimed to provide online teacher-led predetermined discussions (they were written into the modules and the expectation was that online teachers would, at least initially, transfer the questions into the community for learners) that were heavily focused on the specified activities within the units. It is in this forum that online learners were expected to share their pragmatic, school based experiences and online teachers were expected to enhance those experiences by drawing the online learners into a more reflective mode.

With Cohort 1 (January 2001 - January 2002) this largely failed in that the module discussion areas attracted very few participants. A number of reasons for this were evident and are discussed in section 5. As a result, when cohort 2 started in September 2001 the membership of the module discussion group was expanded to include learners in both Access and

Development stages in each region, approximately 200 participants. It was also decided to open all discussions for contribution at the start of the course to allow participants to contribute when they were studying the unit, thus building the programme flexibility into community.

In Cohort 1, learners also shared a Summary of Learning Space with their tutors. These were set up by the tutors initially and this in itself created problems. Many tutors were unfamiliar with the technology. Some had received their training in November 2000 and had not reinforced that learning. In February they were expected to be able to have mastered the technology and be able to create communities with their learners. Many were unable or unwilling to do this and so learners were in effect coming on line for a tutorial only to find the tutor missing and no room in which to meet. Other tutors created the Summary of Learning Space from an inappropriate community and so there was little consistency between regions and tutors.

Some tutors preferred not to use the Summary of Learning Space and communicated with their learners by e mail which was time consuming and wasteful. There was little shared learning and no contact with other members of the tutor group.

Following pressure from the ULTRALAB facilitation team it was agreed to experiment with combining the summaries of learning of each online teacher, creating shared learning spaces of between 12 and 15 online learners with one online teacher. This shared learning space provided localised communities (online tutorial groups) in which NPQH online teachers encourage, stimulate and orchestrate meaningful debate between online learners and give shape to the learning.

The tutors could use their time more effectively because they could see at a glance who had recently contributed to their summary of learning and therefore could respond accordingly. Learners could see what the other members of their group were learning and they were able to comment. They could also see how their work was progressing compared with others in their group.

This smaller group is supported by some face-to-face online tutorials and online learners are encouraged to meet and visit each others schools. The online discussions here are focused on the learning that each online learner has recorded. It is anticipated that online learners will 'collect' comments, discussion points, questions and answers from other parts of the online environment that are relevant and key to their own learning and share these with their group. These form an online learner's summary of learning, which is shared and discussed on line with their online tutor and which is the principle record of the formative learning.

At the start of cohort 1 learners were encouraged to join together in groups of 5 or 6 and develop Learning Circles by creating online spaces. These were intended to replicate online the social and support network which develops when, following a seminar, a group of programme participants might join together at a local pub and discuss the seminar and their work informally.

There was little firm basis for these groups, membership being based on a couple of hours attendance at a formal meeting and largely the areas remained unused. This practice was dropped for cohort 2.

Despite additional refinements with cohort 3 (January 2002) the module discussion areas remain largely unsuccessful in terms of participation. The simplified model adopted by some online teachers, although appearing more attractive, has failed to generate a large number of contributions to discussion items. The Shared Learning Spaces (see section 3) run by the most charismatic and competent online teachers now appear to cover much of the module debate and in these cases a clear purpose for these spaces is still sought.

2.6 Certificate of School Business Management pilot

Learning from the lessons of 3 cohorts of NPQH the Certificate of School Business Management Pilot started with a number of agreements concerning structure. Participants had only 2 places in which they were expected to contribute, the overarching area, Bursars Count and their tutorial group.

From cohort 1 starting in February 2002 the communities have been both vibrant and engaging. Following the successful structure of Virtual Heads overarching space Bursars Count, with 125 members, has both hotseats and a noticeboard. The vibrancy is shown in that by April 2002 the community was on its third noticeboard. Already, 216 contributions have been made on these 3 noticeboards, ranging from:

"I'm here to Does anyone have experience of raising sponsorship for Specialist School status bids?"

to

"Am about to convert from LRM4 to FMS6 Finance module. My helpline isn't particularly mm........'helpful??'. Can anyone tell me how I enter unreconciled cheques from LRM4 onto the new system."

The community is used to prepare learners for the face-to-face events. Administrative information is provided as well as a hotseat for any questions that learners may have. They have to go into the community to find out information as they are not normally sent an e mail but are expected to go into Think.com for this purpose.

The programme of hotseats range from those who are policy experts on bursars and bursar matters, for example Nick Tomlinson of the School Workforce unit at the DfES, to existing experienced Bursars, for example a bursar from a High School who has been answering questions on The Social, Political, Economic and Cultural aspects that contribute to the Education Enterprise. The programme of hotseat guests is structured so that a presentation is made at a face-to-face event, the slides from the presentation are made available to learners who are then able to ask questions in the hotseat. This gives learners more time to think about their questions and the guest can answer when convenient. This integration of the face-to-face meetings with the on line community is a welcome progression. The community is vibrant and friendly, learners sharing their experience and problems.

The tutorial groups consist of ten participants and an online teacher. Some tutors are encouraging their learners to share their learning journal with others in their tutor group and in these cases if has been useful. There is a purpose for the group and it saves tutor time because they only need to respond when a learner has made added some work to their learning journal. Again, the noticeboards are friendly, combining social and work related items.

Section 3
Lessons for
online teachers

3.1   Methods

The methods used to collect the data for section 3 were as follows:

- Contributions to the online discussion space in all Virtual Heads and Bursars communities
- Interpretative analysis of NPQH hotseats
- Interpretative analysis of a selection of online discussions
- Face to face meetings with NPQH and Bursars online teachers
- Informal interviews with teachers and learners
- A semi-structured telephone survey of NPQH learners carried out in July 2001
- Case studies undertaken with learners and teachers in May - June 2002

This is consistent with the research methodology outlined in section 1.

3.2 Participation and engagement

3.3 Findings for online teachers

As outlined in section 1 the key to success in any learning activity is the engagement of the learners in the community and their active participation in the dialogue. In a face-to-face context, this can be seen in attendance at seminars and tutorials and in the submission of material for assessment at the end of each unit or module. Online, the learner has to be visible if participation is to be confirmed and this may lead to tensions between the self directed learner for whom the online environment does not fit their preferred learning style and the need for the online teacher to ensure the learner is present. The online teacher, therefore, needs to design activities and tasks that encourage contribution and response. Evidence shows that in social communities, without the imperative of assessment and qualifications, participation rates are around 6-10% (Wenger, 1998). This low rate is clearly inadequate to sustain a model of social and constructivist learning, which requires not only engagement but also active participation. ULTRALAB have found that if the philosophy of the programme continually reflects participation and collaboration (see section 1) then it is more likely to engender increased participation. Key to maximising this participation is the role played by the online teachers.

This section 3 outlines the findings for online teachers, which documents the successful processes online teachers are engaged in to enhance learning. Section 4 outlines the evidence of learning for online learners from the NPQH programme.

The key role for the online teacher is to enable learning through the participation of learners in the online community. Two barriers may be perceived as inhibiting their effectiveness: technical and pedagogical barriers. ULTRALAB's experience is that technical barriers can be quickly overcome in most cases and are only temporary inhibitors.

Overcoming pedagogical barriers and adapting style and philosophy to the online environment is more complex. Most online teachers will be transferring their knowledge of teaching to the online context for the first time. A long history of being both taught and teaching in a face-to-face context makes this a familiar learning context. Few have any previous experience of being a learner or teacher online.

ULTRALAB has identified a number of strategies to be employed by online teachers that encourage the participation of learners in an online environment.

ULTRALAB Bradshaw, Chapman, Gee July 2002

3.4   Strategy 1: *Time-limited activities*

These should be based on a published timetable which reflects the rhythm of the school year and external events. Within NPQH, a hotseat timetable was published from the start (January 2001). This timetable gave the title of the experts discussion and the dates experts would be online. The initial timetable specified two speakers every two weeks, one practising head and one expert. In the phone survey and in the online discussions learners commented on the value this schedule had in enabling them as busy professionals to timetable their time online. In addition a programme of discussion activities, which linked to the materials and which changed every two weeks was timetabled. This reflected the rhythm and nature of the face to face programme. Whilst the hotseat timetable worked well the rigourous nature and the fast pace of the bi-weekly discussion put a strain on the online teachers who were still getting to grips with the technology and the learning in an online environment, and yet had to change discussion items every two weeks.

This relentless pace was not suited to reflective, asynchronous, online discussions and meant that in only a few discussions had a stage been reached where dialogue had taken place before closure. After a first feedback meeting with the online teachers in June an ULTRALAB facilitator reported,

> *"One issue that arose today was that of timing of conversations etc. It maybe better to let them run on for longer if they are likely to be 'studied' by candidates later on in the course. This is obviously a fine line but sticking rigidly to a two-week schedule may prevent some candidates contributing."*

This pace was relaxed for NPQH cohort 2 in September 2001.

Our findings show that time limited activities are valuable and do help online learners timetable their learning. They also stress the continuing development of the online environment and emphasise the need for learners to return on a regular basis. However the pace and rhythm has to be suitable for an asynchronous online context.

3.5   Strategy 2: *Induction process for online learners*

Ideally this should be delivered by online teachers, rather than by ICT experts. The emphasis should be on the programme, rather than the technology,

"We didn't have a hands-on ICT slot in the introductory tutorial for the Access Stage and so candidates were very much alone with only the handbooks for guidance."
(NPQH online teacher reflecting on cohort 1 of the NPQH programme)

By January 2002 one regional online teacher commented,

"We give all candidates an hour online at their introductory session. We organise this carefully and, as well as giving them a demonstration, have a worksheet for them to work through and special online activities."

This reflects the growing confidence of the online teachers who had received some online training and therefore felt increasingly assured and able to deliver the learners induction. In contrast to January 2001 when the first cohort of NPQH came online many online teachers felt unsure. One online teacher reflected,

"Many of our tutors were at sea with <online software> and couldn't manage…. Others were very resistant - particularly those who had previously been NPQH trainers and were missing the face-to-face sessions that they had had before."

By cohort 3 (January 2002) the same online teacher commented,

"Tutors are better trained and more confident now. We have tried hard to motivate them by reassurance and praise when appropriate. We have planned their training and produced suitable materials for it. We now have examples of good practice to show them."

And many were supporting colleagues new to online working,

"It was really supportive to be working alongside an experienced tutor who had done it last year. I reiterate the comments about the earlier ICT sessions, I was not even half a step ahead of the candidates!"
(NPQH online teacher reflecting in the Good Practice community)

It is not surprising, given the experience of online teachers outlined above, which demonstrates increasing confidence, that the experience of learners reflected this.

3.6 Strategy 3: *Encouraging participation by also using the online environment as an area for social interaction*

As clearly indicated in the underlying philosophy of section 1, learning does not only take place in communities designed for discussing the programme related materials, but in informal community structures. In a face-to-face context this informality often takes place in discussions outside the structured lesson in coffee breaks or after the session meetings in the local pub. Online this informality is essential in getting learners to feel comfortable and in helping ice breaking, thus enabling relationships to build. The online teacher needs to take part in these activities to develop a relationship with learners and ULTRALAB's analysis of NPQH 'Shared Learning Spaces' undertaken in June 2002, show that those tutors who encourage and develop informality have the largest number of contributions in candidates key learning points. Informality also allows busy professionals to let off stream. The importance of this informality was recognised in both the Quality Assurance report on NPQH,

> *"The most 'newsy', busy and informal notice boards, using positive language, are the first indication of a more lively active area."*
> (NPQH Interim Quality Assurance Report (May 2001)

and in the evaluation of the Bursars' community,

> *"...a theme which has emerged strongly in all types of the data is the value of formal and informal contact with fellow participants (e.g. 'in the bar....).. Several participants have indicated that this type of sharing of knowledge and experience has been as powerful as the input from the programme modules."*
> (University of Manchester Bursars evaluation report (May 2002)

Recognising this, online teachers have integrated social aspects into their community spaces. For example in the NPQH Good Practice Community, an online teacher comments:

> *"I've opened up a Coffee bar conversation area as a 'work-free zone' on our tutorial pages; an interactive idea I borrowed from my other e- life – and it's working already. Candidates have a designated place for light/relief/humour (essential) and feel able to contribute on screen in the coffee bar, before going 'live' with professional contributions in other places."*

ULTRALAB have observed the number of social discussions increasing as the online teachers confidence has grown with the development of 'work-free zones' (NPQH tutors 'Shared Learning Spaces'), funny stories ('It shouldn't happen to a Bursar' discussion in 'Bursars' Count') and Coffee and Wine Bars (as in example above).

However, this provides tensions for online teachers, who wish to ensure that substantive learning takes place, whilst recognising the importance of fun and delight. Our experience demonstrates that the best online teachers join learners in informal discussions, as well as directing the conversation. One online teacher in a meeting discussing this issue expressed it as follows,

> *"I agree that you should socialise learners at first, but I see a tension between simple questions and depth of learning."*

With another tutor reflecting that,

> *"The on-line environment needs to be welcoming and friendly with care being taken over tone."*

3.7   Strategy 4: *Support for community discussion through reminder e-mails, telephone and synchronous activities.*

Those who do not contribute in the online environment are not visible. This makes it hard for online teachers to develop relationships and fulfil their role. Online teachers need to be proactive in encouraging learners to contribute and use a number of strategies, including phone calls and e-mails. This view is supported by a tutor in this comment,

"As tutors do not get any of the direct signals that occur in a face to face training environment, it is vital that participants communicate sooner rather than later if they have any problems. Whether the problem is technical or relates to content, it is important that it is dealt with speedily; the medium builds up that expectation. Unresolved problems, particularly for people with limited confidence, can form stumbling blocks to learning. They can also confirm a predisposition towards more traditional approaches."

With cohort 1 of NPQH tutors waited far too long before getting in touch with learners who had not been obviously online. This resulted in impetus being lost. Since cohort 2 the advice has been to contact learners not present online within two weeks of the programme start. This sets the expectation in the mind of the learners that contributions online are a requirement,

"I post a comment in their Summary of Learning and I send a postcard too. What about us having some pre-printed NPQH multi-choice postcards that we could quickly complete and post off if we wanted to? It might just give a more official air to the reminders."

(NPQH online teacher in a tutor discussion)

3.8   Strategy 5: *Aiding navigation through maps, contents lists and infrequent changes to design*

There is a tension between freshness and continuity. However it is important that changes are made infrequently and that important items remain in the same place on community pages. For example a noticeboard needs to be where it can be easily found, whilst images, discussions can change in time. In an 18-month period the format of Virtual Heads remained unchanged.

As a result of feedback, navigation maps and images were introduced, and a list of regularly used items and hotseat archives maintained.

3.9   Strategy 6: *Modelling behaviour and presence*

The online environment is stark. Lacking in visual clues as to expected behaviour, learners may be reluctant to contribute. Teachers model this expected behaviour, building trust and encouraging learners to emulate, through answering questions and engaging in dialogue building on learners' comments but without dominating the discussion,

"Some good thinking going on here! ... How do you make a vision equally clear and internalised by everyone in the school community? How do you keep it in front of people week by week?"
(An NPQH tutor responding in a summary of learning, Feb. 2002)

This allows for a flow in the conversation in which learners can test and develop their ideas,

Conversely if a teacher is not seen to be actively contributing to a discussion, but merely reading, then the learners are not likely to want to contribute, or the discussion may end, learners becoming frustrated,

"It seems a long time since we started the NPQH and I am feeling a little isolated and panic will set in soon! I have had no communication from anyone."
(A learner writing in her journal, Nov. 2001)

Tone is equally important. A comment made by an NPQH tutor whilst learning on another course stressed the importance of being positive to learners,

"I was thinking how good I felt when you said really nice things about me (online) I didn't praise my candidates obviously enough and I noticed the number of contributions went up, so did the quality, when I started being very direct with praise."

And having a positive and enthusiastic attitude towards the environment,

"I am part converted! My healthy scepticism of the success is shrinking as a result of my candidate's interest and varied use of the medium. I am of the view that communicating ideas, thoughts, aspirations etc. is the way ahead and a desirable habit for the profession as a whole."
(A tutor writing in the Good Practice community (Feb. 2002)

In cases where online teachers are not present learners may continue to post but not explore the learning points in depth, or may go off at a tangent. Equally if the teacher posting is *"too long, too descriptive and too academic...."* (Interim Quality Assurance report) learners will find it difficult to contribute. Making it easy for learners to contribute in the early stages is essential and this is best done through real tasks which draw on the learners experience. For example in NPQH learners are first asked to contribute with a description of their school, and their vision for future schools, before moving onto the learning materials.

Online teacher comments need to be made as explicit as possible. Ambiguities can be heightened without the other clues of body language and context and by the time delay caused when using asynchronous discussions. In a face-to-face situation misunderstandings can be cleared up immediately. Online they need to be avoided in the first place.

3.10 Strategy 7: *Taking account of the role being played in the learning environment*

While it is important for teachers to be active in conversations, they need to have regard for the various roles that they are playing. In modelling online behaviour they are coaching, in being part of the conversation they are also learners:

> *"Oh I really like this.."*

> *"Two things in this that set me thinking further…."*

> *"Like your postscript!!! I will try to get balance in due course... Does that mean that you think I am wrong about the danger of routinisation?"*
> (Comments from a guest in a hotseat, in response to questions)

This peer learning is also a way of reinforcing behaviour. When a teacher affirms their learning, it will encourage others to reflect on their own.

But a teacher is also a teacher, an expert. In the learning environment, this is usually seen in the opening remarks and stimuli,

> *"Let's start with examining the link between learning and schooling... Having considered both the 'challenges' and the 'statements', what would be your priorities for children's experience of schooling? How might you lead staff, governors, parents and pupils towards your vision of what school should offer children?"*
> (NPQH tutor opening a conversation, Mar 2002)

but should also be seen by online teachers challenging learners in a non-threatening way, to deepen knowledge and understanding,

> *"Can I push you a little further on this"*
> (NPQH tutor in a module discussion group)

and tactically intervening to make learners think,

> *"Isn't it dangerous to have a vision, especially if it is your own? How do you know that you know what is best for children?"*
> (NPQH tutor in a module discussion group)

This role is also the one played by guests in the hotseat. As experts they draw learners into the discussion and provoke them to ask questions. This strategy of teacher-as-expert is one that can be exploited in any learning situation. Here a NPQH tutor redefines her role by setting up a local hotseat, mirroring the style used at national level:

> ''Q: (from learner): *"How much is a small school allowed to rely on untrained LSA's to deliver special needs teaching and tutorial support? Is it merely a judgement made by individual school's?"*

> A: (from online teacher): *"There's not a simple answer to this. Fundamentally, the issue is about the QUALITY of the provision, which forms part of the teaching programme within the school. ...The teacher should direct the work of the LSA through planning work that builds on pupils' prior learning and monitoring the progress pupils make. Clearly the school should make arrangements to determine and meet the training needs of support assistants and ensure they are appropriately briefed…….Teachers should be mindful of the pay differential between themselves and support assistants and take responsibility for pupils' learning in a 'reasonable' and 'professional' manner. Good support assistants are worth their*

weight in gold!"

In this particular example, there was a change of role but not a change of overall structure of the learning space. This hotseat has not knowingly resulted in an increase in participation but provides a good example of a change in role. The lack of responses in this particular space needs to be addressed by lessons learnt about structure.

The type of discussion, can vary but care needs to be taken as to what is appropriate to elicit the desired outcome. An exchange when 'Sharing Good practice' in the community of that name included the following:

Tutor A
"My informal monitoring tells me that Brainstorms generate more candidate contributions than other types of 'activities…' include one for each unit. It helps the less confident candidates."

Tutor B
"I agree, the brainstorms seem to be popular. I also have found that the activities related to what people already know or feel are easy to respond to and have a quick take up. The activities that are related to the set activities from the unit workbooks, that demand that the candidates do some preliminary work first, are less quickly taken up – this sounds obvious. It makes me wonder whether the time that is given for each of the units is tight or whether longer should be given for completion of each unit."

A discussion that led to a great many in-depth contributions was in the form of a conversation. The target audience was intentionally limited to learners teaching in a particular type of school but learners from a wide variety of backgrounds made valid and useful contributions on a topic relevant to all. The question was brief (nine words only) and elicited 184 responses (see appendix for more detail).

3.11 Styles of learning and teaching

Learners have different preferred styles of learning as already referred to in section one. Adult learning should be problem-centred and not content-centred, Stephen Heppell (2001) comments "In a world awash with content and information the teacher's ability to annotate that information and to develop a critical awareness in learners seems to be invaluable".

The provision of content is not sufficient for adult learning. Online learning provides community and connectivity which has primacy importance.

Online teachers need to consider the structure of the environment and activities to provide for the needs of these different learning styles. The assimilative will need ample resources at the start of a programme, whereas the activist will need to have opportunities to join discussions at the first possible opportunity,

"I go in for a purpose but find I often learn more by following a whim or checking out something that interests me…all of which takes time that I don't have. I believe I am also an activist/theorist but doesn't that cover all the options."

"The medium should enable you to adopt your own learning style. 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."

"I'm highly curious by nature and need to get an overview of whole picture up front – that's my preferred learning style (Gestalt theory of perception)… therefore I went through every page/link/space that (the course) had on offer and felt

satisfied/comfortable when I'd done the tour."
(3 NPQH tutors who are participating in a course as learners)

Teachers also have their own style and just as in a face-to-face situation they should use the online space to give an insight into their personality. An analysis of two NPQH tutors 'Shared Learning Spaces' undertaken in June 2001 demonstrated that different tutor personalities lead to the use of different online tools and different structures in the space but on similar learning contributions.

As well as matching the personal style of the teacher, it is important that any programme materials and associated activities are adapted to suit needs of learners and contexts, and provide complementary online discussions.

If activities are lifted from another source and embedded verbatim in the online learning space, those which are inappropriate for an online context automatically fail. Similarly if questions are too complex they will fail. Those questions most likely to succeed (based on an analysis undertaken for Talking Heads) are those which contain one question, are short and straightforward. For example,

> *"How do you think your school benefits or could benefit from being involved with IIP ?"*
> (An additional activity from unit 3.3)

If a blended learning approach has been taken, as was the case with both NPQH and the Certificate of School Business Management Pilot programmes, all learners will need support in reinforcing the links between the different aspects of a

programme – for example the materials, conversations, activities (online and work-based), face-to-face training and assessment. Without this linkage there is the danger that some learners will regard the online aspects of learning as an extra and the variety of opportunity will be regarded as a burden. Here an NPQH candidate comments in a summary of learning and links to two other aspects of the programme,

> *"Thanks for your contributions to On-Line Discussion Modules. Have you read Barbara McGilchrist's Hotseat article?"*
> (Tutor comment Oct 2001)

Some learners do not value the online element of the NPQH programme because it is not formally assessed,

> *"I think that some tutors, candidates see face to face and assessment as their priorities, and online as not. It is an issue for <organisation> to make the online part count – at the moment if you do not log in, it doesn't matter."*
> (Tutor comment, May 2002)

This gives the message that it is less important than other aspects and when busy professionals are forced to choose which elements to concentrate on the online community aspect will receive low priority,

> *"One of the main issues is learners having difficulty managing their own learning."*
> (Tutor comment, May 2002)

3.12 Summarising, flow and threads

As a discussion builds up online it can become difficult to follow. This is due to the volume of information and to the number of topics that may be raised in any one conversation. The teacher should take responsibility for summarising as the conversation progresses, the final summary and for starting new threads as appropriate. The managing and navigation to these new threads will also need care if the learner is not to be overwhelmed or confused:

"Thanks for all the contributions. Three strands are appearing.... You seem to be valuing IEPs and have suggested ways of reducing the bureaucratic load."

"(name) identifies benefits for the whole school arising from the Gifted and Talented provision, and also hints at the coverage across the curriculum. How do others see this?"

"How does the Portsmouth guidance cited by (name) strike others - is the distinction between gifted/core and talented/non-core useful?"
(Summary and question to move conversation on)

"The other issue, that of summarising is also key... we will be summarising as we go... we may even invite others to make their own summaries... for whose summary is the most appropriate/accurate??? Sometimes I have been thanked profusely for summarising key points, at other times folk have complained that I have missed things!"
(NPQH comment on summarising in discussion, course for tutors (Feb. 2002)

"I agree it is a good idea to share the reading and post summaries but a different tack. I have just had a look over the resources for this unit [ie I need an overview] and found the scale daunting. Initially this was off putting [I think other learners may react in this way] but I am beginning to grasp the significance of the net to learning. So much is out there, the secret is having the key to find it. The bonus in this situation is having a group to check out understandings."
(Learner comment on volume and navigation, course for tutors (Feb. 2002)

By providing a summary the signal of closure is made and the learning can move onto the next topic. Online there is a lack of the distinct start and finish evident in face-to-face learning. These 'drumrolls' (Sloman, 2001) need to be provided by the teacher.

If a learner makes a point that suggests a new thread then they can be further empowered by taking responsibility for developing the new topic themselves:

"I would like to hear more about my fellow participants experience as online learners and what they felt motivated them to participate (could include this module)."

"Thanks for the prompt on motivation, and your brainstorm on it. If others would like to contribute to this brainstorm it can be found on the unit 2 or click here."
(Learner suggestion and response from teacher, tutors course Feb. 2002)

They should also be encouraged to summarise their learning and any conversations they are responsible for. A danger here though is that the more reflective may produce summaries of learning without contributing to the active learning discussions,

"I have noticed that there are a number of candidates who contribute to the national hot seat debates fairly regularly and a number of candidates who are actively engaging in the centre module discussions. But unfortunately it is not a high percentage of our candidates who are making any contributions."
(NPQH centre manager in discussion with tutors)

3.13 Giving feedback

It is imperative that learners receive feedback on their postings and reflections. A learner who does not take active part is not present, neither is an online teacher,

> *"One candidate made 38 contributions without the tutor responding on the tutorial noticeboard. Regular contributions by the tutor to the board appear to result in a more responsive tutor group."*
> (University of Manchester Bursars evaluation report (May 2002)

Many learners faced with an absent teacher will drift. Care needs to be given to the style of this feedback. This can be done in the online space so that all learners can read it or can be one-to-one to allow for privacy of response. The table shows the number of postings in learners' Summaries of Learning for two tutor groups.

A further consideration is the style and length of response. Just as a long or complex question face-to-face deserves a reasoned response so online a brief remark may be seen as off-putting to the learner. Conversely, if a long response is given to a short question it may induce the expectation that the next question must be of length. This can be difficult and the conversation may stall.

3.14 Conclusion

Teaching in an online context is not that different, from teaching in a face to face environment, although the ability to 'slip time' does mean that strategies to get learners to participate have to be broken down and made explicit. Our examination of NPQH tutors 'Shared Learning Spaces' and Bursars tutors 'Online Tutorial Groups' have demonstrated that a sympathetic strong and imaginative teacher is able to transfer those skills online. Being interested in learning they are often willing and enthusiastic about transferring their skills and welcome the challenge of a new context. However the starkness of the online environment exposes those teachers who fall back on dissemination models, or often absent or not in sympathy with their learners. There is no hiding place online for weak or ineffectual teachers.

Learning online gives new opportunities for teachers to expand the programme and this is being increasingly recognised by those online teachers in both the NPQH and the Certificate of School Business Management Pilot programme,

> *"NPQH online goes over and above the content. It is about learners' professionalism, expertise and experience. It provides a wonderful opportunity for candidates to share."*
> (Tutor comment, May 2002)

Section 3: Appendix

Analysis of discussion in virtual heads

- The title of the discussion was: "What do you do in your school about vision?".
- It was started on 1st October 2001.
- The discussion starter was: "Are there any strategies for turning vision into practice that you would like to share with others?"

1. Summary of quantitative data

The style of the discussion was as a conversation. The number of contributions to the conversation attracted attention. An overview of some of the quantitative data is presented below (Table 3.1).

2. General observations

There were many contributions that satisfied the opening remark and also expressions of appreciation for such contributions, for example:

"If we are honest, we would say that the vision for the school is driven by the headteacher. We all recognise that the other stakeholders need to consulted, but ultimately the headteacher leads/manages the school and as a result needs to move the school forward in a way that they think is right. Show me a headteacher that strives for a vision that they do not believe in! So how do we get others on board? Perhaps you could ask all the stakeholders, including the parents (you will have to expect criticism) what three things could we do to improve the quality of teaching and learning in the school? You may find the results interesting! But it will give you an insight into what stakeholders want from the school (their vision)."

"Your vision must reflect your values so surely these would be apparent in whatever kind of school you find yourself. You will find that processes and outcomes will vary but the vision lives on. I do like the idea of three key points from all stakeholders to drive a vision forward. Thank you for that."

There was also much discussion and exploration of vision itself. e.g. defining, interpreting and exploring vision as the example below shows,

"Thanks to everyone for their insights- they have really helped me in my thinking. Isn't vision simply "WHAT I BELIEVE" in a school/headteacher context? I thought Suzannes comment about walking ahead...is true- its about leading and checking that the track is still clear enough for everyone to see where they are going."

Many heads also used the discussion to raise their own issues, difficulties or problems rather than for sharing strategy. Many of these contributions received responses however there was little re-participation to say if these responses were useful.

A number of recurring themes emerged from the discussion. These are shown in Table 3.2 together with the number of times they recurred. These could be arranged in more general themes; management issues, clarifying vision, effecting vision etc.

Quantified Items	Quantity
Start Date	1/10/01
Archive Date	6/3/02
End Date	31/3/02
Number Contributions	184
Number Participants	167
Number Re-participants	12
Number Males	55
Number Females	106
Number Gender unknown	6
Expressions of Thanks	12
Re-participants Expressing Thanks	3

Table 3.1 General Quantitative data.

Recurring Theme	
Ownership	115
Heads' role in process	61
Continual re-evaluation	45
Exploring / defining vision	41
The children	36
Communication	32
Creating or inheriting a vision	31
Mission / vision statement	23
Consultation	16
Reference to module or face to face training	16
Faith	14
Managing change	14
No vision	10
Busy staff/heads	8
Managing conflict	8
Managing vision skeptics	8
Celebrate achievements	6
Others	9
Total	493

Table 3.2 Recurring themes in discussion.

3. Evidence for community

Evidence for community was seen in contributions after they were classified according to Table 3.3 below:

- All 184 contributions were analysed, most were assigned classifications according to Table A3.3.
- Approximately 80 contributions displayed multiple entries, i.e. two or more different indicators of community within a single contribution.
- 90-100 contributions had a single entry in the community section.
- 10-15 contributions showed no indicators for community. above.

Categories of Indicators to Community	Number
Me and my school	87
Disclosure & Venting	34
Agreement or reference to other participant	109
Ownership (proposing actions)	42

Table 3.3 Classification of contributions for evidence of community

4. Evidence for learning

The categories in Table 3.4 (below) are indicators of learning. Contributions to this discussion were analysed for these indicators:

- All 184 contributions were analysed, 50 were classified as in Table 3.4.
- Only 2 contributions displayed multiple entries.
- 48 contributions had a single entry.
- 137 contributions showed no indicators of learning.

Categories of Indicators for Learning	Number
Reflection of what has gone before – enthusiastic / agreeable reference to prior contributions.	39
Learning - explicit references to learning,	11
Impact, change -" as a result of this I will/have" The hotseat has caused change to happen	2

Table 3.4 Classification of contributions for evidence for learning.

5. Gillian Salmon's taxonomy of active & interactive thinking

- 97 contributions were analysed using an adaption of G.Salmon's taxonomy. These were the first 94 contributions (2 were duplicates) and the last 5 contributions.
- The effectiveness of the modified taxonomy is being investigated with a view to future use in discourse analysis. It is likely that it will be further modified.

Table 3.5 (below) shows the modified taxonomy and the results of the analysis using the modified taxonomy. Each item in the taxonomy has been coded, all later references to the taxonomy will use this code.

The three major changes are defined in the 'comments' column. They were introduced to suit the nature of the data, specifically to facilitate the process of discriminating between categories. In doing so the number of multiple entries (of codes for contributions) was reduced. However the analysis still recorded multiple entries because while this makes interpretation of the totals more complex it provides extra depth and detail as compensation.

The column 'single entry' shows the number of contributions that are entirely defined by each code. 'Multiple entry' shows the number of contributions that are partly defined by each code. For example, code S2: 18 contributions were partly defined by containing challenging questions and partly defined by one or more other Salmon categories; whilst 3 contributions were entirely defined by code S2. In total 21 contributions had S2 assignments. The frequency of single and multiple entries is shown below (Table 3.6).

Taxonomy Category (adapted from G.Salmon)	Notes	Single Entry	Multiple Entry	Total
S1 Offering ideas/ resources and inviting critique of them		1	7	8
S2 Asking challenging questions		3	18	21
S3 Articulating, explaining and supporting positions on issues	Raising an issue	6	9	15
S4 Exploring & supporting issues by explanations & examples	Congenial reply	31	32	63
S5 Reflecting and re-evaluation ones personal position		0	4	4
S6 Critiquing, challenging, discussing & expanding others' ideas	Adversarial reply	1	14	15
S7 Negotiating interpretations, definitions and meanings		1	10	11
S8 Summarising, drawing together threads		3	7	10
S9 Proposing actions on developed ideas		1	15	16

Table 3.5 Adaption of G.Salmon's taxonomy and summary of the analysis.

Contribution containing...	Number of occurrences
Single entry	47
Double entry	37
Triple entry	10
Quadruple entry	3
Total number of contributions	97
Total number of entries	163

Table 3.6 Summary of single and multiply entries for Salmon analysis.

Section 4
Learner learning / how members learn

This section analyses and discusses the online experience of learners in the NPQH programme. ICT and online learning tools have been used to provide learning opportunities in programmes. As well as having an impact on the learning objectives of the programmes, the use of ICT results in learning gains in the use of the technology itself. This aspect of learning, supplementary to the main aims but valued by learners, is considered at the end of the section.

4.1 Expectations of online learners in NCSL programmes

- Online learners are professionals who need to take responsibility for their own learning.
- Online learners should contribute to discussions and reflect on the learning that comes from the discussions.
- Online learners should post summaries in their learning groups, and comment on others in their learning circle.

Simply reading hotseats and online discussions is a valid way of learning but this learning needs to be drawn out in the summaries and assessment processes.

The online elements of the NPQH programme consist of four distinct elements:

- Resources and websites of materials
- Overarching spaces for national discussions, hotseats and administration
- Asynchronous regional discussion forums
- Spaces for learners to share learning with peers and teachers

For a programme to be successful these elements must be coherent and, crucially, the online element must not be seen as an extra but must be central to the process of learning and of assessment.

In this section the impact on learning of each of the sections is considered in turn.

4.2 The impact of online work on learning

The majority of online learners report that they find one or more of the online aspects useful (see Table 4.1 below). Frustrations occur when material is not available for them to contribute to, or when their contributions go unanswered. These frustrations are often voiced in a need for more face-to-face meetings (see the end of this section), a natural reaction but one which needs to be first addressed by ensuring that discussions are available, interesting and relevant.

59 cohort 1 NPQH learners were surveyed in July 2001 and asked which of the elements they found most useful to their learning.

The results showed that they found the national overarching elements of most use.

The most often stated reasons given to explain the usefulness of these elements to learning were:

- Reducing isolation, networking across a larger area,
- Exposure to remote experts
- Wider range of case-study Headteachers
- Availability of hyperlinks to materials
- Feedback from tutors and others
- Being able to work at own time and pace

Hotseats and the website of materials are the two most popular elements. It is these two elements that allow for the more reflective style of learning with learners being able to spend time reading, rather than contributing.

To balance this it is necessary to take a more proactive approach in the learning spaces and discussion forums where teacher and learner are engaged in discussion. The resulting restructuring of summary of learning groups, following the survey and feedback from centres, has allowed more sharing of learning.

Online element	Hotseats	Website of materials	Regional discussions	Learning space
Number of mentions	26	21	6	13

Table 4.1 Responses to 'Which element/s do you find most useful?' July 2001

Cohort	Log on rate
1 (spring 2001)	93% by April 19th
3 (spring 2002)	98% by March 22nd

Table 4.2 Log on rates

4.3   Logging in rates

For the induction to Cohort 1 in February/March 2001, there was no requirement for learners to log in. Indeed, few induction tutorials were held in venues where this was possible. This caused problems with learners subsequently not being able to access the online components:

"Demonstration is not sufficient. Learners need to have hands-on experience so that they can feel confident of expectations and how to fulfil them."

"(This implies the need for) clarity for tutors/learners re what expectations are (i.e. how often people log on, what they post in summary of learning, how they contribute to online tutorial groups."

(NPQH Centre Manager reflecting on Cohort 1 inductions)

As a result of this lack of hands-on access, there were a significant number (1 in 14) of learners who had not logged in after several weeks. After the experience of this cohort, centre managers revised their approach to the induction tutorials so that by Cohort 3, the requirement to log in and experience the online environment was central to the tutorial. Following the introduction of integrated ICT in the recommended agenda for induction tutorials (cohort 3) the log in rate for all learners had increased to a level at which virtually every learner had logged.

4.4   Summary of Learning Areas

In Cohort 1, the summary of learning community was shared between one tutor and one learner. This required the tutor to set up and manage a large number of communities, maybe as many as 30 if they work on both Access and Development stage. Across the country this resulted in some 2000 communities, with a consequent problem of navigation and location of previously-visited conversations. In some cases, where participants provided impressive Summaries of Learning these were locked in 2 member community isolation, unshared and uncelebrated. This was completely contrary to the philosophy of both community and the programme, which emphasised collaboration and shared learning.

Often learners did not know how to post to their summary of learning space, as this had not been covered in the induction tutorial. With so many communities to visit, successful posts were often not seen by tutors for some time,

"Learners need more expertise than they have, in some cases, to publish something on their summary of learning page. Tutors need, in some cases, more expertise than they have to seek out contributions that are languishing in the gallery. The result is that learners feel aggrieved that no-one is responding to their work, and tutors feel disheartened that no-one is posting anything."

(Centre Manager commenting on use of summary of learning spaces in Cohort 1)

This structural issue was addressed for Cohort 2, by combining the summary of learning spaces of all learners that shared a tutor to form a 'Shared Learning Space'.

**Image 4.1
A Cohort 1
summary of
learning,
showing little
interaction**

Post box

Started on : 28-FEB-2001 03:52 PM
Ended on : 07-MAR-2002 12:00 AM

For ▒▒▒ to post key learning points and talk with Janet

25-JUL-2001 06:18 PM

---How about writing down some thoughts on your studies so far?

25-JUL-2001 06:18 PM

I'm currently looking at Unit 3.1 Working With Stakeholders. At present my school has no 'formal consultative structure' for the children to communicate their ideas about their school. Most communication is directed at the adults in their lives, although, we do have an active anti-bullying programme which is often referred to during whole school and keystage assemblies. The adult stakeholders have the forum of a Parents Staff Association, which interestingly has no staff members other than the headteacher! Governors are also very high-profile in that most of our governing body is made up of parents who are very vocal. This is a positive thing in one sense, but can and has caused difficulties in the past.

25-JUL-2001 06:18 PM

Well done ▒. If you were the head of a school what sort of structure would you want and why?

As well as making the navigation for tutors easier, the reduction in the number of Summary of Learning Communities (from approximately 2000 to 250) meant that they could be set up centrally in each region. This meant fewer errors and less problems for learners in finding their spaces. This had been a major source of frustration for cohort 1 learners:

Versions 2 and 3 of think.com and the simplified structure of communities were both welcomed, and are having a positive impact on online learners' use of these spaces. In Cohort 3, four Summary of Learning Spaces were analysed. Over 75% of candidates make regular use of their summary of learning, posting a summary at least once a month. In cohort 1 the figure was under 50%.

Learners' responses often reflect the attitude of their teacher to ICT and online teaching:

"My summary of learning space is the most useful as my tutor is great."

"My summary of learning space is fantastic – my tutor's response provoked me."

"I was enjoying my summary of learning until I realized I had made a mistake, now I am too frightened to use it."

"Interaction with my personal tutor has been limited. I'm not sure how confident he is with online input!"
(Comments from candidates about their Summary of Learning Spaces)

Image 4.2
Example of a shared learning space, increasing interaction via a shared single page

4.5   Hotseats

From the first hotseat run by Michael Barber the hotseat programme in NPQH has been hugely successful and there is ample evidence that online learners in NPQH are using the archive to further their learning:

"When I was studying unit 1, the hotseats really affected my thinking."

"Tim Brighouse made me think hard, the hotseats change the way I think."

"The hotseats are really interesting and accessible, I'd never meet (the hotseat guests) in real life."

"Some learners have been quite engaged by the hotseat debates, which I regard as one of the biggest selling points of the site."

(Centre manager comments on hotseats, Cohort 1, June 2001)

Conversely learners have high expectations of the hotseats and become frustrated when the discussions are not easy to follow,

"The hotseats are not productive. I've only been in 4 times because they are very long-winded and frustrating."

One of the aims of the review of the NPQH programme model was to provide interaction with serving headteachers. This is appreciated by learners:

"Ones with real heads are best…"

"The best hotseat was the one with the teaching head…"

Hotseats: Tim Brighouse (Sep 2001): What makes a good Headteacher?

Started on : 12-SEP-2001 12:00 AM
Ended on : 25-SEP-2001 12:00 AM

To read my article 'What makes a good headteacher?' please click here.

What would be interesting is to try to capture the small acts which Head Teachers carry out which illustrate the subtleties of their successful practice - have people got examples? Please share them by writing in the box below.

12-SEP-2001 12:48 PM

One head teacher I worked for was extremely good at giving praise to her staff. As well as verbal praise, she used to send appropriate postcards to the member of staff concerned. Very quick yet personal.

Tim Brighouse   13-SEP-2001 05:20 PM

Not really a question but certainly well worth sharing. I entirely agree with what your former head was doing. I guess such actions have to be very personal and in a sense not routinised….otherwise they appear less genuine. I do something aimilar but by handwritten letters and occasionally buying something very small….but confess it's mostly females in my experience who are really good at this!!!

12-SEP-2001 09:06 PM

Very interesting ! I was about to mention the same point made by ▮▮▮▮▮ (12/9/01) regarding "Thank you" notes put in staff pigeon holes after successful INSET days or Open Days. Extremely efficient motivational tools. Another excellent head teacher, whilst touring the school, would just "pop in" to a class and tell harassed teachers to "Go and make yourself a cup of tea - I'll look after the class for 15 minutes". Sometimes it's all busy teachers need and coming from the Head is always much appreciated.

Image 4.3 Hotseat page with Tom Brighouse

NPQH Hotseat Summaries: Module 1			
Michael Barber	DfES	From Improvement to Transformation	Jan 2001
Mel Farrar	Headteacher	Aiming for Excellence	Feb 2001
Tim Brighouse	CEO, Birmingham	Vision into Action	Feb 2001
Barbara MacGilchrist	Institute of Education	School Development Planning	Sep 2001
John Dunford	SHA	Creativity and Leadership	Jan 2002
Stella Blackmore	NCSL Leadership Team	The Soul of Society	Mar 2002
Rosie Pugh	Headteacher	Team Leadership and Teamwork	Mar 2002

NPQH Hotseat Summaries: Module 2			
David Floyd	Headteacher	Teaching and Learning	Jun 2001
Pam Coward	Headteacher	Boys' Underachievement	Sep 2001
Francine Griffith	Headteacher/ NASS	Managing on the Edge	Oct 2001
Paul Kelley	Headteacher	ICT Developments	Oct 2001
Vanessa Wiseman	Headteacher	Inclusion - Facing the Challenge	Nov 2001
Martin Blows	Consultant	Teaching, Learning and ICT	Jun 2002

Image 4.4 Hotseat archive

"The head of the special school raised my awareness of SEN issues…"

Another reason cited for their popularity is their involvement of a large number of fellow learners:

"They allow me to get a wide range of different viewpoints and perspectives."

"It is good to share with existing heads and fellow candidates."

Conversely though, some candidates feel this constrains their use of this forum,

"The hotseats are interesting to read, but I feel vulnerable in a big group."
(Learners' feedback, July 2001-June 2002)

The archive provides a dynamic supplement to the materials website. In compiling the archive an index has been created that collates the hotseat summaries according to the module that they address. Links between the programme materials and hotseat discussions are being explored in the rewriting of the materials.

The hotseats were initially envisaged to cover two aspects of learning:

- Case study material led by existing Headteachers
- Expert hotseats led by regional and national figures

In parallel to this model, the questions and answers were initially of the 'learner-expert' type, with learners asking direct questions and not reflecting on their practice. As the hotseat schedule proceeded the questioning became more reflective.

Several hotseats have been analysed for this change of style. Evidence of learning based on learners moving from stating what they do now, through reflection on others' comments to direct expression of a change in practice. The figures for this last type of question are suppressed as few learners ever return to a hotseat to report back such change of practice.

4.6 Analysis of learner contributions to hotseats.

Four categories for the contribution of learners were recorded. These are subjective categories, the criteria determining each is shown in Table 4.3 below. It should be noted that it's common to find contributions that fit into more than one category.

Exemplars were collected for three of the categories, the exception being 'Hotseat guest as expert'.

The figures that relate to the categories are in Table 4.4.

Clearly learners are not reporting impact in the hotseats. This may again reflect their national status and their phrasing in question and answer with a guest. The impact on actions is a specific requirement of the school-based activities, which are reported on in candidates' summaries of learning. It is interesting to note, however, that learners are interacting with each other, reflecting on each others' comments and on their situation and their schools, with over 70% of contributions falling into these two categories.

Examples of comments showing impact:

"…This morning I gave the Head an idea of what development planning actually was from your work and that of (name). It looks like we are due to have a big inset on the whole issue and I have been invited, as a non SMT member, to produce a model for staff discussion."

"…I feel that I am at an important stage in my own learning - proximal development etc. - and the crucial task now is to consider what impact ICT has had so far on our pupils' learning, apart from their obviously improved skills, and what impact it could have in the future… I think your advice has in the meantime shown me a starting point - I need to share these ideas with the rest of the staff and identify a 'project'…"

"Thank you for a very apt and succinct summary of Headship, particularly the 5 essential qualities. I intend to refer to these in any future Headship interview! They must underpin all the other little gestures and actions too, because if the relationship is not based on trust and respect, a Head's ostensibly kind and supportive actions will be treated as anything other than that…"

(Comments from learners in hotseats, Feb-Aug 2001)

Hotseat guest as expert; case study	Mainly Q & A - talking about the hotseat guest's own school, their expertise.
Me and my school	The contribution is characterised by the learners repeatedly referring to themselves, their school or their colleagues.
Reflection of what has gone before (learning)	Reference to other questions/answers. Mention of others, explicit references to learning.
Impact, evidence through actions	"As a result of this I will/have…" The hotseat has caused change to happen.

Table 4.3 The four categories of contribution from learners in hotseats.

Hotseat Guest	BM	DF	PS	GG	TB	TOTAL
Hotseat Guest as expert/case study	10	9	6	1	18	44
Me and my School	13	25	7	7	10	62
Reflection on previous comments (learning)	14	21	9	7	19	70
Impact, evidence through actions	1	0	0	2	1	4
TOTAL	32	51	22	12	46	180

Table 4.4 Categorisation of learners' contributions to hotseats.

4.7 Materials website

Each module emphasised reflection and 'cued' online learners for the reflective experience. The materials website consistently linked back to the online community and gave online learners the opportunity to develop a pedagogy based on dialogue, discussion, collaboration and sharing best practice within the communities to which they belonged.

Thus the materials website was consistent with the changed philosophy of the NPQH programme; this was not a managed learning environment in which control resided in the programme team, but an information tool through which the pedagogical thinking residing in the programme (self-directed learning, continual professional development, collaboration, sharing best practice and criticality) could be best implemented.

The NPQH learners had access to the materials in paper form as well as on the website. Both of these formats are valued:

"The paper materials are wonderful…"

"The website materials and their links are very convenient…"

"The website is the most useful, especially its links to information e.g. in the unit on governors"
(Feedback from learners, July 2001)

From the launch of the new model of NPQH the website of materials has attracted a large number of visits with each visitor spending some time browsing and reading a number of pages.
Duration of logging: 8 months
Number of page hits: 119,000 (exactly)
Number of sessions *: 10198
Number of pages per session: 11.7

* a session is defined as a visit by a user from logging into the site, to leaving it.

4.8 Module discussion groups

Known as online tutorial groups in Cohort 1, these provide a space for learners across a region to share in discussion with the regional tutor team,

"The Online Tutorial Groups are not going down particularly well for various reasons

- *Tutors - expertise in putting the right things in the right place*
- *Learners - reluctance to put themselves "out to dry" as someone said to me today. Can't help feeling that future heads ought to have the courage of their convictions, but clearly in some cases they don't. That's an issue.*
- *Until we reach "critical mass" in contributions, those who don't contribute feel disappointed at the lack of interaction"*

(Centre manager comments on Cohort 1)

Module 1 activities and discussions

🗣️ A vision for this century

By ░░░░░░░░░░░░

Ends 12-FEB-2003 12:00 AM

Please use this space to record what you see as the key ingredients of your vision for the school you would like to lead.

░░░░░░░░ ░░░░░ says, "*I have a vision of a school where every pupil and member of staff enjoys learning and craves for more! Learning thus needs to be stimulating and exciting and importantly achievable but challenging.*"

🗣️ Working with stakeholders

By ░░░░░░░░░░

Ends 25-FEB-2003 12:00 AM

Please use this space to share ideas on how best to involve parents, pupils, governors and others in the community in developing the school's vision.

░░░░░░░░░░ says, "*Each year we have a 'strategy' day with governors to consider the direction of the school. My school was new in September 2000 and therefore we had to agree a vision/aims etc. This 'away day' proved to be very successful as we played games, developed as a team, have a lot of fun and produced a mission statement and set of aims that we are proud of.*"

💡 Strategies for monitoring, evaluation and review

By ░░░░░░░░░░

Ends 25-FEB-2003 12:00 AM

Please use this brainstorm to share successful strategies for monitoring, evaluation and review.

For each strategy, say what you see as the head's role.

The latest entry is, "*If we do not give teachers the time to monitor, evaluate and review their work, we give the message that it can't be very important. Teacher days need to be set aside for this activity, rather than all being used to launch new initiatives.*"

Image 4.7 module discussion group

4.9 Centrality of online elements to learning and assessment

From the outset, online work was seen by a 'core' of online learners as an integral part of the programme. Many of the early complaints concerned the inability of learners to find appropriate online spaces, either due to the failure of online teachers to establish these areas or navigation complexities.

Even in early discussions there was obviously some reflecting of ideas back into the school situation. Cross-LEA boundaries aided this discussion. Online learners report they have benefited from access to a much wider range of ideas online, for example hotseats allow them to directly interact with experienced headteachers and policy makers and to share ideas.

In any programme of learning, components need to be coherent, and seen by learners to contribute to the whole programme, and to its assessment. This applies equally to the online aspects of the NPQH learning programme. Without this centrality, learners will become frustrated and put undue reliance on the face-to-face elements of the programme:

> "ICT mustn't be seen as an add on. It is central to developments in school today."

> "I don't like the dependence on ICT. Yes, it is good to use this facility but I am resigned to logging on at home, in the early hours as there are too many other things which are demanding my time. I don't think this is lack of time management but lack of time!!! Does anyone else feel the same?"

> "The face 2 face days were intense but at least I was able to devote my full attention to them. I know that being a Head will be demanding but I know I couldn't work harder than I do at the moment and I am using my time efficiently. Where does everyone else get the time to log on?"

> "With the 'lunch box' modules to study, the school improvement focus, and gathering the extensive evidence for the school based assessment, there is no time left."
> (Comments from learners on NPQH programmes, Cohort 1)

> "Feedback from learners at face-to-face training today is very clear. They feel there is too much to do in studying the units anyway. Add to that the time demands of responding on-line and the whole things becomes not only unmanageable, but de-motivating."
> (Comment from a centre manager, with Cohort 1)

These issues are compounded if, and when, learners realise that their online contributions do not directly form part of the evidence for their assessment. To counter this, many regional centres are asking assessors to explicitly require learners to produce the evidence so that it may be considered along with that from the school-based activities.

4.10 Impact of online learning on learner's ICT capabilities

While the emphasis of any online component of a learning programme must be on the core topics being studied such as leadership, management, learners inevitably report a benefit in terms of their capability with ICT and the flexibility it brings to learning:

"I had not used ICT before, and would never have thought of registering online. Now, I wouldn't think twice about it".

"The beauty of this is that I can do it at 3am if I like."

"I can work from home or school, I can fit it in around the needs of my family."
(Comments from learners, Feb-July 2001)

Indeed, it was from the evaluation of the pre-2001 NPQH programme, indicating the desire of learners to use ICT in their learning, that led to the introduction of the online elements in the new model. In the first cohort, 28% of candidates registered online. This increased to 55% in the second cohort, as the centrality of ICT in the process became recognised.

Section 5
Lessons learnt

5.1 Guidelines for setting up an online programme

Through our experience of the development of programmes for the NCSL, specifically the NPQH and a pilot of the Certificate of School Business Management programme for bursars, we have learnt a number of lessons and have key recommendations for others implementing such programmes.

ULTRALAB's understanding is based on a number of premises outlined in section 1; namely that online community discourse adds value to most programmes. This is based on the belief that discourse within a community context allows participants to collaboratively reflect, develop and share best practice, unlocking the tacit knowledge resident in professional learners.

ULTRALAB have been running assessed online programmes since 1994 when the first online Integrated Course module for a university MA programme was designed and run within ULTRALAB. We have been running online communities since 1993. This report draws on these experiences.

To date (May 2002) over 6,000 online learners and 517 online teachers have been involved in the NPQH programme and 100 learners and 10 online teachers in the Bursars' Development Programme pilot.

At programme inception there is a need to clarify understanding of all the elements of the programme with all members of the programme team, including the project leader and material writers. It is essential to ensure that those designing and developing the online environment are involved in all the early discussions of any of the programme's elements. ULTRALAB's experience with the development of NPQH emphasised the importance of this aspect.

Simultaneously there was rapid development of the NPQH programme, the materials, the content of the face-to-face element and the final assessment methods. By the time of the launch of the new programme, in January 2001, there was little integration of the individual elements of the programme. For example, although online community dialogue was a substantive part of the programme and embedded into the philosophy of the new programme, there was no assessment of the online contributions. It was apparent to learners that there was no requirement to contribute online, as demonstrated by the comment by one NPQH tutor below,

> *"Horrified after I picked up a discussion 'thread' in Mar01 group that talks of " assessors NOT wanting to see think.com contributions/discussions as evidence" (Will someone please tell me this is not true before I sceam ?) NB Hard copy print-outs of think.com evidence is as valid, reliable, attributable, as any other material."*
>
> (Comment in online community from NPQH online teacher)

Participation in the online community should be part of the assessment process and be regarded as essential; philosophically this gives the message that contributions are of value and online contribution is worthwhile. When the Bursars'

Development Programme pilot was developed in January 2002, assessment of the online dialogue was written into the programme at the development stage. Learners understand that this is essential and consequently worked to overcome barriers to communication:

"thank you! Please forgive my pedantry, but I wasn't sure if I was merely confused, or hadn't learnt properly... (aha! another entry for my Journal -or is that cheating?). duz ythis program have spellcheck?"

"Don't really want to post this, seem to be hogging the show, but if you don't ask you don't learn.., HEY, I've found the spell check, in Preview! (Another L-J entry, heh heh heh...)"
(Two comments from the same learner in Bursars Count noticeboard)

Demonstration of the value held by community can be made in a number of ways, including the commitment to participate by those running the programme.

The elements of the NPQH programme were seen as standing in isolation. For example there was no extension of discussions held on face-to-face days into the online community dialogue. Thus an opportunity was lost to provide an integrated approach for the learners. The bursar pilot has structured the programme of hotseat guests so that a presentation is made at a face-to-face event; the slides from the presentation are made available to learners who are then able to ask questions in the community hotseat. This gives learners more time to think about their questions and the speaker can answer when convenient. This integration of the face-to-face meetings with the online community is a welcome progression, improving the relationship of the online elements with the face-to-face.

It is essential to ensure that the programme materials can integrate with online dialogue. The NPQH writing team had little experience of online learning when the questions to be discussed were written, hence the activities specified in the modules for online community dialogue were not always suitable or appropriate. Teachers reworded them or replaced them with other activities designed to stimulate discussion (see section 3).

For the development of successful online community discussion it is essential that the underlying programme philosophy is in symmetry with participation and dialogue. If the programme exists in isolation, as in the case of LPSH, then the online element is likely to fail. Within the NPQH programme, the materials' website was designed to provide flexibility, thus the underlying database and system of hyperlinks enabled the online learner to 'follow a journey' through the materials. Online learners are able to use the materials website to access both the programme materials and resources and up-to-date information from external web sites, for example when studying the issues around setting a school budget, the website contained background information, links to organizations, such as the Audit Commission, and spreadsheet models that can be downloaded and tailored to individuals needs.

Each NPQH module emphasised reflection and 'cued' online learners for the reflective experience. The materials website consistently linked back to the online community. This gave online learners the opportunity to develop a pedagogy based on dialogue, discussion, collaboration and sharing best practice within the communities to which they belonged. Thus the materials website was consistent with the changed philosophy of the NPQH programme; this was not a managed learning environment in which control resided in the programme team but an information and learning tool through which the pedagogical thinking residing in the programme (self-directed learning, continual professional development, collaboration, sharing best practice and criticality) could be best implemented.

There is a need for any programme to consider the potential learners to ensure that their learning will be enhanced by access to a learning community. If the philosophy of the programme is reflective and self directed our evidence is that learning will be enhanced (see section 3).

Image 5.1 The overarching area for the pilot Bursars' Development Programme

5.2 The structure of the online learning environment

The online space for any programme should consist of an overarching space and spaces for learning, which will have distinct features, to match the style, aims, objectives and numbers involved in the programme. Both these types of spaces are discussed in this section.

5.3 Overarching area

All programmes, including NPQH and the Bursars' Certificate of School Business Management pilot have demonstrated the need for an overarching area where all online learners meet. This was established in the early planning of the online aspects of NPQH. This 'central' place (Virtual Heads and Bursars Count) provided crucial administrative functions. For example all the necessary programme documents were available for online learners to download in Virtual Heads, both communities provide a 'noticeboard' for online learners and teachers to highlight issues, problems and notices.

Image 3.1 (in section 3) shows the overarching area for NPQH and Image 5.1 that for the pilot Bursars' Development Programme.

All those involved in a programme belong to the overarching community. This provides for essential access to a feedback space for the online learners.

5.4 What should an overarching area contain?

Whilst programmes will vary and have distinct 'flavours' there are some generic features which can be identified and should be in each overarching area:

- Noticeboard, to include reminders and timelines, and clearly stating that all members including learners can add notices
- Links to materials and resources to support the discussions
- Discussions with experts. These may be the online teachers themselves or guests and may be led by more than one person concurrently
- Teachers' contact details and links to their own spaces (if provided by the software)
- Bibliographies
- Programme guidelines, including the schedule, learning objectives, assessment requirements

Experience shows that these overarching spaces are well used by online learners who give valuable feedback on all aspects of the programme, including design, implementation and materials. The examples below give two of the many types of feedback from Virtual Heads:

"I'm a new member to NPQH and was relieved to read that other people are finding it difficult to get online - I thought it was me/my eldery computer. Finally made it tonight although I had o make a cup of tea whilst waiting for photo to install....No doubt it will become clearer in time. I look forward to contributing to discussions, ask Hotseat questions etc but so far find it a little intimidating."

5.5   Programme learning communities

"What has changed? Tonight for the first time everything worked without me having to try twice at all and i was on for nearly half an hour. Well done! Is it the time or a fluke. I hope not because it certainly made a difference to what I could do in the time. I will let you know if it continues."
(Comments from online learners in Virtual Heads feedback)

A consistent approach should be adopted in these spaces, few changes being made to ensure that online learners can find the information they need with as little waste of time as possible. Within Virtual Heads, from the programme inception in January 2001 the area contained a noticeboard, where both online learners and teachers could raise issues, links to documents and external sites (including the NPQH materials web site) and the hotseats.

Early learning from Talking Heads emphasised the importance of limiting the number of places those contributing online needed to visit to contribute. When the number of places where contributions can occur is reduced, then less members are viable. Talking Heads participants polled for feedback frequently mentioned too many places and too many discussions, as demonstrated by the comment below from a member of Talking Heads,

"I cannot find the discussion I started to find out if anyone has commented ..... there are simply too many places to go to and too many overlapping discussions."
(Comment in personal communication from Talking Head participant to a facilitator)

In the development of NPQH, the project leaders wished to replicate the face-to-face experience online and thus created a large number of private communities. For example in January 2001 online learners on the NPQH programme were expected to discuss their learning in a space designed for one online learner and one online teacher. This mirrored tutorials in a traditional learning situation. These areas were called Summaries of Learning and the anticipation was that online teachers would interact with online learners on a regular basis to add advice, expertise, support and encouragement to the online learner. Each NPQH online teacher had 12 to 15 online learners and therefore 12 to 15 Summary of Learning areas. This led to unfortunate replication of the problems identified by Talking Heads participants.

Some participants produced active and impressive Summaries of Learning. Despite the success of this minority, a large number of online teachers were still embracing their capabilities with

the tools and did not cover all the administrative tasks required by the software. For example, they omitted to invite participants to the spaces or created the areas in the wrong places. When this area was created for each learner this led to confusion, due to the number of online spaces created (over 2,500) and the impossibility of ULTRALAB facilitators or regional co-ordinators checking to correct errors. A more serious problem, however, was that in cases where participants provided impressive Summaries of Learning these were locked in two-member community isolation, unshared and uncelebrated. This was completely contrary to the philosophy of both community and the programme, which emphasised collaboration and shared learning.

Following advice from the ULTRALAB facilitation team it was agreed to experiment with combining the Summaries of Learning of each online teacher, creating Shared Learning Spaces of between 12 and 15 online learners with one online teacher. The Shared Learning Space provided localised communities (online tutorial groups) in which NPQH online teachers encouraged, stimulated and orchestrate meaningful debate between online learners and gave shape to the learning. This smaller shared learning group is supported by some face-to-face tutorials and learners are encouraged to meet and visit each others schools. Within the online space it was anticipated that online learners would 'collect' comments, discussion points, questions and answers from other parts of the online environment that were relevant and key to their own learning and share these with their group. By transforming these

Summary of Learning areas into Shared Learning Spaces, allowing other members of the group to comment, the programme ensured that there was a real purpose for these

areas and that the learning which took place could be shared.

These spaces have become the online learners' principle record of formative learning.

By May 2002 Shared Learning Areas had become lively and vibrant, especially in the Access stage of the programme. Within these areas the personality and tutoring style of online teachers, who have embraced the environment, shines.

Participants have been keen to extend the remit of these areas initiating all sorts of discussions including those surrounding the modules but at the expense of participation in the Module Discussion Groups.

Virtual Heads Module Discussion Areas were designed so that discussion could take place with a large number of online learners. Discussions in these areas surrounded the programme modules, which were regionally based and managed and were cross phased. These communities aimed to provide online teacher-led, predetermined discussions that were heavily focused on the specified activities within the units. It is in this forum that online learners were expected to share their pragmatic, school based experiences and online teachers were expected to enhance those experiences by drawing the online learners into a more reflective mode. Despite an increase in the membership of these communities, from 54 in January 2001 to 300 in January 2002, there remains in May 2002 only patchy evidence of discussion in these areas and a lack of clarity of purpose as the Shared Learning Spaces gradually extend the discussions from the original brief into all aspects of the programme.

	March – May 2002
Average number of contributions in regional discussion groups (typically250 members)	17.8
Maximum number of contributions	114
Average number of contributions in shared learning spaces (typically 12 members)	14
Maximum number of contributions	93

Table 5.1 Contributions to online spaces

Summary of Learning Group

Chat /Coffee Room

By **G**...

Ends 31-MAR-2003 01:00 AM

This is the place for any general comments or questions to share with the tutor group. **Humour** is a welcome visitor here ... know any good, clean jokes?

Reflections on Chapters 1+ 2 of Module 4.4

By **G** ... ...

An opposing view to ICT!

Learning from Experience

By **G** ...

Ends 31-MAR-2003 01 00 AM

This space is for you to share learning points which arise from your School Improvement work, the training days or any other **learning activities** you engage in. *Brief comments work best.*

Image 5.2 A tutor's customized summary of learning group space

5.6 Key reasons for lack of participation in module discussion areas

A number of reasons can be identified for the module discussion areas attracting very few participants:

- Inappropriate module questions. The NPQH module writing team had no experience or understanding of working online when the questions to be discussed were written. These questions do not lend themselves to online collaborative discourse.
- Lack of understanding of the new course philosophy on the part of online teachers. 'Self directed' was often seen as 'by yourself' in the eyes of the tutors.
- Pace of the programme. The programme flexibility enabled online learners to work through units in any order. This meant that very few of the learners would be studying the same unit at the same time, thus the number prepared to discuss an item was too small for discussions to obtain momentum.
- Rhythm of the programme. The expectation was that the programme would run as per a face-to-face programme so that discussion items would be open for only 2 weeks. This rhythm was inappropriate for an online environment.
- Lack of purpose. Given the number of areas online learners were able to engage in (DfES in Dialogue community, NCSL community, Virtual Heads, Summary of Learning areas, Learning Journals, Learning Circles) the module discussion areas lacked a strong enough purpose to engage learners.
- Inactivity by online teachers. Those new to the technology found it hard to overcome the technological and structural barriers, this resulted in some regions having no activities online for their learners.

Despite lack of participation in these areas by November 2001

a number of online teachers were experimenting with both the questions and the online environment by offering less structured discussions, combining a number of questions and adding social dimension to the communities. This stage is important as it marks the phase when the online teachers became so confident with the technology that they used their expertise as deliverers of learning to experiment in the environment. However a real purpose for the Module Discussion Areas is still sought.

The Bursars have two communities, the Bursar's Count community, to which all learners and tutors belong and their Tutor Group which consists of about 10 learners and a tutor. The tutor groups only have a noticeboard and a learning journal for each candidate. It is in this forum that online learners are expected to share their pragmatic, school based experiences and online teachers were expected to enhance those experiences by drawing the online learners into a more reflective mode. The tutors could use their time more effectively because they could see at a glance who had recently contributed to their learning journal and therefore could respond accordingly. Learners could see what the other members of their group were learning and they were able to comment. They could also see how their work was progressing compared with others in their group.

This smaller group is supported by some face-to-face online tutorials and online learners are encouraged to meet and visit each others schools. The online discussions here are focused on the learning that each online learner has recorded. It was anticipated that online learners will 'collect' comments, discussion points, questions and answers from other parts of the online environment that are relevant and key to their own learning and share these with their group. These form an online learner's journal, which is shared and discussed online with their tutor and which is the principle record of the formative learning.
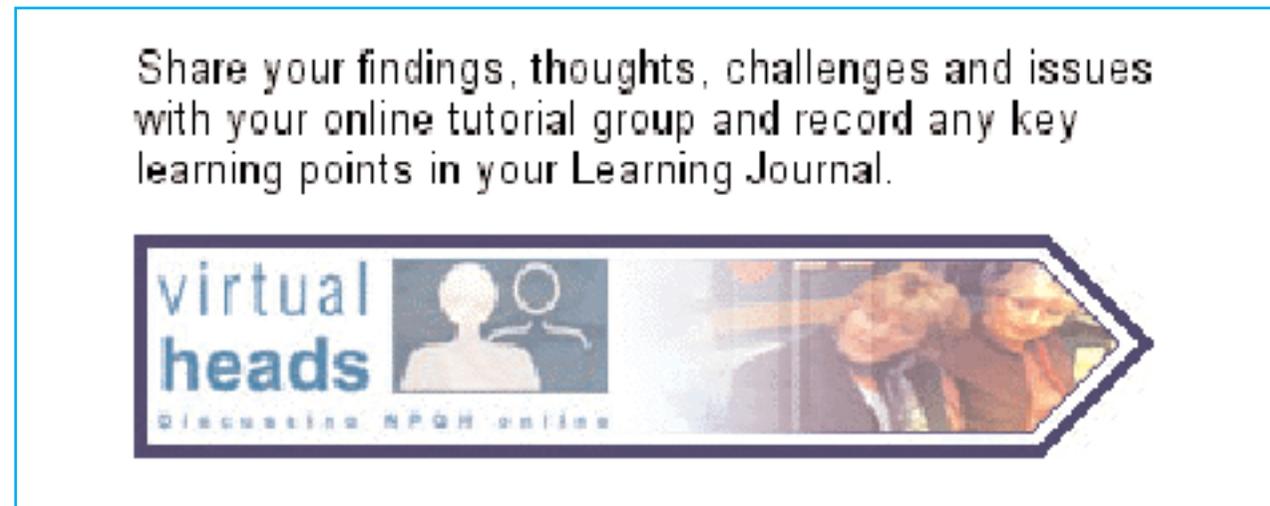
5.7 Bursars' Development Programme - reasons for success

The pilot for the Bursars' Development programme has yielded vibrant online spaces from the outset. There are several reasons that may contribute to this success:

- The programme has built on lessons learnt during the first 3 cohorts of NPQH. For example the structure of the Bursars programme has been refined and simplified to ensure success with the number of communities being reduced.
- Those responsible for running the programme saw the developments in Virtual Heads and were therefore willing to take advice from ULTRALAB facilitators so building on experience gained.
- ULTRALAB facilitators were involved early in the programme developments and implementation so that the purpose of online community was built into the programme and thus an integral part rather than a bolt on.
- Those running the programme are committed to the online community, as evidenced by their interventions and participation in the online community.
- Participation in the online community is assessed and is therefore regarded as essential. Philosophically this gives the message that contributions are of value.

The important lesson from the above account of the development of the structure of NPQH and Bursars is that a clear purpose for each community is essential. The purpose needs to be expressed so that online learners are clear as to the expectations of them in each area created. In Cohort 1 of the NPQH learners were encouraged to set up Learning Circles, but given the number of areas online learners were able to engage in (DfES, NCSL, Virtual Heads, Summary of Learning, Learning Journals, Learning Circles) this area lacked a strong enough purpose to engage learners. Similarly the Module Discussion Areas are still in May 2002 seeking a clear purpose which is not covered by other online spaces and which is strong enough to engender discussion.

Image 5.3 Signposting from the materials website

Share your findings, thoughts, challenges and issues with your online tutorial group and record any key learning points in your Learning Journal.

virtual heads
Discussing NPQH online

5.8   Integration of a programme

Most online programmes have some element of stand alone programme materials. For the programme to demonstrate value placed on participation and collaboration it is essential that the materials do not stand in isolation. Value was demonstrated within the NPQH programme by ensuring that access to the programme materials was via a hyperlink from within the communities. This allowed online learners not only to use one ID and password (that used to access the community software) but importantly, emphasised the importance placed on the community and discussion elements of the programme, because the online programme materials could only be accessed by passing through the community space.

In addition the materials website in NPQH enhanced the philosophy of participation and collaboration by continually linking back to the communities and encouraging learners to comment. Image 5.3 below taken from the NPQH online materials site demonstrates this link.

The structure of the materials site emphasised the reflective aspect of the programme as demonstrated by image 5.4 below, taken from the NPQH Access materials site shows.
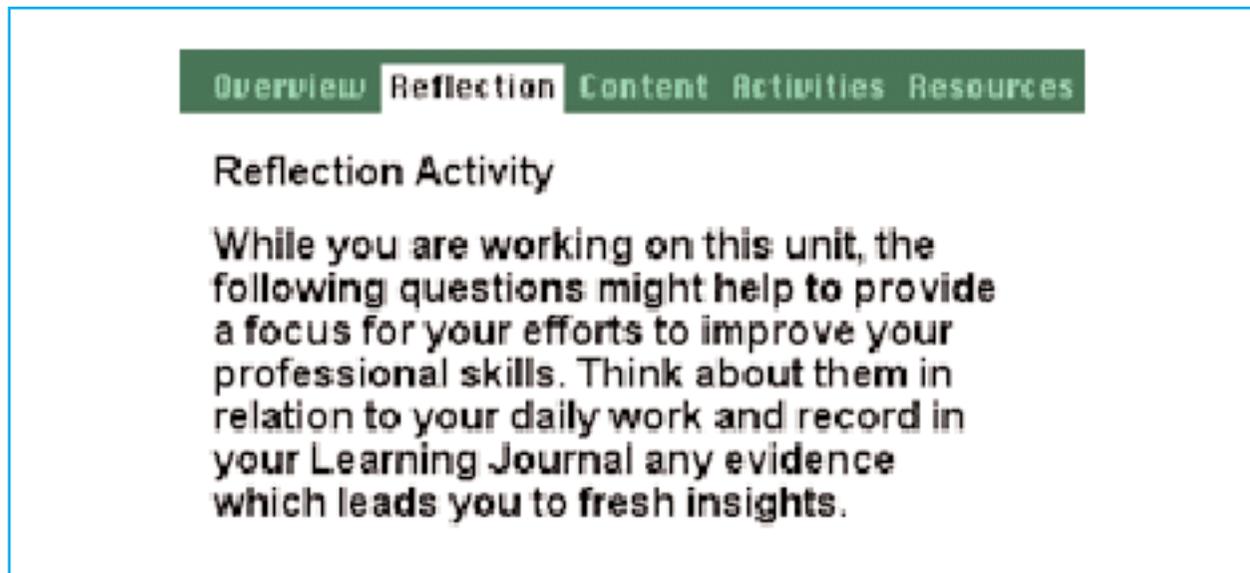
This continually reinforced the programme philosophy. In terms of the diagram in section 1 (Table 1.1) this meant that the NPQH programme firmly placed itself towards the constructivist side of the continuum. In contrast the Bursars programme materials site was developed as a self contained, divorced, structured task environment, sitting firmly on the managed learning side of the continuum. The result of this was that online learners, who were using the community for one month before the materials site was developed were familiar and comfortable with participating and sharing:

"Leaping ahead a bit, I know that shall miss this community when the course is over and I know from conversations at Dunchurch, that others will, too. I wonder if it might be possible, for those who wish to, to stay on as members and perhaps contribute and help with subsequent cohorts? It seems a good way of putting something back whilst also consolidating our own learning. Do you think that might be likely? :) "

"Not related to the course at all really, but can anyone tell me what policies they have in place re: risk assessment. This is something that we as a school need to look at and I would very much appreciate any pointers. Thanks."

(Comments in Bursars Count noticeboard)

Image 5.4 Linking to the summary of learning from the materials website

These learners therefore found the materials site disjointed and difficult. ULTRALAB emphasis that this was not only a structural issue but more fundamentally a philosophical one.

As the move is made towards self reflective, self paced study the pace of the course needs to be considered. Within the NPQH programme online learners were expected to cover aspects of the programme in whichever order and at whatever time they wished. As with any truly flexible programme NPQH participants were able to make use of prior knowledge and ignore those elements where their learning was sufficient if they wished. This resulted in a programme where the online learners could be studying any aspect of the programme at any time. Pacing a programme this flexible was a challenge. In January 2001 the NPQH programme team had a vision, taken largely from a face-to-face environment, of a two weekly cycle of activities that participants could join in when and if they wished. This did not translate well to the asynchronous online environment, where one of the main advantages is the ability to slip time. Discussions closed before all online learners had a chance to participate and those who chose to do the programme in a nonlinear fashion found the areas they were interested in already discussed, summarised and closed. In September 2001 the discussions surrounding the materials were placed online at the start of the programme allowing online learners to add discussion points when they liked. This however meant the discussions were slow and disjointed, dialogue rarely developing and was one of the key elements in the failure of the Module Discussion Areas (see sections 3 and 4). In the more flexible Shared Learning Spaces aspects of the materials can be integrated into the discussion when they affect the online learners to the rhythms and demands of the school year can be integrated into the course, for example the programme material on managing a budget can be discussed at the time when the online learners are concerned with budgets in their school, with the online teacher pointing to the archive of, or current 'live' expert discussion (hotseats) on budgets. This enables a true integration of all elements of the programme.

5.9 Lessons learnt following 12 months of iterative development of NPQH

The learners following the Access programme use the online areas more heavily. This is because the emphasis in the Development programme is on school based work, which means that participants have less need for online collaboration, whereas in Access the emphasis is on sharing best practice and learning. This emphasizes:

- Purpose: there needs to be real purpose for a community to flourish
- Size of community: as long as there is strong purpose and a commitment to contribute a community can be as small as 8 members and still be vibrant.
- Technological skills are easily taught, good teaching skills are not. Strong and successful teachers in traditional learning environments are able to transfer their skills online as long as they are not technophobic. These people prove to be innovative and inventive online teachers whose personality adds dimension to the online space.
- The online environment is blunt and exposing for weak teachers. Online teachers who do not deliver are obvious.
- Participants, who are extending their working day by participating in an online programme, only have time to contribute to a number of spaces. Too many areas in which to contribute lead to confusion and dilute the discussions.
- Assessment for NPQH does not formally include online elements, although a large number of online learners agree that the programme is enhanced by online participation. As long as participants are not formally rewarded for their participation contributing online will be the first item to be dropped under pressure of work. Despite all protestation to the contrary this conveys the philosophical message that working online is of low value.

5.10 Key recommendations

- Those working within online community need to be involved in all the early discussions of any of the elements to lead to an integrated programme.
- The underlying course philosophy needs to be in symmetry with participation and dialogue. It simply will not work to take a pre-existing programme and add online community without fundamental changes.
- Participation in the online community should be part of the assessment process and be regarded as essential. Philosophically this gives the message that contributions are of value.
- Programme materials must integrate with online dialogue.
- There is a need to ensure that the programme aims and objectives can be enhanced by access to a learning community - that there is real purpose for each community.
- The number of spaces for online contribution should be kept to the minimum.
- The pace and rhythm of the programme should be adapted for asynchronous online.
- All those involved in running online communities need to be committed to using the online environment.

5.11 Facilitation of a programme

ULTRALAB have established in their early work (www.ultralab.net/papers) that facilitation is essential for any online community to thrive. Facilitation is a skilled activity and those facilitating any online programme need to be aware of the aims, objectives and philosophy of the online programme.

In the design of any programme knowing who the target online learners are is essential. In January 2001 28% of those applying for NPQH filled in the online application form, whereas by September 2001 over 60% applied online. From this information the ULTRALAB facilitators were able to anticipate that the level of access to the internet and the higher level of ICT skills amongst the later intake would make the online community aspects more successful. This, combined with the iterative process which changed the programme (see section 4.4) resulted in the Second cohort having a much more positive experience online. With the Bursars' pilot programme online learners were already using ICT in their work, (although many had no experience of the internet) which meant, as anticipated, the technical barriers were few. In addition for those participating in the Bursars' programme there was a degree of isolation from other colleagues being only one Bursar per school. The community was effective in removing this isolation.

"Great idea to provide current Bursar's Count members with some form of on-going support / links. Everyone I'm sure finds the days together both socially enjoyable and professionally rewarding. We all need to adopt a degree of continued professional development after the Certificate and I think a Bursars Count "Old Boys" group could be a very popular and supportive arena. Bursars Count has such a specific momentum developing it would be a shame not to harness the NCSL's success." (Comment in Bursars Count noticeboard)

5.12 Reasons for success: dynamics of a group (bursars)

Hence one of the key elements in success of an online programme is the dynamic of the group the programme is designed for. In the case of bursars to following factors combined to ensure that Bursars Count was successful and the community valued:

- Bursars are isolated and delighted to have their voices heard.
- Isolation means that the participants welcome the opportunity to discuss their work with other colleagues.
- The lack of a recognised career structure is an issue that is addressed by the programme. Participants therefore approach the programme with enthusiasm.
- Participants tend to be technologically competent, their job ensures they use computers and email. They therefore had less technological barriers to participation.
- Although competent computer users most participants had little experience of online communities or even online user groups, so tended to be open minded towards innovative software which does not follow traditional boundaries.
- Online teachers are also technologically competent so start with no technological barriers.
- Less is expected of bursar online teachers. Having learnt from the early failure of many NPQH online teachers a simplified model has made the task of the online teachers in these programme less onerous.

ULTRALAB's experience is that at least two facilitators per programme are essential. Not only does this allow facilitators to support each other and allows for exchange of good ideas, but on a practical level ensures the community is covered over holiday periods and that the communities are not left untended for more than 72 hours. Two facilitators becomes especially useful when training of online teachers is required.

It is essential that facilitators are kept fully informed of programme developments, organisation and content as well as the roles of others involved in the project. Within the development of NPQH, ULTRALAB facilitators were not involved in, or given any information about assessment process as this was seen as not in their domain. If, however, they had been involved at an early stage they would have strongly advised that some aspect of online community be involved in the assessment. Only after three iterations of the programme is this now being 'written' into the assessment process. In the example of the Bursar's programme those responsible for running the programme saw the developments in NPQH and were therefore willing to take advise from ULTRALAB facilitators thus building on experience gained.

5.13 Online teachers

ULTRALAB facilitators are experts online, their expertise is in online facilitation and not in the subject of the programmes. As such any programme requires online teachers. Online teachers; make the online space welcoming and relevant to the programme participants needs, ensure learning takes place through provocation/questioning/posing of specific questions, direct the learning and the sharing of key learning points, establish personal contact with programme participants if they encounter difficulties or if they do not appear to be present a short period of time after induction (for example 10 days) and allow online learners to display their expertise online at the start - working online is hard enough without having to engage initially in heavy academic discussion. ULTRALAB recommend that starter discussion seek to draw on the online learners area of expertise, making it easy to contribute but ensuring that all contributions are relevant.

One of the key roles of the online teacher is the setting up of the online community space. Although the design of the space will have been agreed before the programme starts ideally the communities should be established by the online teachers so that they feel 'ownership' of the space. Online teachers should personalise the space, For example they should have their pictures or icons published and write about themselves if the software allows. This helps reduce the impersonality of the online environment and a few sentences of introduction can help reduce any reticence to communicate. It also encourages learners to do the same. This is the online equivalent to wearing a name badge at a conference or programme and encourages the building of relationships. There are a number of givens in establishing the online community space outlined below:

5.14 Key recommendations

- The number of contributory items placed online should be limited
- Make expectation clear in each online space
- Ensure the space is welcoming and allow participants to take some ownership. If the noticeboard becomes a 'meeting place' then so be it. Be more creative about the use of tools so that essential items are not missed.
- Online learners are more likely to engage if observable activity has taken place and their online teacher is present and obvious.
- The social needs of online learners cannot be underestimated.
- Within discussion items make instructions very clear and break them down into step-by-step tasks.
- Ensure deadlines are clear.
- Avoid links taking learners out of the community. When it is desirable that they visit another web site then ensure the link opens a new browser, thus encouraging them to return to the community.
- If learners do not make themselves 'visible' then they should be contacted, preferably by telephone. They may be having technical problems and be unsure or unwilling to ask for help. Learners may never previously have found themselves in a situation where they cannot cope and may not wish to expose their feelings of inadequacy.
- If an online teacher is to be absent for any period of time they should make it clear to their learners that this will be the case. A clear notice informing others of when they will be 'off-line' is a matter of courtesy that is often forgotten.

With both the NPQH and Bursars programme the online teachers had very limited experience working online. In the case of NPQH 516 online teachers needed to understand the

environment in which they were to work in a very short period of time. NPQH online teachers first saw the online environment in which the programme was to take place in October 2000 when their usernames were created. The first cohort of online learners were scheduled to come online and start the new programme in January 2001. This meant an intensive training programme was essential.

Philosophically ULTRALAB believe in empowering people to take control of their own environment and do not believe in a model of dependency. With these aims in mind the aim of any training programme developed for online teachers is to empower them to run the programmes and to allow for the disengagement from ULTRALAB facilitation.

Developing from ULTRALAB experiences with both NPQH and Bursars' training ULTRALAB believe that training for online teachers new to working in an online environment should take place not only face-to-face but in the online environment in which the programme is to take place. An online training programme should ideally consist of:

• 1 day face-to-face training with a full computer suite and a digital projector
• 4 weeks online training with a commitment to contribute for 2 to 3 hours a week

The online training programme should allow online teachers to experience being taught online, and thus through skilled and active facilitation allow them to understand and model behaviour for naive users. Thus the emphasis of any training programme should not be on the technology but on the philosophy and understanding of teaching and learning online.

Commitment to participate is essential. A course modelled on the guidelines above was developed for NPQH centre manages in September 2000, but with little commitment and interest on the part of some managers participation was low. NPQH research has shown that in those regions where the centre managers undertook the course and actively participated online teachers have had less problems and thus the experience of learners has been generally rewarding. Online teachers need an initial face-to-face induction programme followed by an online extended course. The induction needs to clarify the course philosophy, not simply concentrate on the ICT element. Although initially the overcoming barriers to ICT may appear to be the strongest basis for training programmes, any training based solely on this outcome will not lead to empowerment or arm online teachers to work in the environment. For this reason it is essential that ULTRALAB facilitators are involved in the programme developments so that training can be integrated into the programme requirements and the programme philosophy can be integrated into the training. Any training activities which do not mirror the requirements of the programme and do not lead to understanding and reflection on the use of the community environment will leave those being trained unaware of the potential of the environment. In the early training stages of NPQH not enough attention was paid to the change in the programme structure and philosophy.

Online teachers were not therefore left aware of the full implications of a self-study, self-directed, flexible programme. If the ULTRALAB facilitators had been involved in the whole programme, rather than simply the online aspects, many issues could have been addressed at an earlier stage and a number of problems could have been avoided.

After tutors had received their initial NPQH training they were invited to join the Good Practice community which was established in February 2001. This space was where the ULTRALAB facilitators could communicate directly with all NPQH tutors, although support via 'back channels' (email, telephone) is frequently sought. Advice on using the tools and examples of a Module Discussion Area and Summary of Learning Group were provided. Online teachers could ask the ULTRALAB facilitation team questions, initially these were mainly technical but soon addressed other issues such as participation,

> *"I need to set up some easy way of flagging to all my tutor group that there is something they must look at without sending stickies with detailed instructions to each."*
> (Sample comment from online teacher in "Good Practice" community, 26th July 2001)

Since October 2001 it has started to become a channel for online teachers to share good ideas and innovations. This is a stage towards community ownership,

> *"At our recent tutor meeting, our tutors wanted to know how we can evaluate what learning has gone on from online activities. Has anyone any ideas?"*
> (Sample comment from online teacher in "Good Practice" community 11th November 2001)

The online teachers on the Bursar programme also had a community which was relatively small but used extensively by organisers and online teachers for communication, dissemination of information and sharing of ideas:

- To clarify with online teachers the process and procedures necessary to transfer face-to-face skills into the online environment.
- To share with online teachers the philosophy of online community and the programme structure.
- To share best practice in teaching and learning online.
- To empower online teachers to run tutorial groups/communities.
- To discuss innovation and experimentation in the online environment across phases and/or regions.
- To arm online teachers with the technical skill to carry out programme requirements.

5.16 Online learners

As online learning is still new many online learners will not have clear expectations from a programme delivered largely online. This being the case an initial face-to-face element is useful to set out expectations of all parties. In an environment which is self-study and self paced, emphasising the knowledge residing in the participants expectations could be set via a negotiated 'learning contract' between parties, but the nature of such a contract will depend on the philosophy, cost and length of the course.

As with any participative programme there should be a clear code of conduct that generates appropriate expectations for participation and reciprocity. This should be understood and agreed by programme leaders, online teachers and learners.

Materials should integrate all aspects of the programme, although for naive participants an ICT handbook may be necessary. As the use of online programmes spreads this will cease to be necessary.

It is vital that the holistic nature of the course should be stressed to online learners and not simply the ICT element. Although ULTRALAB believes that learning should be delightful it also needs to be meaningful. Thus, it is important to demonstrate that community has added value and provide examples which stress sharing and developing good practice.

Hands on experience is desirable because ULTRALAB experience has demonstrated that a successful first login is vital. Evaluation after the first cohort of NPQH learners recognised the desirability of learners having logged into the learning environment as a part of their induction process which helps to 'debug' any initial problems. With the Bursars' programme this was not possible as online learners were given only one hours demonstration of the system, but this was combined with a discussion of the purpose and philosophy of the online learning community which is an essential component of any demonstration.

Key recommendations:

- Expectations for online learners should be clarified.
- Purpose and philosophy of the online community should be emphasized.
- Participants should be given an opportunity to log into the system whilst in the company of their peers.
- An opportunity to take part in and visually experience a joint task/activity is desirable.
- Follow-up online activities should be shown and available to complete at a later date.

References

Barber, M. (2000)
Learn to Love Sitting in the Hotseat, London: Times
Educational Supplement, 14 April 2000

Brighouse, T. (2000)
Presentation at launch of NCSL, London

Britain, A. A. and Liber, O (1999)
A Framework for Pedagogical Evaluation of Virtual Learning
Environments, Bangor, University of Wales (available at
http://www.jtap.ac.uk/reports/htm/jtap-041.html)

Bruner (1996)
The Culture of Education, Cambridge, MA, Harvard University.

Cabinet Office (2002),
E-government Interoperability Framework, available at
http://www.govtalk.gov.uk/interoperability/egif.asp, accessed on
6 June 2002

Chapman and Ramondt (1998)
Online Learning Communities, Chelmsford, ULTRALAB
(available at
http://www.ultralab.ac.uk/papers/online_learning_communities/)

Collarbone (2001)
Presentation to centre managers, London Leadership Centre
(unpublished)

DfEE (2000a)
National Standards for Headteachers (available at
http://www.ncslonline.gov.uk/ncsl/index.cfm?pageid=210),
London, Department for Education and Employment

DfEE (2000b)
NPQH Access and Development Stage Materials, London,
Department for Education and Employment

DfEE (2001)
Building on Success, London, Department for Education and Employment

Heppell, S. (1999)
presentation to the TES-Keele University Improving Schools Network Keele University, June 1999

Heppell, S. (2001)
presentation to BETT, January 2001

Knowles, M. (1984)
Andragogy in Action. San Francisco, Jossey-Bass.

Laurillard, D. (1993)
Rethinking University Teaching - a framework for the effective use of educational technology, London, Routledge.

NCSL (2002)
Leadership Framework. Nottingham, National College for School Leadership.

Palincsar, A. S. (1986).
The role of dialogue in providing scaffolded instruction. Educational Psychologist, 26, 73-98.

Salmon, G.
E-moderating: the key to teaching and learning online, London: Kogan Page

Salmon, G. (2002)
It's Teaching, Jim, but not as we know it, presentation to UACe conference, Bath University, March 2002. Available at http://www.bath.ac.uk/iohm/salmon2.doc accessed on 6 June 2002

Sammons, P. Hillman, J. & Mortimore, P. Key Characteristics of Effective Schools: A Review of School Effectiveness. London: OFSTED

Senge, P. (1996)
Introduction to Synchronicity: The Inner Path of leadership, Jaworski, J., San Francisco: Berrett Koehler

Southworth, G. (1990)
Leadership, Headship and Effective primary Schools, School Organisation, No. 10

Smith, T. (1999)
Spinalot, a Software System to Support the Development of Web-based Communities, available at http://www.apple.com/education/LTReview/fall99/spinalot/ accessed on 6 June 2002

Ultralab (2002)
M-Learning, available at http://www.ultralab.ac.uk/projects/m-learning/ accessed on 6 June 2002

Vygotsky (1978)
Mind in society: The development of higher psychological processes. Cambridge, MA: Harvard University Press.

Wenger (1998)
Communities of Practice: Learning, Meaning, and Identity. New York: Cambridge University Press

Development of online components in NCSL programmes   ULTRALAB Bradshaw, Chapman, Gee July 2002