Scaffolding for e-moderators' development: the early years

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Abstract
I report here on a 5-week, entirely online programme intended to offer an experience of e-moderating for self-selected university teachers across the world, and completed by 230 participants. I explain the research-based model and frameworks for the course together with the underlying principles of experiential development and scaffolding. The outcomes from the course experience are based on the participants' self reporting in an exit questionnaire. Discussions on the outcomes reflect the continuing and growing need for H.E. teachers to be offered more appropriate development for their e-learning skills and competencies (Dondi, Mancinelli et al. 2006; Van den Branden, Van Petegem. 2006).

Introduction
In 'E-moderating' (Salmon, 2000), I described a 5 step model on which I had based a staff development course for online tutors in the Business School at the UK Open University. Chapter 4 of the book explained in detail how the online training worked, with outcomes and participants' comments. As a result, many people from around the world and from differing educational backgrounds contacted me to ask if they might take part in a similar course. Initially, they could not, as the course was for Open University tutors only. But in 2001, with a colleague, David Shepherd, I set up a small training company (All Things in Moderation Ltd. www.atimod.com) to offer publicly-available e-moderating courses entirely online. We also offered courses for universities or organisations who requested their own special in-house versions of the online training. We were able to build on and extend the frameworks in use during the research for my 2002 book 'E-tivities' (Salmon 2002). The 5-week, entirely online courses proved extremely popular and soon we were running many every year.

Context
During 2002-5, universities throughout the world were devoting considerable resources to the development of web-supported learning and teaching (Gray, Ryan et al. 2004).

Most Higher Education Institutions (HEIs) adopted a centralized learning management and delivery system, especially WebCT and Blackboard (Bell, Bush, Nicholson, O'Brien & Tran, 2002). However, the manner in which such systems were introduced, deployed, used support and used was highly variable (McNaught, Phillips et al. 2000, Salmon 2005).

In the literature, lack of personal motivation or incentive by academics was commonly cited as a barrier to the use of web-supported or computer-facilitated teaching (McNaught et al, 2000, Schifter 2000), and still is. However, teachers of adults from around the world discovered and registered on the All Things in Moderation courses. They were often early adopters and more driven or more motivated than average. From their stated reasons when they joined the courses, it was clear that some considered an independent provider more acceptable than their own university's staff development unit. Others reported that they wished to experience a research-led and/or learning-based course approach at a time when technology push in universities was common.

The principles underlying the courses

1. The changing role of the university teacher

The role of the university teacher is shifting, to multifaceted and complex roles (Salmon 2005). Working online is not just a matter of encouraging university teachers to adopt new tools but a change in working practices (Schifter 2000). We considered that our approach to enabling online working should be through facilitating groups of university teachers, helping them to experience and explore the nature and needs of the online environment for themselves. We consider 'top-down training' to be potentially counterproductive in most university situations as it does not blend well with the collegial atmosphere common amongst academics.

Our view of our potential participants and audience was of university teachers who:

- would benefit from experiencing an authentic online environment for themselves as well as acquiring the skills for e-working with their own students
- appreciate working with colleagues but in a structured and paced way that did not take any more of their time than absolutely necessary and which was seen to be highly relevant to their needs
- were capable of acquiring the basic skills in using the platform *along with* the skills of communicating and learning on the course
- would benefit from regular opportunities to reflect on their learning and progress, and were capable of judging and transferring models, frameworks and processes, in which they were taking part, to their own course and programmes
- came with a background in the pedagogies of e-learning but brought their own fully worked-out understanding of knowledge construction and the way that learning and teaching should take place within their discipline and their culture (Boekkelund 2006, Prosser, Ramsden et al. 2003)
- needed to extend and revisit their teaching in the light of learning technologies, and rebuild and refresh their range of pedagogical and technological choices.

- skills and competencies must be addressed as well as theory and understanding.

2. Scaffolding development

The 5-step model (Salmon 2004) is intended to provide a scaffold (Barcena and Read 2004) for course participants' learning progress. We appreciate McKenzie's metaphor for scaffolding (McKenzie 1999a) as "structures thrown up alongside of buildings to support workers in their skyward efforts". Hence we offer support for the online participants, based on firm foundations, to enable them to work with others to gradually increase the breadth and depth of their own learning, in increasingly autonomous, self-sufficient ways.

The model is used to scaffold in the following ways:

1	Prior to course	Develop and Design	Model provides guidance to course designer for learning activities, the pacing and timing for the course, and the needs of the individuals and the group at various points in the learning process
2	During course	Pathways and Support	Direction, signposts navigation and pacing for participants, contributes to group building
3	During course	Tool for transfer	Model is made explicit so participants can 'take away' and try out in their own context if they wish
4	During course	Invitation to reflect on own learning	Participants explore extent to which the purpose of each week, and their own needs, have been achieved
5	During course	E-convenor (experienced e-moderator) demonstrates	Weaves and summaries to draw out and make explicit links back to the model and e-tivity purposes
6	At course end	Reminder and overall feedback	Invitation to review overall 5 weeks including auditing all own and others' messages as an aid to development planning

We addressed Mckenzie's (1999b) eight key characteristics of scaffolding to inform our course design and delivery:

	Mckenzie's principles for scaffolding	Application in the e-moderating course based on the 5 step model and e-tivities
1	Clear direction	We use a structured and specific framework for online collaboration called e-tivities (Salmon 2002) and write careful instructions called the 'invitaation'
2	Highly relevant sources	All e-tivities start with a 'spark to start a dialogue' to concentrate participant's efforts. These can be quotes, references or specially produced resources and are rarely more than one screenful
3	Reduce uncertainty, surprise and disappointment	The full prior course design is developmentally tested to eliminate distracting frustrations and ensure instructions are clear wherever possible. All e-tivities and the overall course

		are edited and tested extensively on novices and adjusted before being offered
4	On task:	Each e-tivity, and each part of the e-moderating course is designed to engage participants in active contribution, and response to others.
5	Clarifies purpose	The purpose of each week's work and each e-tivity is made clear
6	Assessment to clarify expectations	We found formal assessment unnecessary as participants are well-motivated and self-selected people who wish to acquire the skills the course offered, often for future promotion or for altruistic reasons. We make explicit the criteria for the award of a certificate of course participation,
7	Delivers efficiency	(and I would add, effectiveness): It shows respect for the participant to clarify exactly what is required of them and how often, and enable full contributions to knowledge sharing on the programme
8	Creates momentum	The momentum, pacing, continuous interest, sense of direction, and growing competency and achievement as participants climb the scaffold, are perhaps the most important motivational aspect.

I would add that when the scaffold is removed and the online course is over, the substance should remain. (Barcena and Read 2004). For further information on the use of the model for scaffolding, see Learning in Groups: A Handbook … [Jaques and Salmon, in press])

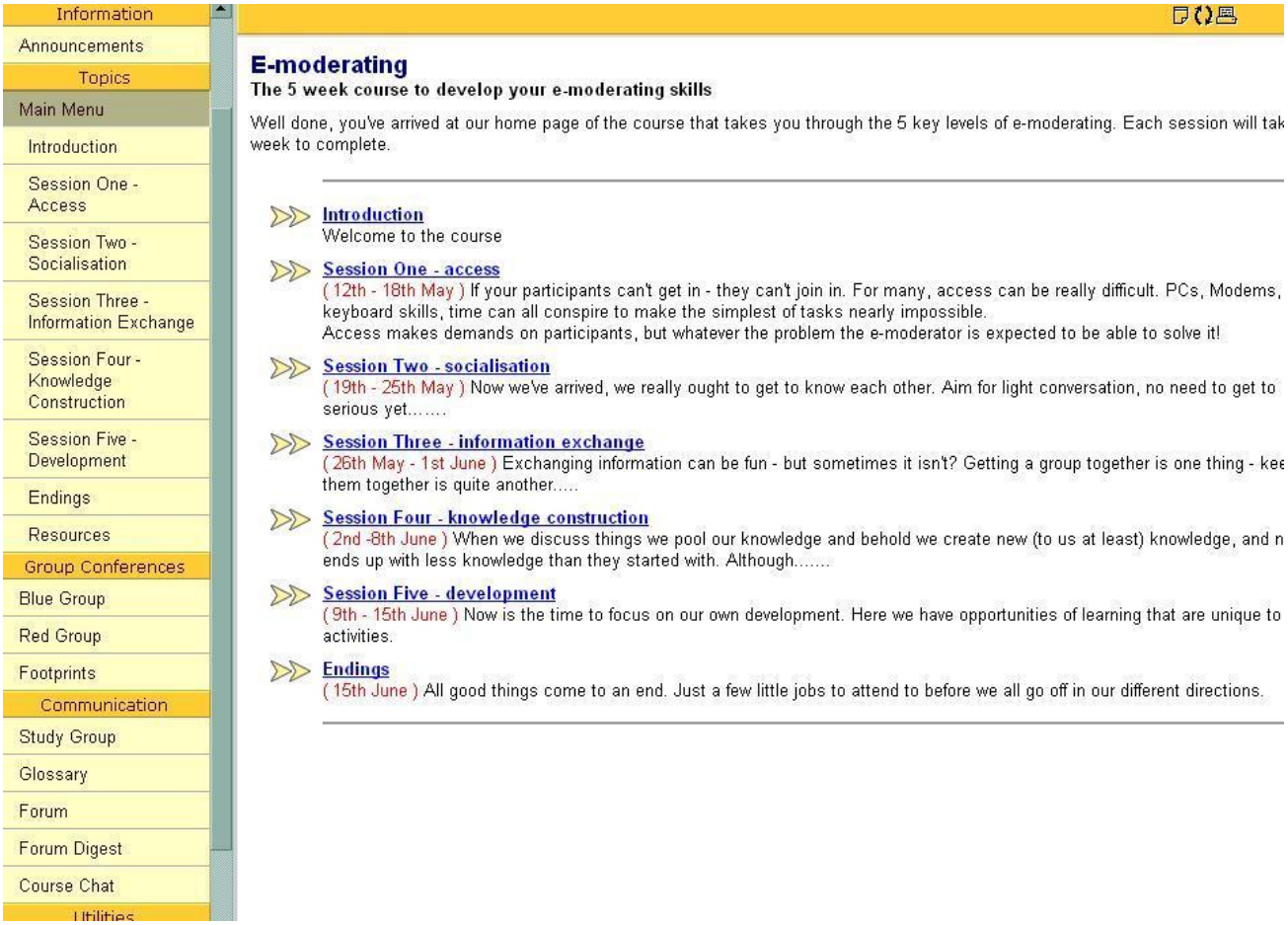
About the course

The publicly-available e-moderating courses were first built in First Class (™) and hosted by US partners (first Centrinity, then later Learning Networks www.learningnetworks.net). Later they were created in Blackboard (™) and hosted by Glasgow Caledonian University (www.gcal.ac.uk) and also in Janison Toolbox (™), hosted by Australian partners (www.janison.edu.au) and more recently in Moodle.

This paper reports on Versions 1, 2 and 3 of the courses which were run entirely online over five weeks, in English and attracted direct registration from participants.. Versions of the course are also run through partners in Germany and Austria in German, in-house in universities in the UK, Singapore and Australia and in other Virtual Learning Environments (VLEs). The feedback from these is not included here. The courses reported on here are not discipline specific – we also run special versions for specific professions or disciplines.

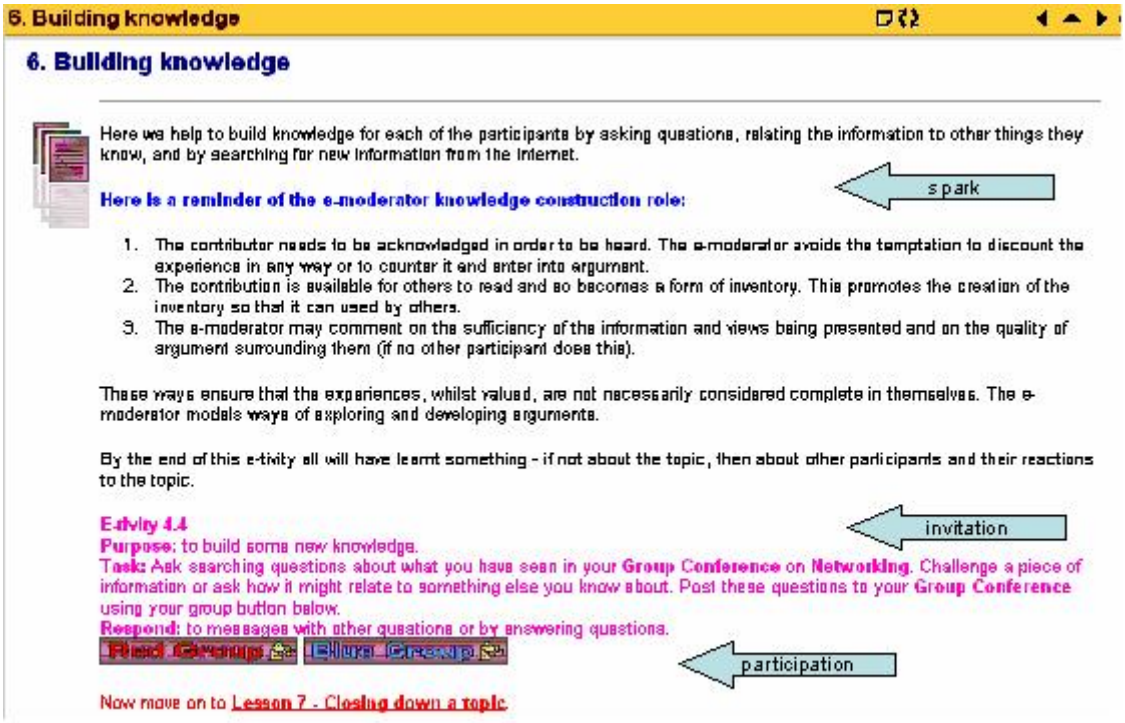
We use the 30 competencies from 'E-moderating' as our basis (Salmon 2004, pages 54-55)

Each week of the five-week course addresses one stage of the model using interactive asynchronous bulletin boards. A typical layout was:



During each week participants took part in up to 8 'e-tivities' that required a *minimum* of one posting and one response to others. The e-convenor provided regular weaves, summaries, and feedback to individuals and to the group.

A typical e-tivities layout was:



For more about e-tivities see Salmon, 2002.

The participants

26 courses were run over a 3 year period. A typical course size was 10-12 participants with one e-convenor (the name we give to the tutor, trainer or e-moderator). If a course was larger than 15, we split it into two. A typical participant was a member of academic staff but we attracted a small percentage of independent consultants and tutors, instructional designers and learning technologists and a few researchers. The course attracted staff in campus, mixed mode and blended learning universities, also those involved in distance learning. Participants took part from all continents (except Antarctica) with around 40% located in the UK, 20% from Australia, 8% from Continental Western and Eastern Europe and the remainder from Middle East, Far East, USA and Africa.

Our results put the spotlight on individuals who recognized the need for acquiring their own e-moderating skills and who somehow found the time to do so. Sometimes small groups were sponsored by their university. Commonly an individual later persuaded others to come on an e-moderating course or their university to fund a similar in house programme. They were influencing the 'knowledge stage' of innovation adoption by others and thus scaling up in their departments or institutions (Shea, Pickett et al. 2005). We recognise that these individuals were probably early adopters, certainly self aware and strategic thinkers, not least about their own development.

The results

The results reported here focus on the responses of individuals who completed the courses and the exit questionnaires**.** A total of 230 participants completed and sent in questionnaires. The 230 were all but a very small number of those completing the e-moderating programmes as the return of the exit questionnaire was one requirement for the award of a course certificate of participation.

There was a drop-out of around 8% overall, usually in weeks 1 or 2. Some courses had no drop-outs. Those dropping out were either late in starting the course or with unexpected intervening events occurring in their lives. The former can be controlled for, the latter cannot.

The exit questionnaire was based directly on the weekly scaffolding of online activity. Each of the 5 sections of the questionnaire asked 4 questions, with a response of 1-5: 1= 'not at all' and 5 = 'extremely well. (See appendix 1). The questionnaire was administered online by a collation and reporting service.

Stage 1 tackles 'access and motivation'. It consists of 8 e-tivities for the participants to complete including sending messages to a conference, writing messages, joining a group, sharing experiences and expectations, advising others how to get help, encouraging first contributions and reflections on Week 1. Four questions were asked about this stage in the exit questionnaire.

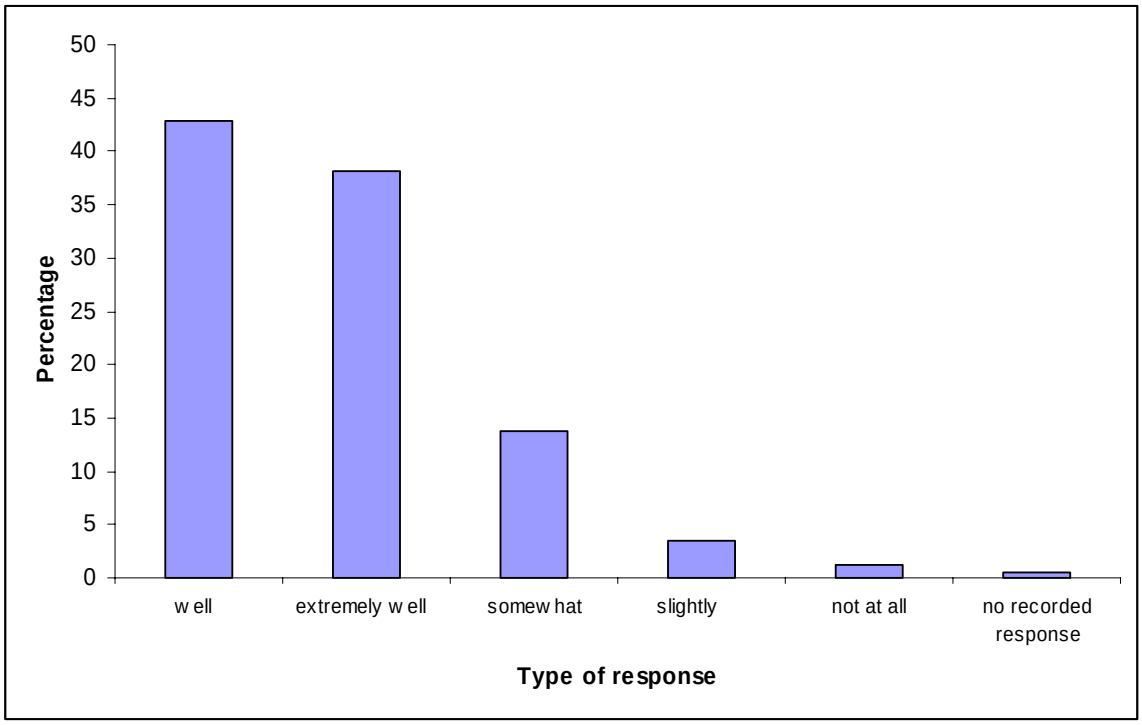


Table 1 Understanding access and motivation

Typical responses were:

"The importance of ease of access tied up closely with motivation and de-motivation became very apparent very quickly - these are skills and knowledge areas that need to be further developed (at a personal level) for me to feel confident "

"…e-tivities were planned to promote both access and continuing motivation. This first week was a useful time for opportunity to look around the site. My technical skills were not good then but have improved with practice so I feel better prepared now to aid students"

The slightly higher score for understanding about access to the platform, compared to learning about motivation, probably reflects the nature of the self-selection of the participants. Nevertheless, it was common for participants to join the course giving 'how to motivate students to contribute' as their reason – often expressed as 'how to increase participation by students'. . We usually gently explain that motivation is a complex issue and not something you can 'apply' to others, however well intentioned your aim; and that the whole structure of the scaffold and of the group e-tivities is based on an intention to motivate participants by encouraging them to respond to a safe e-tivity, and then in turn have their contribution acknowledged. We are much encouraged by the high scores given to 'learning to welcome and encourage' and 'examples of e-tivities' since these appear directly and immediately transferable to the participants' own practice.

Stage 2 addresses online socialization. It asks the participants to take part during the week in 8 e-tivities covering feelings about working online, creating an 'enticing' activity, considering and writing online resumes and getting to know others, learning through interaction, responding encouragingly, exploring ideas of quality, time online and reflecting.

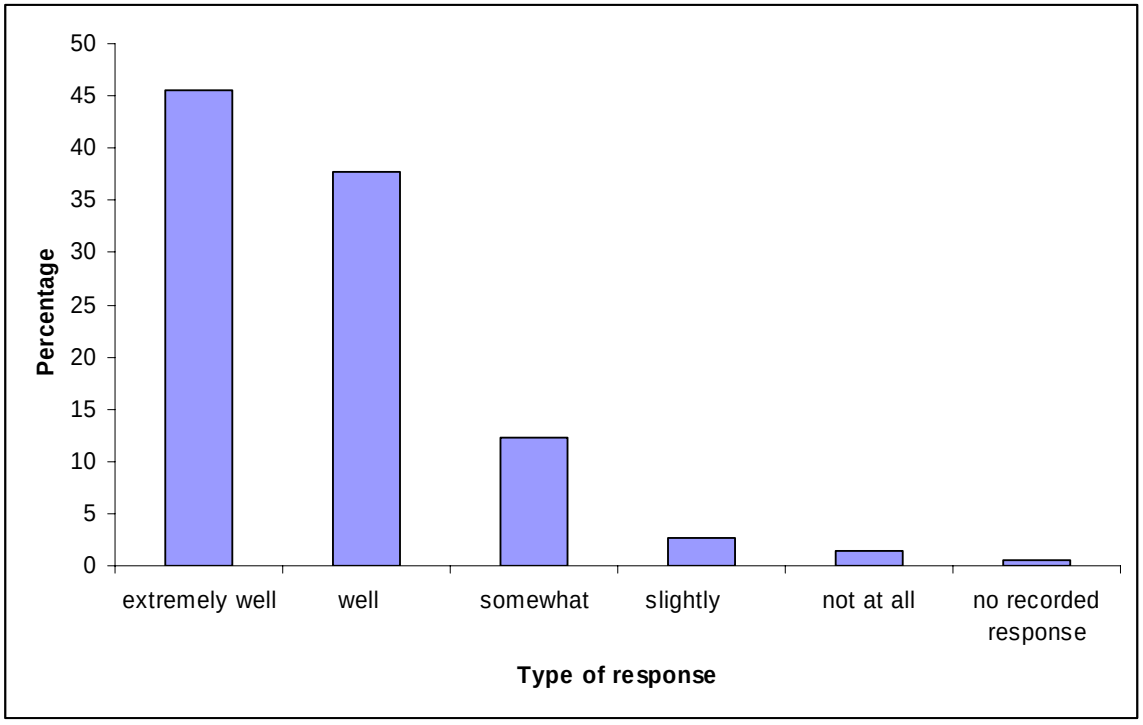


Table 2: Enabling online socialization

We are much encouraged by the high scores on enabling socialization in the online learning environment. Indeed a further breakdown of responses shows that against the question related to appreciation of the importance of enabling online socialization, 91.8 of the participants answered 'well' or 'extremely well'. We know that attention given to establishing successful working groups positively impacts throughout every form of e-learning and use of asynchronous working. However the slightly lower scores for question 2.2 suggest that we should be offering more frameworks! Many teachers are themselves self-actualisers (Maslow ref) and may not realize that their students need motivating in different ways.

> "I just loved the positive (and sometimes the relative failing) experiences that took us through the highs and lows of online socialisation. I noted that it grew with some and others kept it at an arm's length, like f2f"
> "The importance of online socialization was a lesson learnt extremely well! I won't just talk about it in future - I will practice it"

Stage 3 explores information exchange in the online environment through 8 e-tivities. The participants work together to evaluate messages, exchange information in small groups, and practise the key e-moderating skills of weaving, archiving and summarizing and other forms of intervention and feedback. They compile useful sources of information for e-moderators and learn about using information as 'sparks' or 'triggers' for online group work, without being the source of information themselves. Reflections again feature at the end of the week.

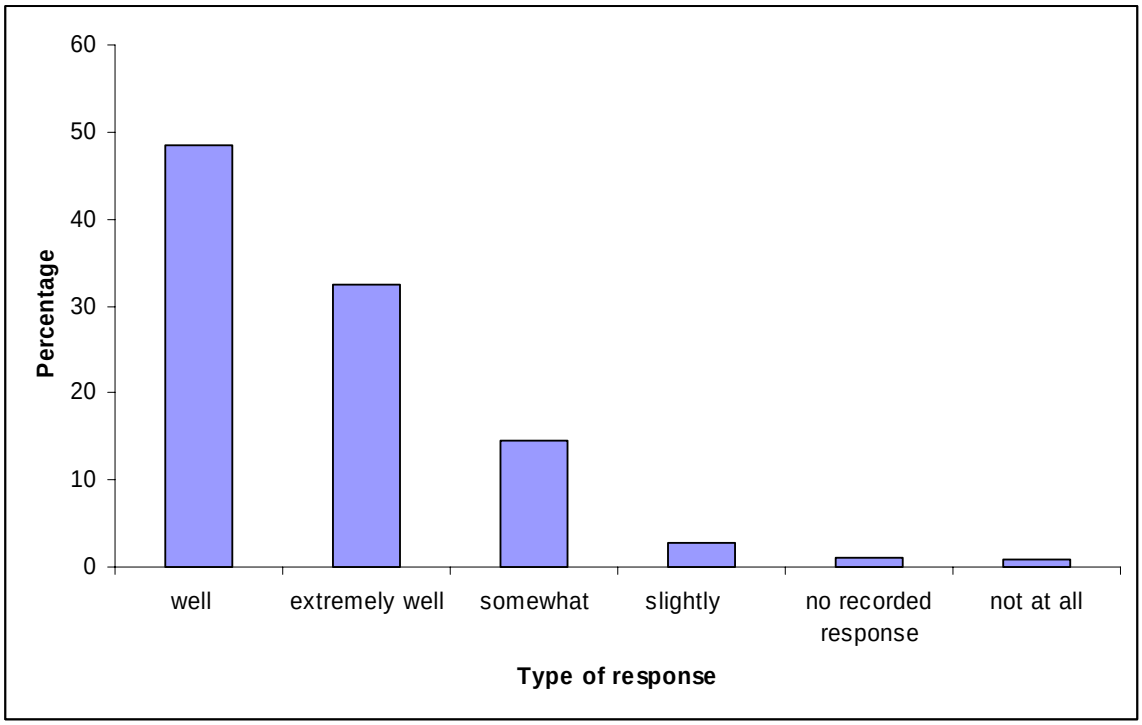


Table 3 Exploring information exchange in the online environment

Again the lowest score here was on enabling information exchange between participants and we have now revised this section to offer increased practice with guidelines, frameworks and techniques. Weaving and summarizing online is a challenge to most of our participants and yet provides the greatest 'added value' in practice. However, again, we are heartened by the high scores on key e-moderating skills and examples of e-tivities since these are directly transferable and impact on practice.

> "…need to practice weaving more and more- but I understand the principle"
>
> "I found this part the hardest...But got the hang of it eventually
>
> "I appreciated the opportunity to take the role of information channeller! It is a skill I hope to pass on to my academic colleagues"
>
> "I liked the small group work here… I thought it was chaos at first…- but exposed me to my greatest learning experience"

At Stage 4 there are 6 e-tivities aimed at knowledge building and construction. They involve participants in developing their own e-tivities, giving and receiving feedback, setting out purposes, involving others, building new knowledge through online networking, concluding discussions and reflecting. .

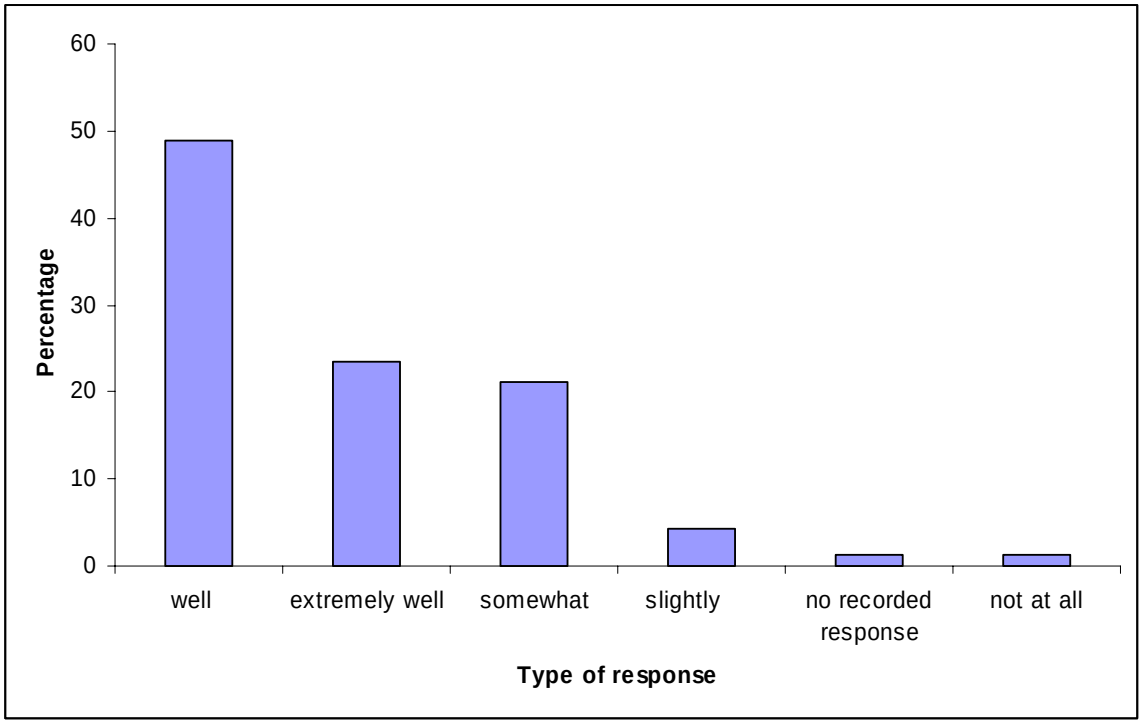


Table 4 Knowledge Building and Construction

Compared to the first 3 weeks of the course, the participants score slightly lower on all questions at this stage. It could be read as indicating that they appreciate the value of dynamic knowledge construction in groups but still need additional skills or more practice in order to facilitate them for others. Our observation is that nearly every course 'dips' a little in terms of participation around this point as the work gets rather more demanding of the participant – not so much in terms of time but of thinking. At this stage, participants themselves take increasing responsibility for e-moderating, with less direction from the e-convenor; this provides an experience similar to the uncertainty experienced by the student left to fend for herself online. Furthermore, participants appear to need to take a day or two away from the online environment after 3 weeks' fairly intensive work. When working with students, we suggest extending stage 3 for another week or two before starting with more demanding knowledge construction e-tivities.

> "…very many useful discussions that added to existing knowledge and provoked reflection. The varied background experience of participants broadened the scope of reference, offering new perspectives. The e-convener was always ready to supply further sources and subjects for consideration"
>
> " knowledge was created, shared and transferred between participants. This was achieved by participants' willingness to share with each other and the copious amounts of encouragement… Trust was built up."
>
> "What impressed me is the ability of all to contribute, the way the expert shares, and the newcomer asks the obvious questions. It is a form of knowledge construction enhanced by the semi-permanent nature of thread contributions"

Stage 5 is about looking forwards to e-moderating in practice through looking backwards over the course experience. We call it 'development'. Through 6 e-tivities participants are invited to identify their ongoing development needs as e-moderators, get feedback and support from others on the needs, and draw up a personal development plan. They are asked to look back over the course and review their own messages, contributions and intentions. The exit questionnaire is offered along with a an opportunity to say 'thanks and farewell' to fellow participants.

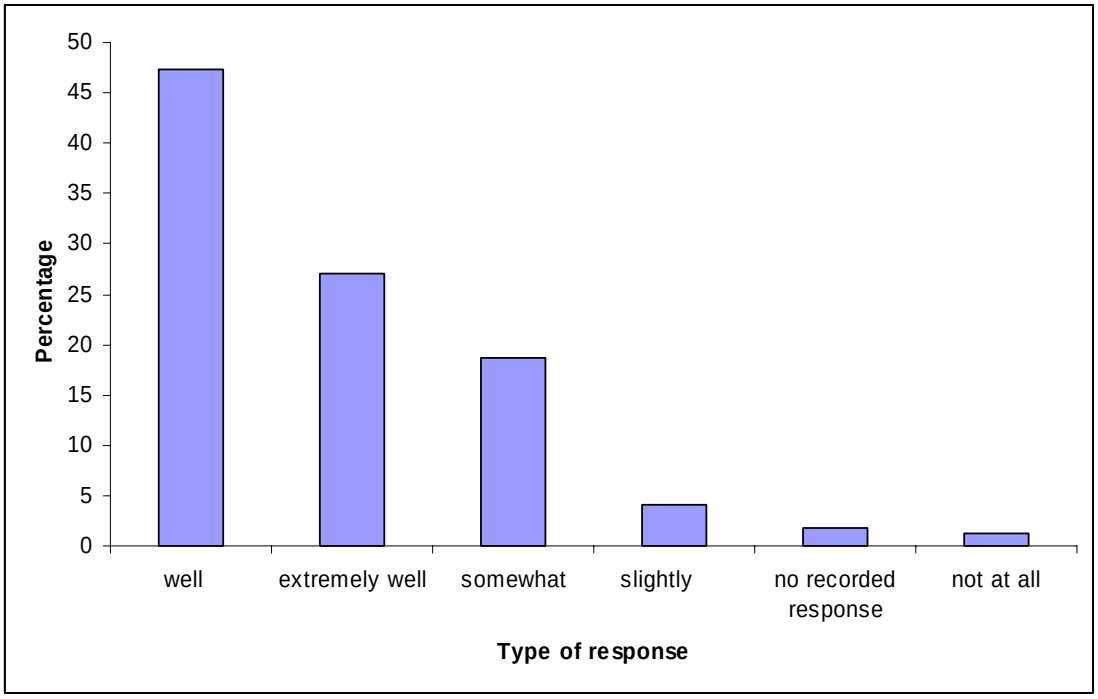


Table 5: Assessing overall experience and e-moderating practice

At this stage, the score of 4 for personal development plans and 'take away' resources is satisfactory, although we have now given rather more attention to both of them in a revised e-tivity, because of their critical importance for ongoing independent work. However, against other questions, the slightly lower scores here suggest a little less confidence from participants about enabling the development of others. Against question 5.1 for example, 22.2 of participants only answered 'somewhat' against "I can enable *the development* of individuals and groups online'.

This result may be a natural response to the intensive 5 week experience. Our ambitions are perhaps too high against the time scales of the process. We believe that the course aids the development of e-moderators but in the time available, it is unlikely to do more than model the developmental potential for students. Or it may be a cry for help in a more sophisticated approach to designing for learning. With that in mind, we now offer a 3 week e-tivities course to meet this need.

"To start with people are reserved but they become themselves by the time the course ends"

"Two steps forward and one back, but making progress all the same"

"My learning process has helped me understand and will make it easier for me to understand the journey the new students have ahead of them"

"I grew week by week and gained in confidence and experience and I can now confidently move forward into the virtual class room"

And our participants comments about the value of scaffolding:

"All stages were useful and added incrementally to my knowledge and experience. It was good to have a variety of challenges and formats, demanding different response registers and modes"

"I benefited from the communal and gradually more demanding experience which will help me model how this would be for other courses, this also showed up the importance of time management and planning, and gradually building, building, building. It happened without trauma and the plan didn't overrun!"

Discussion

Observability refers to the ease with which a technology can be seen, imagined, or described (Rogers, 2003). We noted difficulty in describing to potential participants how successful and productive the use of asynchronous bulletin boards can be, and how they can be used as a powerful learning and teaching tool, given understanding, frameworks and structures. However, within days of commencing work on the course, great insights were clearly gained by our participants. A number transformed their observable thinking and action. The first level of the scaffold in place!

"I began running to catch up and up popped the whole range of emotions - frustration, guilt and a desire to "show I could do it!". It's quite a while since I've experienced that lot at work! I still had time management problems by end of the course but feel this experience will greatly help and influence my future online work - teaching generally really"

Rogers also claims that the greater the opportunity to test a new technology, the more likely it will be adopted (Rogers, 2003). This is known as trialability. The e-moderating courses offered university teachers the opportunity to test out online teaching, for themselves, before they needed to work in the environment with their own students. (Shea, Pickett et al. 2003). This feature was noted by many:

> "Getting in and getting started was a natural fit for my own style of learning about software, which is to 'muck around'. I noticed if others were doing things I could not, and 'discovered how to'. I especially liked the way the platform ran well even when many features were not yet understood or being used."

That over 80% of participants answered 'well or extremely' well to questions about understanding online access and motivation and socialization, we feel bodes well for their future confidence based on observability and trialiability.

Shea et al (2005) point out that, like students in online courses, a higher level of satisfaction is commonly reported with online staff development where there is considerable group interaction. The challenge is to offer major opportunities for interaction online, but to manage it properly so it does not become overwhelming and counter productive: something that otherwise occurs too easily and quickly! We are reasonable satisfied that participants answering a mean of 4.14 to "I learnt the importance of...opening, weaving and closing…". These are the overwhelming important skills for handling large numbers of messages and adding value to students' discussions.

Next steps

These developments took place in a climate of a shift towards support of individual institutions in the UK by Government initiatives and away from big sector-based programmes. A strong agenda is emerging of exploring the student learning experience (http://www.heacademy.ac.uk/e-learning.htm) along with a tough sense of the need to move away from 'projects' to embeddedness, growth and sustainability for e-learning. This last is a considerable challenge since many individual educational researchers attracted considerable sums of money for e-learning research projects during the 1990s. However these researchers and early adopters, are not necessarily the very best at spreading the outcomes of their early experiences, nor even interested in, extending and embedding their knowledge in the painstaking way that is required, now that funding has diminished and become almost impossibly competitive (Kerres and Engert 2006). A simpler, more directly supportive approach is required.

We continue to run the e-moderating courses, both for individuals and for in-house or professional versions. The course is now in Version 4, as a 4 week course where stages one and two of the scaffold are combined. Version 5 is under development to incorporate wider notions of e- and digital literacy (Aviram and Yoram 2006). In addition we run short courses in designing e-tivities and 2006 saw the introduction of a 'Beyond E-moderating' course for those with experience of e-moderating who wished to develop and rapidly expand their skills. It seems that as yet demand continues unabated for this style and approach.

Thanks to the following for their help with data collection, analysis and their comments on this paper: David Shepherd and Ken Giles of All Things in Moderation Ltd., Jaideep Mukherjee of Beyond Distance Research Alliance, and all the e-moderating participants for their astute reflections.

Appendix 1: Exit questionnaire

Please highlight the extent to which you agree with these statements and felt you achieved what they suggest.
1 INDICATES NOT AT ALL, **2 SLIGHTLY** **3 SOMEWHAT** **4 WELL** **5 EXTREMELY WELL.**
If you answer 3 or below to any question, please indicate what you needed or need now to achieve confidence or success in this area.

1	**Access and motivation:**	
1.1	I learnt about the importance of access to the system	1 2 3 4 5
1.2	I learnt about how to motivate participants	1 2 3 4 5
1.3	I learnt how to welcome and encourage participants at stage	1 2 3 4 5
1.4	I saw some examples of e-tivities that I could try out	1 2 3 4 5
2	**Online socialisation:**	
2.1	I appreciate the importance of enabling socialisation in the online learning environment	1 2 3 4 5
2.2	I learnt how to encourage socialisation and group formation in my online participants	1 2 3 4 5
2.3	I experienced and learnt about the importance of managing, time and complexity in online conferencing	1 2 3 4 5
2.4	I met and worked with some interesting people online	1 2 3 4 5
2.5	I saw some examples of e-tivities that I could try out	1 2 3 4 5
3	**Information exchange:**	
3.1	I appreciate the broad range of information and approaches to information that can take place through human online interaction	1 2 3 4 5
3.2	I know how to enable information exchange between my participants	1 2 3 4 5
3.3	I learnt the importance of key e-moderating skills such as opening, weaving and closing, and can try them out myself	1 2 3 4 5
3.4	I tried out some examples of e-tivities and online tasks that would be useful to me as an e-moderator at this stage	1 2 3 4 5
4	**Knowledge construction:**	
4.1	I appreciate the value of dynamic construction of knowledge online	1 2 3 4 5
4.2	I have explored some key skills and topics that will help me to e-moderate knowledge construction conferences	1 2 3 4 5
4,3	I know how to build on participants knowledge online	1 2 3 4 5

4.4	I experienced some relevant e-tivities and group working	1 2 3 4 5
5	**Development:**	
5.1	I can enable the development of individuals and groups online	1 2 3 4 5
5.2	I have made plans for my own development as en e-moderator	1 2 3 4 5
5.3	I can mirror my ideas and experiences online and enable the reflections of participants	1 2 3 4 5
5.4	I have explored some useful resources, and will be able to continue to share and build on these	1 2 3 4 5

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