

Working towards a symbiotic practice

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Abstract

In this research paper I am offering an account of my action enquiry to date. My enquiry has focused on exploring my understanding of how I have developed from a commitment to propositional knowledge, while teaching as a secondary school science teacher, to a commitment to dynamic transformational forms of knowledge, following a move to St Mary's University College, undertaking the role of senior science lecturer to BA Initial Teacher Education (ITE) students (a three year course for novice teachers which results in qualified teacher status). My research has been to do with how I provide a context and conditions for students to develop their own capacity for independent enquiry with a particular focus on how I can develop this through a virtual learning environment (VLE). My original claim to knowledge is that I have come to understand how a VLE can help students to explore the skills of independent enquiry and how discussion forums play an important part in this. Throughout this paper I use the metaphor of the relationship between the Nile crocodile and the Egyptian Plover to help explain how I believe I am working towards a symbiotic practice.

Keywords: Independent Learning; Virtual Learning Environment; Symbiotic Practice

Prologue



Figure 1. Nile crocodile and Egyptian Plover

In order to help explain how I believe I have been working with my students and in turn what my understanding of a symbiotic relationship is I use the metaphor of the Nile crocodile and Egyptian Plover. Both of these organisms live in a mutually beneficial relationship; a symbiotic relationship. Parasites can be found in the mouth of the crocodile which the Plover removes. In this way the Plover gets fed while the crocodile gets its teeth cleaned. I believe that the students perceive me as the 'expert-knower' and in turn as the crocodile, the animal with the power to shut its mouth and crush the student. However, for this relationship to exist it must be noted that both animals are each as important as the other. Throughout this paper I hope to demonstrate that it has been possible for my students to have learnt with me as I gain a better understanding of how I can best develop my practice.

I hope that you can see that my values are borne out in this action research report, and that I draw on my values to show how I make judgements about my claims to have improved my practice through improving my learning. Throughout my research I hope to show how I am able to transform these values into my critical living standards of judgement and use them to make judgements about the quality of my evidence (see Whitehead & McNiff, 2006).

Since undertaking my research and developing a more critical stance to my teaching and learning, I have come to see my key value as one of mutual respect between myself and the students, alongside those of equality, personal excellence, and a love of scientific

enquiry. My understanding of equality, within the classroom, is that every student has the right and also the capacity to develop as a critically thinking individual with the skills of independent enquiry and that it is my role as an educator to assist in this development. I believe that if I can build relationships with my students that allow for us to learn from one another then my values of mutual respect and equality will be manifested in our symbiotic practice. I align myself with DeLong (2002) when she explains that 'the development of a culture for improving learning rests upon supporting the knowledge-creating capacity in each individual in the system' (DeLong, 2002, p. 2), and in order to do this it is first necessary to understand my own learning. Only when I can manage and understand my own knowledge-creating capacity can I expect to help others to do the same. It is for this reason that I am undertaking a self-study research project into improving my practice.

Introduction: contexts of my research

Fromm (1976) claims that there are two kinds of students: those that exist in a 'having mode' and those that exist in a 'being mode'. He characterises students in the 'having mode' as owners of a collection of statements produced by someone else without the need for creation of something new, the creation of new knowledge. They 'will write down every word in their looseleaf notebooks – so that later on, they can memorize their notes and thus pass an examination' (Fromm, 1976, p. 25). In this way the students are passive learners who are taking little accountability for their own learning. Ramsden (1992) has used similar terms when he describes some students' approach to learning. Those students that adopt a 'surface' approach often do not see the need to integrate and evaluate the ideas of the lecturer. While this behaviour does not sit comfortably with my values, it is, I believe, easy to see why students react in this way. Most of the students I teach are products of the GCSE conveyor-belt system (General Certificate of Secondary Education; exams taken by most 16 year old children) where they are fed facts throughout the duration of their courses until they take exams, which is when they get off. Within schools there is often an academic over-compliance where there may be an undue dependence on routines and teachers. Success within many schools is often due to their structure where propositional knowledge, such as the learning of facts and the passing of exams, is paramount and approved.

It is only now, through engaging with my studies, that I understand that I played a role in helping to propagate this system and was not teaching for critical enquiry, as I hope I currently do. My values in school, informed by my then propositional form of epistemology, were self-focussed in striving to be the best that I could be. I see now that I was acting as a teacher who operated in the 'having' mode. I was driven by the desire to receive good grades both for my leadership skills and my art as a classroom practitioner. These grades were determined by the Office for Standards in Education (Ofsted) whose prescription of what should be taught and in what way has determined policies in schools and Teacher Training institutions alike. Without critical reflection about what was being asked of me I accepted the praise received for these good grades without realising how this strategy has been used in some organisations as a possible strategy of manipulation and control (see Alford, 2001). I have only recently come to understand Foucault's argument (1980) when he

talks about those who have knowledge, and therefore the power, as being able to decide what is to be accepted as truth or appropriate education. Although I did not feel I wielded this power directly, I can see how I acted as a channel that passed policies and an acceptance of what counts as knowledge from those in power to my students.



Video 1. [Presentation to Critical Friends](#) - Outlining my understanding of Foucault's argument (Sinclair, 2008a)

However, I did not feel constrained by the 'system' at the time and was happy to fit in to the 'conveyor belt system' of transmitting the body of factual scientific knowledge that needed to be learnt for GCSEs. The teaching of the fractional distillation of crude oil is an example of this.

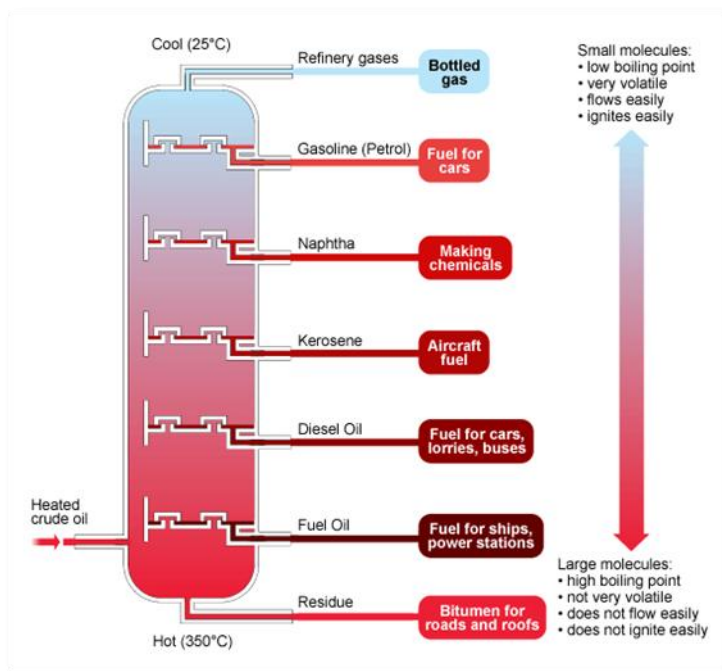


Figure 2. [The Teaching of the Fractional Distillation of Crude Oil](#)

I could ensure that the students were able to memorise the different fractions and where they appeared in the fractionating column, but did not allow them to make links with the bigger picture of oil production and energy use because it would not appear in their exam. I am not even sure that I was aware that I was using a 'defensive teaching' strategy (as outlined by Gardner, 1999), whereby I was adhering to the rules set by superiors and asking students mainly to memorise facts in a well managed classroom, but at the cost of educational creativity. However, I could easily justify what I was doing and offer a rationale for why I was doing it, as I believed that I was still fulfilling my core values of equality, mutual respect, personal excellence, and a love of scientific enquiry. Chomsky (2000) points out that teachers are carrying out a service that is expected of them by the schools and that they are willingly, maybe even unconsciously, fulfilling the requirements of what he calls 'the doctrinal system' (2007, p. 17). I would go further in saying that they are not only fulfilling the expectations of the schools but also those of parents and society. A teacher whose students achieve high grades is recognised by parents and the school community as satisfying the criteria of a good teacher. Preparing for this article has enabled me to articulate my own learning and in turn I have made this learning explicit through this writing and presentations to my critical friends. In particular I have highlighted how I believe I have moved from an agent of knowledge-transfer to one who co-creates knowledge in a symbiotic relationship with my students. ([Sinclair, 2008a](#); 9 minutes 26 seconds – 9 minutes 54 seconds)

Having adopted a more critical stance following engagement with Masters level work and an ongoing enquiry into how I can improve my practice, it has been important for me, while constructing the Primary Science Teacher Training VLE, that I felt it did not just become a portal which students used to access lecture notes and information about assignments; or that it did not become a technical medium for data retrieval rather than a source of knowledge creation. McPherson and Nunes (2004) point out that VLEs, to date, have only really been used in this format and that the social dimension of learning has often not been taken into consideration. A previous evaluation of the use of the VLE by Level 1 BA ITE students has highlighted that students perceive the benefit of this resource as one of data retrieval, with comments such as; 'I usually go on it to obtain the session power point,' 'obtain lecture notes,' 'print off lecture notes.' Glenn (2006) highlights the fact that in the current technological climate, the term 'information' has become synonymous with that of 'knowledge'. She makes the point that in much of the literature surrounding the area of technology it refers to information and people as separate entities, without seeing the potential of it to create and develop dynamic relationships. I hope that within the group of students that I have invited to become participants in my research, that the VLE can be seen as a tool to create a community where everyone's contribution is valued, and where it can facilitate active learning and encourage the exploration of using the skills of independent enquiry. I hope that I am modelling the appropriate online behaviour that I expect in the way that McPherson and Nunes (2004, p. 319) suggest, 'whether it be in order to promote discussion within groups, develop learning communities, or to engender a sense of trust with and between students in order to facilitate learning.' In this way I align my practice with Glenn's when she states that: 'I believe that I am developing a theory of practice that locates the possibility of learning in the relationships that are created between people' (see <http://www.jeanmcniff.com/glennabstract.html>). This is in line with Dewey's (1916) ideas

that a successful learning environment is one where individuals' learning experiences are valued as well as the collaboration that is made by the members of the community. In doing this research I aim to develop my practice online in a way that requires students to operate in a 'being mode' (Fromm, 1976) and not those who feel that they can find their answers by using technical strategies such as internet search engines or from websites (the 'having mode').

With the UK Government's focus on personalised learning (DfES, 2004) and on lifelong learning, it is important to note that both contain elements where the skills of independent enquiry are expected to be developed. The DfES point out that it is necessary for pupils to 'focus on their learning skills and their capability to take forward their own learning' (2004, p. 6). Independent learning brings its rewards in that students are more likely to be able to act autonomously and to develop their own effective strategies for learning. It can also help them to develop transferable skills and an ability to respond to change. I feel strongly that students who do not have the opportunity to cultivate these skills or operate in the 'being mode' will struggle with changes that they are likely to face in the future as; 'we are currently preparing students for jobs and technologies that don't yet exist... in order to solve problems we don't even know are problems yet' ("[Shift Happens](#)", n.d.). The following powerful clip, from which this quote has been taken, highlights some of the changes that our students will inevitably have to cope with.

Independent learning takes into account different learning styles as the learner can use their own judgement as to their preferred learning strategy (Candy, 1991). Peat, Taylor and Franklin (2005), argue that a VLE can reinforce this as students work at their own pace which in turn can cater for students' different learning styles. However, I must also be aware that, although a VLE can allow students to work independently and have freedom over the way they learn, ultimately it is the tutor who decides what they should learn (Monteith & Smith, 2001).

Methodology

Rudduck (1991) gives an explanation for the difficulty I have found in trying to encourage independent enquiry amongst many of the students that I teach. She identified that a large proportion of trainee teachers, at the outset of their course, anticipate the year to be heavily 'practical' which is often narrowly defined as 'doing things in the classroom'. She goes on to stress that if 'practical' expectations are not met, students will often criticise tutors for not delivering the 'nuts and bolts' that they require. This is highlighted by previous research that I carried out with Level 1 students studying for a BA ITE degree in primary education at St Mary's University College (Sinclair, 2007). These students were provided with a science specific needs analysis, as part of their assignment, in which they were asked to identify areas of knowledge that they felt needed developing and addressed them accordingly. They were subsequently asked for their thoughts about the subject needs analysis and whether or not they had felt that this exercise had helped them to develop the skills of independent enquiry.

The findings from this research showed that the majority of the students valued the needs analysis. Of those students that did not, when asked whether it had helped them to

work independently, almost all answered that it had. Evidence for this comes from comments such as; 'they gave me a chance to work at my own pace... researching things until I knew I had an understanding,' 'it has helped me to develop strategies in working by myself,' which demonstrates the capacity of the student to act as an independent enquirer.

What was worrying was that, despite students believing that the needs analysis was a benefit to them, some spoke of it as making them study areas they wouldn't have studied normally, with one student stating that, 'it forced me to look things up outside of college.' This is corroborated by the fact that, of the fifty four student evaluations, forty one stated that they would not have carried out the task unless it had been integral to their assignment. This was despite thirty eight out of the forty one stating that they had benefited from the experience and the fact that it helped them to work independently. Rudduck's experiences are further substantiated by one student who, when asked if they should be working independently, commented that; 'well although it is important I feel that in paying for the course I should have more teacher input.' Ironically it has been shown (Ramsden, 1992) that the time spent on out-of-class learning can actually be more productive than in-class lectures, providing the learning requires the use of higher order thinking skills.

For this reason I have undertaken my current research with a group of 24 Level 3 BA ITT students. I have worked closely with these students over the last two years as they have chosen to study science as a specialist subject for which I am tutor. In this capacity I have been able to spend more time with this group with the added bonus of the fact that part of their assignment does not require passing of a knowledge-driven exam. I hope the relationship with the group as it has developed would allow for uninhibited dialogue. While I know that they still position me as the 'expert-knower', I hope that through discussion they are more at ease with the idea that I too can learn from them and that we, in fact, co-create knowledge in a symbiotic learning relationship.

Why action research?

Elliott (1991) believes that there can be no development in the curriculum without there first being professional development of the teacher. He suggests that this development is as a researcher of their own practices. I believe strongly that this form of professional development is the most valuable as, throughout my career, I have always had difficulties in accepting any research that has been produced by scholars with no 'in-school' experience.

It is encouraging to read Clandinin and Connelly (1995) and Ghaye and Ghaye (1991), who report that questions are being asked by a number of teachers about the usefulness of knowledge that is produced out of a practice context. Many practitioners see these kinds of comments, research and theory as having little practical value. Research into the social sciences, such as education, has traditionally been modelled on the natural sciences, with an underlying positivist epistemology. Winter (1989) points out that researchers who hold these epistemologies believe that, if enough situations are studied with enough care, generalisations can be made about how humans act in the same way as they can be about

mosquitoes. In this way it is believed that human behaviour can be predicted and therefore controlled.

I have already outlined why I find it difficult to accept data generated by ‘outsiders’ and am amazed at how this form of research can reduce humans to agents who do not have the ability to think for themselves. It is difficult to see how research in this field can give explanations for those who are being studied who do not fit in to the generalisations made by the research. However, I have identified that I used to believe (as Schon, 1995 would describe it) that I was from the ‘high ground’; an elitist knower looking at the students in the ‘swampy lowlands’. Ghaye and Ghaye (1998) mention that for true reflection to take place one must first accept that the practice can always be improved in some way. For me this has been a revelation and a realisation that what I would have termed ‘reflection’ in my old practice was not really the case. If I had had this opportunity to critically reflect while in school I am sure that I would have realised that my teaching was far from perfect and that I could have made major improvements to my teaching to encourage students’ learning.

Rose (2007) points out that an examination of your own practice through an action enquiry can not only improve the quality of the teaching and learning that you provide, but that it can also make the whole teaching experience more gratifying. This whole process can play a part in re-enthusing and re-empowering the practitioner at the same time as revising what could be perceived as a *habitualised practice* (Rose, 2007, p73). Winter (1989) points out that action research should be seen as part of the idea of being a professional and that it should be seen as an extension of their work and not as something extra. It also provides the practitioner with the capacity for symbiotically bringing together theory and practice.

By studying my own practice I can show how I hold myself accountable for my own educational influence in the learning of those that I teach and possibly those that may read this research paper. Therefore the methodology that I used for my research project, which allowed me to study my practice using the experience that I have gained during teaching, took the form of an action enquiry as set out in McNiff and Whitehead (2006).

Gathering data

Throughout the 10-week course I placed a comment on the discussion forum of the VLE after every lecture outlining how I felt each session had gone. I asked that the students read this comment and if they felt it appropriate provide further feedback about their thoughts on the session, taking into consideration mine and others’ opinions ([copies of the discussions that took place can be seen here](#)). I wanted to develop Bohm’s (1996) ideas, surrounding the meaning of dialogue. Bohm argues that dialogical communications are to do with the construction of meaning through collective conversation where a theory of knowledge is generated by those involved. As I will discuss later, not only do the postings on the discussion forum give me evidence of the students’ learning but also of my own and that of the group.

In addition to the feedback on each session I also provided copies of lecture notes, assignment details, and readings around current science topics. I also introduced quizzes and other activities which I believed would engage the students’ interest. Enthusiasm for a subject is one of the pre-requisites required for a student to become an independent learner

(Pokorny & Pokorny, 2005). This enthusiasm is also paramount in getting students to engage with the VLE in the first place (Bromham & Oprandi, 2004).

Following the course I asked all 24 students to complete a questionnaire in order to survey their responses regarding how they had valued the VLE. The questionnaire asked the students what they felt the term 'independent learning' meant and whether or not the VLE I had provided had enabled them to develop their skills of independent enquiry. It required them to rate how valuable they felt the VLE was and to state which features from it they used along with their justifications. In particular I asked them to focus on how useful they felt the discussions forum had been and whether or not it had helped them to evaluate the sessions that they had participated in. I also enquired about the value of the comments I had made about the sessions (see Appendices).

I chose questionnaires as my initial data-gathering tool as it gave me a broad set of data to analyse. Having read the questionnaires I used semi-structured [interviews with five of the students](#) (Sinclair, 2008d).

I did this in order to tease out further detail that the questionnaires could not generate and secondly to produce more data to back up the reliability of the data from the questionnaires. The evidence generated from these interviews will be discussed at a later stage.

In order to generate evidence in relation to developments in my own learning I used the following data: my log book, postings I have made on the discussions forum, e-mails, student course evaluation sheets, and my previous modules for my Masters study programme.

Ethical considerations

Bell (1999) stresses the need to be sure that any participants within research projects are actually willing to undertake this role. Indeed Kemmis *et al.* (1988) go further to state that an action research project must pay even closer attention to ethical considerations as they highlight that research such as this is 'deeply embedded in an existing social organization and the failure to work within the general procedures of that organization may not only jeopardize the process of improvement but existing valuable work' (1988, p. 43). For this reason my choice of research group was important and all students received a copy of my ethics statement and gave their permission that they would be participants in my research by signing these.

The ethics statement assured students of complete confidentiality, anonymity and non-traceability either in any of the data collecting methods or of any published research material. They were informed that discussion of one participant with another would not occur. They were also assured that they had the right to withdraw from the research at any time and any data regarding them would be subsequently destroyed. The plan for my research had also been agreed by St Mary's University College ethics committee. Permissions to undertake my research, and my ethics statements, may be found in the appendices of my Masters dissertation (Sinclair, 2008b).

How did I generate evidence from the data?

So that I could generate evidence from this data I looked for evidence where I believed the VLE had encouraged independent learning. In particular I looked for areas where I felt students had been self-motivated, planned their own learning and had shown the abilities to be reflective and self-evaluate. These have all been highlighted as skills that the independent learner should have developed (Confessore & Kops, 1998; Zimmermann, 1998; Zimmermann and Schunk, 2001).

I also drew on my values of mutual respect and equality to provide my living standards of judgement. In this way I looked for examples within the data that showed that I have acted in a way that manifests these values. I believe that if I can demonstrate that these values are being realised it will provide evidence that I have created a supportive online environment where students can learn and not just retrieve information, and thereby improve the quality of my teaching and their learning. In addition to this I hope that by the end of this account the reader can validate that I am 'engendering a sense of trust,' (McPherson and Nunes, 2004, p. 319) and working with my students in a symbiotic manner. In addition to this I have looked for disconfirming data which challenges my belief that I taught in an inspiring way or where students felt my values were not being borne out in my practice.

Main Findings

In response to the question about whether the VLE had encouraged the students to become independent learners, only one student answered in the negative. This student had experienced technical difficulties surrounding logging on to the system and has highlighted the fact that, even in this computer age, not all have ready available access to a computer or the internet.

While the majority of the students valued the usefulness of the VLE, I was initially disheartened by the fact that the reasons given for why they used the VLE were to retrieve lecture notes and check assignment details. Eighteen of the twenty four had stated they used it for downloading session slides and sixteen to check assignment details. Only seven of the students noted the use of the discussion forum. From this I initially felt I had been helping to replicate Fromm's 'having-mode' students.

However, when asked specifically whether they found the discussion forum useful and whether or not it had helped them to become independent learners, over two thirds replied in the positive. In line with my belief that everyone has the potential to develop the skills of independent enquiry I looked for areas where I felt this was being manifested. I feel the following quotes act as evidence for this and demonstrate that the VLE was helping the students to explore the skills of self-motivation and evaluation; 'it gave me the guidance required to start discovering information for myself' and 'it helped me to reflect on my own participation within the lectures.'

While encouraged by these facts I also need to take into consideration that one student noted that, 'I just don't feel it really helps me or is that much use' and preferred to find their information from books. Some students did not feel that contributing to the

discussions was a priority and felt that they didn't have the time. I am embarrassed when recalling a learning point which was not commensurate with my values of mutual respect and equality. 'Lynne has pointed out that it appears that I think that the only subject the students study is science and that they should be more committed to logging on to the VLE' (A. Sinclair, personal communication, November 16, 2008). Perhaps an even more important consideration is the one student who stated that she felt embarrassed sharing her thoughts with the whole class, especially when on-line comments are available indefinitely. Others pointed out that they had read other students' comments and that this had helped them to evaluate the session for themselves, but then had refrained from leaving a posting themselves. These students could be referred to as 'lurkers' (a lurker being someone who reads postings made on discussion forums yet, for whatever reason, does not participate in the dialogue). It is important to highlight that the majority of students were not 'lurkers' (Pearson, 1999) with a far greater number contributing than would have been expected (Peat, Taylor & Franklin, 2005).

The semi-structured interviews allowed me to gain a further insight of the use of the VLE and, in particular, highlighted something that the questionnaires couldn't. While having been discouraged that my previous research had showed that the main use for the VLE was to download lecture notes and assignment details, I had not considered the independent learning that may have occurred after this. One student pointed out that they didn't like putting their hand up if they didn't understand and would use their lecture notes as a basis to work out any problems they may have had for themselves outside of lecture-time. Others used their lecture notes so that, 'I went back and sat down and it made me think, what did we actually do...?', and, 'it kind of makes you think about what you have done in the lesson.' I offer these [examples as evidence of students evaluating their own learning](#) (Sinclair, 2008c). These findings about online learners have also been corroborated by Bromham and Oprandi (2006).

The interviews also gave me an understanding into the reasons why not all of the students were willing to be involved in the discussion forum. Some pointed out that, while making a posting had helped clarify their understanding of a session, they had not really taken any notice of what others had written. Other students felt that they had similar ideas to postings that had already been made and that they would have just been replicating what had already been mentioned. I believe that this is evidence that the discussion forum still plays a role in helping the students develop the skills of self-reflection and evaluation, but that this will not necessarily help create the dialogue which I had hoped. One suggestion was that it may have been better if students could not have seen other postings. While this may not have created the dialogue I initially wanted it may have had an influence on the number of students evaluating their own thoughts on the sessions. A proposal, from one student, as a way to stimulate dialogue among students, was that, 'you could put questions up about ethical issues on science, not just about the lectures.'

The highlight in dialogue and engagement came when students discussed work that they had produced as a teaching resource (lesson plans based on a visit to the local river). Students had access to each other's work via the VLE. The engagement can be seen in the numbers who participated in these discussions and the comments that were made; 'it gives them lots of opportunity to discuss', 'I am glad to see that there has been mention of exploring through play, as this is so important for younger children' and 'having the learning

objective and directions for what the teacher needs to do could be really useful,' are all examples, I believe, of students reflecting on whether the lesson plans would be useful to them (See Appendix - Subject: River Crane and ideas for Reception). This is corroborated by Leander and Duncan (2004, p. 433) who note that 'when the virtual is not integrated in any useful way into the students' real lives, the energy and motivation for the virtual experience tends to languish and stall out.' Some of the most pleasing dialogues are when it is obvious that the students are operating in the 'being' mode and have processed ideas from the lesson resources and made suggestions about further activities. For example, in response to my posting about a concern that we had benefited from a visit to a wildlife reserve mainly because of the good weather, two students made different comments about what they would have done if it had rained. One thought that, 'it would be a fantastic place to take a class, even if it was raining (think of all the fun you could have splashing in the puddles with the ducks!!),' while another agreed, 'Yes I think the weather helped, but no matter what the weather was like on the day, this could just be used as a learning/teaching point. For example, where would the animals go in the rain, cold, heat and so on. Would rain give a good/bad opportunity for feeding....?' Not only is this obvious evidence of participation with the discussion forum, but I believe it also demonstrates that these students have shown self-motivation and an ability to reflect on their own learning ([actual comments, in context, can be found here](#)).

The discussions forum also gave me feedback about my sessions. While most feedback was constructive, not all was positive and highlights the fact that action research can place the researcher in a vulnerable position when they unearth findings that may not necessarily be complimentary about their practice. I have learned that with this group, at times, my explanations have not been concise enough and that they valued their time working in groups producing teaching resources and lessons. This group said they would have benefited from having more time in sessions to do this.

I offer the following narratives, taken from the SMO discussion forum, as evidence of my willingness to demonstrate that it has been possible for my students to have learnt with me as I gain a better understanding of how I can best develop my practice. In particular I hope to show that I have created a supportive learning environment based on my values of mutual respect and equality; an environment where, specifically, *I am* the learner.

The following are comments that I made after some of the sessions;

I was sincerely impressed with a lot of the ideas for activities that you had (well done - do I underestimate you?!!!). My slight concern was whether we needed to go to the park. Was this a waste of time? Could we have visualised 'a park' and carried out the same activity? Did I give you enough direction / too much regarding the activity? Did I then need to keep quiet and let you get on with it?¹

I thought that you guys were quite interested at first, but that what I had asked you to do was too dull and uninspiring. Would you have preferred to look at all of the questions? Did

¹ Posting made following a trip to the local park to look at ways it could be used in science sessions.

the feedback at the end go on too long? I felt that by the end of the session that you had enough. So was it worthwhile, what did you learn?² (A. Sinclair, personal communication)

I hope that the reader agrees with me that these postings show that I am willing to be open about my teaching and that the questions that I ask show a desire to learn from the students in order to gain a better understanding about my practice. In essence the roles have changed and I am no longer the Nile crocodile, but the Egyptian Plover.

The following excerpt was taken from the discussion forum after a session on building foam towers. It highlights my initial comments and one of the responses made by the students. During this session the students were given explicit instructions (a guided approach) regarding building strong foam towers. They were then set the challenge of building the highest tower using knowledge that they had gained from the previous task.

I'm not sure my explanation at the start of the session was good enough (ie what I wanted you to achieve from the foam activities). I personally think the challenge got in the way of following the instructions. (A. Sinclair, personal communication)

I think your explanation at the start was fine. However the creative and fun practical made me forget the learning intentions. I didn't seem to learn much about the best method for building a foam tower from the guided activity, so I was unable apply any knowledge from it to use on the unguided activity. I didn't think of using the magnifying glasses as I didn't feel it would have made a difference to how we built it. Maybe if it was emphasised more that we should examine the bubbles under the magnifying glasses, rather than just providing us with them. Like you have suggested, I felt the activity did get in the way of following the instructions. Maybe if we all did the guided one first on our tables, then stopped and discussed its pros and cons, and then went on to the unguided one. This may of redirected us reinforced what we were observing in the activities, rather than having too much fun. (Student A, personal communication)

From this response I believe that the student feels comfortable giving feedback to my comments. They are happy to outline that they 'didn't seem to learn much about the best method of building a foam tower,' and were able to make suggestions about how to improve this session. It also shows that the student has taken time to reflect on their own learning. I agree with Whitehead (2008, p. 16) when he says that, 'inclusionality in educational research is distinguished by flows of life-affirming energy and a gaze of recognition of the other.' I also understand that written text, such as this, can mask and omit these flows (Bruce-Ferguson, 2008), but I hope that the reader can still see glimpses of this energy within this symbiotic relationship despite this. It would have been interesting if some of these discussions had been recorded using video footage and whether my claims would have been strengthened and the flows of energy more visible, as Huxtable (2009, p. 25) suggests, when the reader can, 'engage interactively with the multimedia narrative rather than the traditional text alone.'

The questionnaires and interviews also provided me with sources of evidence that many students felt that there was a more collaborative relationship between myself and

² Posting made following a session looking at science tests for children aged 10.

them, despite the fact that they were still positioning me as the 'expert-knower'. Evidence for this comes from a colleague who had been discussing science with one of my students who stated that; 'she feels that there is a real group feel about being in the science group. She likes the ethos you have created for the group' (Student B, personal communication, October 16, 2008).

From this I felt that the relationships I had developed fulfilled my core values of mutual respect and equality and meant that I was moving towards, what I consider to be, a symbiotic practice. Williams, Tanner and Jessop (2007) highlight that virtual communities are strengthened by a blend of face-to-face and online sessions. During a discussion with critical friends, it was pointed out that they (M. James, personal communication, April 2008) felt that the success of the virtual discussion forum must, in part, be due to the successful relationships formed, ironically, during these face-to-face sessions. This, I believe, strengthens my claims that I am working towards a symbiotic practice and highlights that I may, in part, be fulfilling my values of mutual respect and equality.

How do I ensure that any conclusions I come to are reasonably fair and accurate?

I have used my own critical reflection in order to validate my claim to knowledge (Whitehead & McNiff, 2006) and have subsequently tested this claim against the public critique of others. Winter (1989) considers validity a 'dangerous' term to link with knowledge claims when he points out that there is the potential to view findings with a positivist epistemology in describing the findings as 'generalizable, or replicable, or a correct representation of the external world' (Winter, 1989, p. 36). However, I have drawn on the four criteria for 'truth claims' outlined by Habermas (1979) and in this way I hope I have demonstrated that my research-based claim to knowledge is a) comprehensible, b) sincere, c) truthful and d) appropriate and shown that the procedures I have carried out in the research process are rigorous (Winter, 1989). I understand that I have to make my work public and that through critical dialogue with peers I hope that it can be agreed as a valid and rigorous account. As an ongoing process, the members of the St Mary's University College MA group have critiqued and peer validated my work (and I theirs). This process has taken the form of group discussions around ideas and critique from reading my assignments and listening to my presentations ([Sinclair, 2008a](#)). In particular, I was struggling with a definition for independent learning and drew on advice from Jean McNiff, a critical friend (J. McNiff, personal communication, December 2007). My learning log shows that I noted that; 'the more and more I think about this, the more I'm unsure of what a definition for independent learning is. Through working with the students and asking their thoughts on a definition, the majority of them think it is about working on their own. While I agree there are skills that need to be developed and that these are necessary for lifelong learning I'm not sure that this is the best way of learning.' She pointed me to Chomsky's (1986) ideas surrounding 'What is the nature, origin and use of this idea?' In this way my query turned into 'what is the nature of independent enquiry?' which helped me move away from the need for an explicit definition to the idea that everyone has the capacity for independent enquiry, which I firmly believe.

In particular, demonstrating the validity of my account has come through public critique as part of the submission process for this journal. This is an open review policy where dialogue between the reviewers and the author can take place. It gives the author the opportunity to demonstrate further the rigour and validity of their work.

The potential significance of my research

While the numbers starting BA ITE courses are limited by the Teaching Development Agency, the government's strategy on widening participation has meant that there has been a general increase in numbers in the rest of the higher education system. Due to the large numbers taking University places it can be seen why the nature of the student population has changed. Pokorny and Pokorny (2005) point out that it is wrong to make the assumption, as many higher education lecturers do, that students entering a degree course already have the skills necessary for independent learning; and they suggest that there are signs that both progression and retention rates are falling because of this expectation. Further research into how we can help students to develop these skills is necessary if all these students are to succeed in their chosen courses. Findings from this research may go some way in looking at how a VLE can be used to engage all students. While all students in this study group felt that the VLE helped them to work independently, it should be noted that it was not just one specific activity that promoted this. The VLE provided a focal point, a stimulus for students to help them engage with ideas from each session. Responses from the questionnaires showed that some students used lecture notes and links to websites to further their understanding independently, while others chose to engage with members from their group in the discussion forum. The students noted that the form of independent enquiry that this developed was that of self-reflection. They mentioned that it gave them the opportunity to evaluate what they had learned from each session. As mentioned earlier, providing students with the chance to reflect on one another's work elicited the greatest and most self-reflective responses from the group.

Hartog (2004) argues that Higher Education institutions are underpinned by technical rational epistemologies and are being run like businesses in that they have become institutionalised in respect to the quality of their teaching and learning. Guidelines from the QAA ("Quality Assurance Assessments", n.d.) require compliance with a largely technical rational curriculum at the expense of emancipatory dialogue between peers and students. While Higher Education Institutions are suggesting that their students should be able to think critically and reflectively, the guidelines are giving those delivering courses far less flexibility to implement such forms of thinking. There appears to be disparity between policy rhetoric, which emphasises the value of emancipatory practices, and real-world practices, many of which are grounded in technical rational epistemologies. My research, I believe, may give some ideas about how Higher Education Institutions can help develop critical and reflective thinking while at the same time delivering a knowledge-based curriculum in lines with the QAA.

The significance of my research can also be thought of in terms of developing new forms of theory and how I am generating my own living theory of practice (Whitehead, 1989). In this way I am contributing to the debates surrounding the nature of education and

pedagogies and what constitutes knowledge. By encouraging my students to learn independently I am asking them to make their learning explicit. In turn they will be developing their own living theories around their practice and hopefully developing a critical approach towards reflection and critical thinking. Subsequently this may break the cycle of positioning teachers as unthinking implementers of normative theories, and enable them to encourage the necessary skills of critical analysis to the children they subsequently teach. I hope that it has been possible for my students to have learnt with me as I gain a better understanding of how I can best develop my practice and that, with them, I am working towards a symbiotic practice.

References

- Alford, F. (2001). *Whistleblowers: Broken lives and organizational power*. Ithaca, NY: Cornell University Press.
- Bell, J. (1999). *Doing your research project: A guide for first-time researchers in education and social science* (Third Edition). Buckingham: Open University Press.
- Bohm, D. (1996). *On Dialogue*. London: Routledge.
- Bromham, L., & Opandi, J. (2004). Evolution online: using a virtual learning environment to develop active learning in undergraduates. *Journal of Biological Education*, 41(1), 21-25.
- Bruce-Ferguson, P. (2008). Increasing inclusion in educational research: Reflections from New Zealand. *Research Intelligence*, 102, 24-25.
- Candy, P. (1991). *Self-direction for lifelong learning*. San Francisco: Jossey-Bass Higher and Adult Education Series.
- Chomsky, N. (1986). *Knowledge of language: Its nature, origin and use*. New York: Praeger Press.
- Chomsky, N. (2000). *Chomsky on miseducation*. Lanham: Rowman and Littlefield.
- Clandinin, D.J., & Connelly, F.M. (1995). *Teachers' professional knowledge landscapes*. New York: Teachers College.
- Confessore, S.J., & Kops, W.J. (1998). Self-directed learning and the learning organization: Examining the connection between the individual and the learning environment. *Human Resource Development Quarterly*, 9(4), 365-375.
- Delong, J. (2002). How can I improve my practice as a superintendent of schools and create my own living educational theory?. (Doctoral dissertation, University of Bath, 2002). Retrieved April 10, 2008, from <http://people.bath.ac.uk/edsajw/delong.shtml>
- Dewey, J. (1916). *Democracy and Education*. New York: Macmillan.
- DfES. (2004). *A National Conversation about Personalised Learning*. Nottingham: DfES Publications.
- Elliott, J. (1991). A Model of Professionalism and its Implications for Teacher Education. *British Educational Research Journal*, 17(4), 309-319.
- Foucault, M. (1980). *Power/Knowledge: Selected Interviews and Other Writings 1972-1977* (Edited by C. Gordon). Harvester: London.
- Fromm, E. (1976). *To Have or To Be?*. New York: Bantam.
- Gardner, H. (1999). *Intelligence Reframed: Multiple Intelligences for the 21st Century*. New York: Basic Books.
- Ghaye, A., & Ghaye, K. (1998). *Teaching and Learning through Critical Reflective Practice*. David Fulton Publishers: London.

- Glenn, M. (2006). Working with collaborative projects: my living theory of a holistic educational practice. (Doctoral dissertation, University of Limerick, 2007). Retrieved October 23, 2007, from <http://www.jeanmcniff.com/glennabstract.html>
- Habermas, J. (1979). *Communication and the Evolution of Society*. Boston: Beacon Press.
- Hartog, M. (2004). A self study of a higher education tutor: How can I improve my practice?. (Doctoral dissertation, University of Bath, 2004). Retrieved April 10, 2008, from <http://people.bath.ac.uk/edsajw/hartog.shtml>
- Huxtable, M. (2008). How do we contribute to an educational knowledge base? A response to Whitehead and a challenge to BERJ. *Research Intelligence*, 102, 25-26.
- Kemmis, S., & McTaggart, R. (Eds.). (1988). *The action-research planner* (3rd edition). Victoria: Deakin Press.
- Leander, K., & Duncan, B. (2004). *Community construction in the virtual: reconceptualising joint action*. Retrieved April 20, 2008, from www.wwwords.co.uk/elea/content/pdfs/1/issue1_3.asp
- Monteith, M., & Smith, J. (2001). Learning in a virtual campus: The pedagogical implications of students' experiences. *Innovations in Education and Teaching Technology*, 38(2), 119-128.
- McNiff, J., & Whitehead, J. (2006). *All you need to know about action research*. London: Sage.
- McPherson, M., & Nunes, M. (2004). The failure of a virtual social space (VSS) designed to create a learning community: lessons learned. *British Journal of Educational Technology*, 35(3), 305-321.
- Pearson, J. (1999). Lurking, anonymity and participation in computer conferencing. In D. Watson & T. Davies (Eds.), *Communications and networking in education: Learning in a networked society* (pp. 79-90). Norwell, USA, Dordrecht: Kluwer Academic Publishers.
- Peat, M. Taylor, C., & Franklin, S. (2005). 'Re-engineering of undergraduate science curricula to emphasise development of lifelong learning skills.', *Innovations in Education and Teaching Technology*, Vol. 42, No. 2, 135-146.
- Pokorny, M., & Pokorny, H. (2005). Widening participation in higher education: student quantitative skills and independent learning as impediments to progression. *International Journal of Mathematical Education in Science and Technology*, 36(5), 445-467.
- Polanyi, M. (1958). *Personal Knowledge. Towards a Post Critical Philosophy*. London, Routledge.
- Quality Assurance Agency for Higher Education (QAA). (n.d.). *Types of review*. Retrieved May 15, 2007, from <http://www.qaa.ac.uk/reviews/default.asp>
- Ramsden, P. (1992). *Learning to Teach in Higher Education*. London: Routledge.

- Rose, J. (2007). Enjoyment in the early years through critical reflection. In D. Hayes (Ed.), *Joyful Teaching and Learning in the Primary School*. Exeter: Learning Matters.
- Rudduck, J. (1991). The language of consciousness and the landscape of action: Tensions in teacher education. *British Educational Research Journal*, 17(4), 319–331.
- Schön, D. (1995). Knowing-in-action: The new scholarship requires a new epistemology. *Change*, 27(6), 27–34.
- Shift Happens. (n.d.). in The FischBowl: Did You Know? Retrieved June 10, 2009, from <http://thefischbowl.blogspot.com/2006/08/did-you-know.html>
- Sinclair, A. (2007). *Interim research paper: Module 5, MA PVP Programme*. Twickenham: St Mary's University College.
- Sinclair, A. (2008a, May 14). Presentation to Critical Friends [Video File]. Video Posted to <http://www.youtube.com/watch?v=THua6Ywoswc>
- Sinclair, A. (2008b). *Final Research Paper: Module 7, MA PVP Programme*. Twickenham: St Mary's University College.
- Sinclair, A. (2008c, May 13). Interview exert regarding working independently [Video File]. Video Posted to <http://www.youtube.com/watch?v=T1HgIngqH9o>
- Sinclair, A. (2008d, May 13). Interviews with students about their learning from using a VLE [Video File]. Video Posted to <http://www.youtube.com/watch?v=4ubXs5YJ0XM>
- Whitehead, J. (1989). Creating a Living Educational Theory from Questions of the Kind, “How do I Improve my Practice?”. *Cambridge Journal of Education*, 19(1), 137–53.
- Whitehead, J. (2008) Increasing Inclusion In Educational Research: A Response To Pip Bruce Ferguson. *Research Intelligence*, 103, 16-17.
- Whitehead, J. and McNiff, J. (2006). *Action Research Living Theory*. London: Sage.
- Williams, A. Tanner, D., & Jessop, T. (2007). The creation of virtual communities in a primary initial teacher training programme. *Journal of Education for Teaching*, 33(1), 71-82.
- Winter, R. (1989). *Learning from Experience: Principles and Practice in Action Research*. London: The Falmer Press.
- Zimmerman, B.J. (1998). Academic studying and the development of personal skill: a self-regulatory perspective. *Educational Psychologist*, 33, 73–86.
- Zimmerman, B. & Schunk, D. (2001). Reflections on theories of self-regulated learning and academic achievement. In B. Zimmerman & D. Schunk (Eds.), *Self-regulated learning and academic achievement: Theoretical perspectives* (2nd edition). NJ, Erlbaum.

Appendix 1

Comments taken from SMO discussion forum

The foam session

Subject:	The Foam Session – Your thoughts please
Author: Alexander Sinclair	Date: 07 December 2007, 3:30 PM
<p>I'm not sure my explanation at the start of the session was good enough (ie what i wanted you to achieve from the foam activities). I personally think the challenge got in the way of following the instructions (correct me if i'm wrong). Am i right to be disappointed that a) only 1 group used the magnifying glasses and b) groups didn't appear to use what they learnt in the guided activity in the subsequent challenge? However, I do think we highlighted the pros and cons of both approaches. Your thoughts please?</p>	
Subject: Re:The Foam Session	Topic: Thoughts on Sessions
Author: Student	Date: 09 December 2007 1:14 PM
<p>The explanation at the beginning of the lesson was clear enough. But i think everyone in my group kind of got carried away with the challenge and being creative that they lost focus. personally i really enjoyed the lesson. The discussion we had about the two approaches was quite useful.</p>	
Subject: Re:The Foam Session	Topic: Thoughts on Sessions
Author: Student	Date: 09 December 2007 11:21 PM
<p>I think your explanation at the start was fine. However the creative and fun practical made me forget the learning intentions. I didn't seem to learn much about the best method for building a foam tower from the guided activity, so I was unable apply any knowledge from it to use on the unguided activity. I didn't think of using the magnifying glasses as I didn't feel it would have made a difference to how we built it. Maybe if it was emphasised more that we should examine the bubbles under the magnifying glasses, rather than just providing us with them.</p> <p>Like you have suggested, I felt the activity did get in the way of following the instructions. Maybe if we all did the guided one first on our tables, then stopped and discussed it's pros and cons, and then went on to the unguided one. This may of redirected us reinforced what we were observing in the activities, rather than having too much fun building foam towers. After we discussed it as a group, I could understand the reasoning behind the different approaches and their benefits or downfalls.</p>	
Subject: Re:The Foam Session	Topic: Thoughts on Sessions
Author: Student	Date: 10 December 2007 12:35 PM
<p>I think you shouldn't be disappointed. We definitely used what we learnt from the guided activity in the non guided. In a way it was interesting just to do the two activities and then evaluate the learning afterwards. I felt this was an effective way for me to see the pros and cons of each activity as we had already done them. it was interesting to hear different preferences to the approaches and understand how the creativity aspect of lessons needs to be carefully considered. Im not sure how you could have guided us in any other way at the beginning, unless you had stated that we had to follow the rules exactly.</p>	

Trip to the River Crane

Subject: 'The River Crane'	Topic: Thoughts on Sessions
Author: Student	Date: 02 November 2007 10:55 PM
<p>Hello,</p> <p>I would just like to say that I thoroughly enjoyed this session today, as it gave me the opportunity to experience 'pond dipping' for the first time! I find it extremely beneficial visiting such a place as the River Crane because it not only provides a change of environment, for students (and potentially children), but also a learning enriched environment (learning about habitats and minibeasts etc. and unplanned events that reveal interesting information! O2 higher in some places than others). As a training professional I also find it useful going on such trips as it broadens my own knowledge of what places are available for scientifically related topics and potentially other subjects.</p>	
Reply	
Subject: Re:'The River Crane'	Topic: Thoughts on Sessions
Author: Student	Date: 04 November 2007 9:38 AM
<p>I loved this trip, I've never been pond dipping either and found myself excited by the prospect on the day (although perhaps not so much before that). I loved 'getting my hands dirty' in the river. I found it really interesting to see and discuss all the types of organisms that we found. The lady was enthusiastic too, which helped. The waders were a bonus, as I think it might have gotten boring had we all been in the shallower part of the river.</p>	
Reply	
Subject: Re:'The River Crane'	Topic: Thoughts on Sessions
Author: Student	Date: 11 November 2007 10:32 PM
<p>I agree with *****, I thought this trip was great. Even though I was only able to get into the water for like two minutes, it looked like it was great fun and there were many opportunities for the children to develop scientific skills and knowledge. I must admit, before going to the river crane the idea of pond dipping with children seemed crazy to me, or atleast a definat breach of health and safety regulations! However, after seeing it for myself I would love to have the opportunity to take children there, it provides the right balance of safety and fun, as well as a strong base in sciene.</p>	
Subject: River Crane and follow up task	Topic: Thoughts on Sessions
Author: Student	Date: 16 November 2007 11:57 AM
<p>I agree with *****, I thought this trip was great. Even though I was only able to get into the water for like two minutes, it looked like it was great fun and there were many opportunities for the children to develop scientific skills and knowledge. I must admit, before going to the river crane the idea of pond dipping with children seemed crazy to me, or atleast a definat breach of health and safety regulations! However, after seeing it for myself I would love to have the opportunity to take children there, it provides the right balance of safety and fun, as well as a strong base in sciene.</p>	
Subject: River Crane and follow up task	Topic: Thoughts on Sessions
Author: Student	Date: 16 November 2007 11:57 AM
<p>I have found this to be one of the most useful and productive things we have done so far. It was interesting to go on the trip and see what was there and experience the activities. However this was made particularly good for my learning when we got the opportunity to discuss and produce some activities for the day. We were able to link many different aspects of our learning to a fun and very relevant task. Hope they use them in the future cos ours is bangin!</p>	

Reply	
Subject: Re:River Crane and follow up task	Topic: Thoughts on Sessions
Author: Student	Date: 16 November 2007 1:05 PM
Yeah I agree!	
Reply	
Subject: Re:River Crane and follow up task	Topic: Thoughts on Sessions
Author: Student	Date: 18 November 2007 4:08 PM
Actually Henry, I thought ours was just that little bit better. It's crack-a-lackin'!	
Reply	
Subject: Re:River Crane and follow up task	Topic: Thoughts on Sessions
Author: Student	Date: 22 November 2007 4:03 PM
I have found all of the resources useful as I ahve only taught lower key stage 2 so it's good to see other activities I can use. I think a lot of the ideas used in the resources could be used with all ages with varying difficulty. I like the map idea used in key stage 1 to keep the children focused on the way to the river. It's amazing the amount of cross curricular links everyone has managed to bring up. Definately a worth while visit!	

Trip to the Park

Subject: The 'Park' Session	
Author: Alex Sinclair	
I was sincerely impressed with a lot of the ideas for activities that you had (well done - do I underestimate you?!!!). My slight concern was whether we needed to go to the park. Was this a waste of time? Could we have visualised 'a park' and carried out the same activity? Did I give you enough direction / too much regarding the activity? Did I then need to keep quiet and let you get on with it?	
Reply	
Subject: Re:The 'Park' Session	Topic: Thoughts on Sessions
Author: Student	Date: 14 October 2007 7:11 PM
I have found all of the resources useful as I ahve only taught lower key stage 2 so it's good to see other activities I can use. I think a lot of the ideas used in the resources could be used with all ages with varying difficulty. I like the map idea used in key stage 1 to keep the children focused on the way to the river. It's amazing the amount of cross curricular links everyone has managed to bring up. Definately a worth while visit!	
Reply	
Subject: Re:The 'Park' Session	Topic: Thoughts on Sessions
Author: Student	Date: 14 October 2007 11:07 PM
I think that we could have thought about it some more int he classroom, but going to the park helped me to think more clearly about the aspects of science involved. Agreeing with *****, by giving us 'food for thought' it supported and helped to develop my own ideas. I think it was good that we had a chance to experience the practical aspects of the park because I was realising things about the science of the 'rides' without even knowing it until I'd said my thoughts aloud and it provoked discussion with whoever I was with.	

Reply	
Subject: Re:The 'Park' Session	Topic: Thoughts on Sessions
Author: Student	Date: 25 October 2007 12:25 PM
<p>I agree with ***** in that if we hadn't gone to the park then I don't think I would have thought as much about the 'science' involved with the rides. If we had visualised a park then I don't think I would have come up with the sorts of key questions about the different rides that we could ask children whilst on a visit to the park with them, these fed directly into our lesson outline so were really useful. Maybe to make the park session more productive we could have in our groups taught the type of lesson we would teach to children in the park instead of coming back to the class and writing it down.</p>	
Reply	
Subject: Re:The 'Park' Session	Topic: Thoughts on Sessions
Author: Student	Date: 11 November 2007 10:24 PM
<p>I thought the trip to the park was useful for numerous reasons. Firstly, I find that 'visualisation' is not my strong point, and so simply talking about the park may have generated ideas, but actually physically going to the park, I feel, enabled us to really think about the science behind the rides. It certainly helped me to come up with key questions and ideas for different investigations which I doubt I would have thought of from the classroom.</p>	

Thoughts on work produced for lower KS2 children

Subject: The River Crane and Ideas for Lower KS2	Topic: Thoughts on Sessions
Author: Student	Date: 09 November 2007 8:30 PM
<p>Overall i thoroughly enjoyed this session and found it extremely interesting, there was many ideas that i found useful which i could use if this trip is possible with the year i teach. i have never been pond dipping so it was a great experience.</p>	
Reply	
Subject: Re:The River Crane and Ideas for Lower KS2	Topic: Thoughts on Sessions
Author:	Date: 14 November 2007 3:58 PM
<p>The resource idea pack suggested for KS2 seems interesting and something that will engage the attention of the older children. It also gives the children an opportunity to develop their experimental skills and investigation skills as they will be looking at filtering. This will give the teacher a chance to assess whether children can identify different strategies for experiments and will support them in their SATs. Children are also able to compare different parts of the river so they can see the difference.</p>	

Session Planning Resources following the trip to the River Crane

Subject: Planning Session	Topic: Thoughts on Sessions
Author: Alexander Sinclair	Date: 12 November 2007 3:19 PM
I am interested to know how you felt this week's session went. Was there enough input from me? too much? I felt a general level of enthusiasm for the subject, which was very pleasing. Is this because of the nature of the task (ie working collaboratively) or because it was due to the experience 'in the river'?	
Reply	
Subject: Re:Planning Session	Topic: Thoughts on Sessions
Author:	Date: 13 November 2007 10:41 PM
I felt that this weeks session was a worthwhile one because it meant that we were given practice on planning sessions outside of the classroom. We were forced to think about safety issues outside of the classroom. My personal enthusiasm was due to the fact that I enjoyed the River Crane trip and also i enjoy working in a group.	
Reply	
Subject: Re:Planning Session	Topic: Thoughts on Sessions
Author:	Date: 14 November 2007 2:20 PM
Stop arse kissing *****!!!! ;)	
Reply	
Subject: Re:Planning Session	Topic: Thoughts on Sessions
Author:	Date: 14 November 2007 5:59 PM
It's true I should leave it to the expert.....you! lol :P xx	
Reply	
Subject: Re:Planning Session	Topic: Thoughts on Sessions
Author: Alexander Sinclair	Date: 14 November 2007 7:52 PM
That was actually just what I was after. An honest answer to what you thought of the session. If you got something from the session please say, if you didn't find it useful please also let me know. *****your thoughts.....?	
Reply	
Subject: Re:Planning Session	Topic: Thoughts on Sessions
Author:	Date: 14 November 2007 10:06 PM
Sorry, was just being childish :) Yeah I think the resource packs were a great idea and I am happy that I have these resources available to adapt when I need. I also feel a sense of pride about giving something back to the people at River Crane. *****, that's how you do it!!! ;)	
Reply	
Subject: Re:Planning Session	Topic: Thoughts on Sessions
Author:	Date: 22 November 2007 8:10 PM
Wat do you think you are running for Prime Minister or something??!!! lol...Get over urself !! hehe On a level, i think these resources will prove useful in future and I think this activity has been one of the most useful for me personally.	

Thoughts on work produced for Reception children

Subject: Re:River Crane and ideas for Reception	Topic: Thoughts on Sessions
Author:	Date: 14 November 2007 4:04 PM
<p>This resource has very good links to all areas in the foundation scheme of work. The activities are simple but effective for children at such a young age. It gives them lots of opportunities to discuss and talk as this is where they can be assessed by teachers. Children at this age would not be expected to write a lot so pictures and little notes are a good idea. Also using a camera helps teachers to assess whether the children have been looking and noticing things at the River Crane and the environment around it.</p>	
Reply	
Subject: Re:River Crane and ideas for Reception	Topic: Thoughts on Sessions
Author:	Date: 16 November 2007 1:14 PM
<p>I am glad to see that there has been mention of exploring through play, as this is so important especially for younger children. Sometimes too much focus can be given to structured learning trends and less time for creativity and unplanned experiences. I have saved some good ideas to my m. stick for this one. Thanks guys!</p>	
Reply	
Subject: Re:River Crane and ideas for Reception	Topic: Thoughts on Sessions
Author:	Date: 19 November 2007 9:33 PM
<p>I really liked the activities and the layout of the teaching ideas. Having the learning objectives and directions for what the teacher needs to do could be really useful.</p>	
Reply	
Subject: Re:River Crane and ideas for Reception	Topic: Thoughts on Sessions
Author:	Date: 21 November 2007 11:23 AM
<p>I thought that the ideas were very good for Reception age children. As i have worked in Reception before i think the children would enjoy the activities, activities are pitched at right level and the opportunity to discuss is good. Also using cameras is good use of ICT and pupils will like taking and having little pictures to work with.</p>	
Reply	
Subject: Re:River Crane and ideas for Reception	Topic: Thoughts on Sessions
Author:	Date: 21 November 2007 12:34 PM
<p>A good idea to include what the teacher needs to do, gives some important guidance. I like that one of the activities includes the journey down to the river, it makes the overall River Crane experience worthwhile and continually guides children's efforts to some good learning opportunities.</p>	
Reply	
Subject: Re:River Crane and ideas for Reception	Topic: Thoughts on Sessions
Author:	Date: 22 November 2007 11:23 AM
<p>i especially like the idea of children noticing things on the walk to the river, will keep them occupied on the walk!</p>	

Thoughts on work produced for upper KS2 children

Subject: Re:River Crane-Upper KS2	Topic: Thoughts on Sessions
Author:	Date: 22 November 2007 4:44 PM
I really liked the Upper Key Stage 2 ideas as I have only taught lower Key Stage 2 also. It is a reassuring that I can use these resources in the future. Even if it is in Kent and not London!! Thank you. *****. Hope everyone has seen that Science isn't on tomorrow but questions instead.	
Reply	
Subject: Re:River Crane-Upper KS2	Topic: Thoughts on Sessions
Author:	Date: 22 November 2007 9:27 AM
I think there is some really good ideas here which would definitely appeal to children!	
Reply	
Subject: Re:River Crane-Upper KS2	Topic: Thoughts on Sessions
Author:	Date: 22 November 2007 11:14 AM
Some really good ideas that will appeal to children and make them remember the day!i really like the idea of the survival theme	

Session on SATS papers

Subject: SATS questions	Topic: Thoughts on Sessions
Author: Alexander Sinclair	Date: 30 November 2007 2:06 PM
I thought that you guys were quite interested at first, but that what I had asked you to do was too dull and uninspiring. Would you have preferred to look at all of the questions? Did the feedback at the end go on too long? I felt that by the end of the session that you had enough. So was it worthwhile, what did you learn?	
Reply	
Subject: Re:SATS questions	Topic: Thoughts on Sessions
Author:	Date: 01 December 2007 4:53 PM
Admittedly I wasn't exactly thrilled at the prospect of looking through a SATs paper, but i think it was beneficial to us because we haven't had much opportunity to look at papers and you're comments helped us consider our position on the appropriateness/ effectiveness of SATs papers and league tables etc. I think that each group looking at two questions each was a fairly good idea, but yes I do that it went on too long towards the end.	
Reply	
Subject: Re:SATS questions	Topic: Thoughts on Sessions
Author:	Date: 02 December 2007 2:52 AM
I hate SATS paper with passion, probably because I spent practically the whole of my first Teaching Practice going through, and marking them with my class. However, I must admit that the lesson was no where near as boring as I initially thought it was going to be when you said we were going to be looking at SAT's papers. I think that looking at two questions was enough, because if we had had to go through any more questions I think we would have gotten bored. I found the session useful, especially the part when we had to think about activities we could use to ensure that we had covered the necessary topics for the test. I thought this was particularly useful because it highlighted that although we need to cover the material in the test, we do not need to teach TO the test. The session actually passed by really quickly- although I do have to agree with Fiona when she says that it went on a bit too long towards the end.	

Reply	
Subject: SATS questions	Topic: Thoughts on Sessions
Author:	Date: 03 December 2007 4:04 PM
<p>I agree with ****, ***** and *****. The thought of SATs papers didn't sound thrilling but I have had no experience with them myself (apart from when I was at school of course) and so pairing off to concentrate on 2 questions was a good idea. Two questions were enough as if we had had more, then we would not have thought in such detail about them. The lesson did go fast and I feel the most beneficial part of the lecture was the revision ideas. Like you said, we are not teaching the topics to the children as new but REVISING what they should already know. The feedback did go on a little too long though. With regards to the solar system.....do not know if it is any good but have a magazine from one of the teaching organisations which (if I remember) I will bring in. If I forget, it will be in my Science Core folder.</p>	
Reply	
Subject: Re:SATS questions	Topic: Thoughts on Sessions
Author:	Date: 05 December 2007 11:49 AM
<p>I thought that I wasn't going to get alot from the session at the beginning when you said that we were going to look at SATs papers, however I haven't looked at SAT's papers in any of my other lectures and I did find it useful. I definitely took some ideas away from the discussion at the end with regards to what different people would do in their revision sessions.</p>	
Reply	
Subject: SATS questions	Topic: Thoughts on Sessions
Author:	Date: 01 December 2007 12:42 PM
<p>I found this lesson helped me recognise the importance of practical work based on theory children need to know. I found researching different aspects of the Curriculum based on the SATS paper benifical to my understanding of the different area of science questioned in in the paper.</p>	
Reply	
Subject: Re:SATS questions	Topic: Thoughts on Sessions
Author: Alexander Sinclair	Date: 02 December 2007 4:29 PM
<p>I like your idea ***** about the importance of practical work based on the theory children need to know. I'm also glad Julia agrees that we shouldn't be teaching TO the test. Any idea how we would go about revising / teaching theory work which doesn't have obvious practical elements, for example..the solar system??</p>	
Reply	
Subject: Re:SATS questions	Topic: Thoughts on Sessions
Author: Alexander Sinclair	Date: 02 December 2007 4:29 PM
<p>I personally thought that looking at practise SATs questions was helpful as we were able to think about various ways we could help chidlren revise for SATs. listening to other people ideas also gives everyone else ideas about things they could do. Relating practical work to Science is extremely benefical and some children may also find it easier to understand for when they come to do the real paper.</p>	

Session at the park

I was sincerely impressed with a lot of the ideas for activities that you had (well done - do I underestimate you?!!!). My slight concern was whether we needed to go to the park. Was this a waste of time? Could we have visualised 'a park' and carried out the same activity? Did I give you enough direction / too much regarding the activity? Did I then need to keep quiet and let you get on with it?

Reply	
Subject: Re:The 'Park' Session	Topic: Thoughts on Sessions
Author:	Date: 14 October 2007 7:11 PM
<p>I think that as adults we could have 'visualised' the park scenario yes, but I can understand why you let us go. It made the lesson more practical and I am a visual and kinaesthetic person but I feel I did not make the most of being at the park. When at the park, you gave us 'food for thought' which personally helped me. I know I can think of all the right things to say and link to the topic but need more confidence in myself. I did appreciate the direction you gave us as a group though.</p>	
Reply	
Subject: Re:The 'Park' Session	Topic: Thoughts on Sessions
Author:	Date: 14 October 2007 11:07 PM
<p>I think that we could have thought about it some more in the classroom, but going to the park helped me to think more clearly about the aspects of science involved. Agreeing with *****, by giving us 'food for thought' it supported and helped to develop my own ideas. I think it was good that we had a chance to experience the practical aspects of the park because I was realising things about the science of the 'rides' without even knowing it until I'd said my thoughts aloud and it provoked discussion with whoever I was with.</p>	
Reply	
Subject: Re:The 'Park' Session	Topic: Thoughts on Sessions
Author:	Date: 25 October 2007 12:25 PM
<p>I agree with ***** in that if we hadn't gone to the park then I don't think I would have thought as much about the 'science' involved with the rides. If we had visualised a park then I don't think I would have come up with the sorts of key questions about the different rides that we could ask children whilst on a visit to the park with them, these fed directly into our lesson outline so were really useful. Maybe to make the park session more productive we could have in our groups taught the type of lesson we would teach to children in the park instead of coming back to the class and writing it down.</p>	
Reply	
Subject: Re:The 'Park' Session	Topic: Thoughts on Sessions
Author:	Date: 11 November 2007 10:24 PM
<p>I thought the trip to the park was useful for numerous reasons. Firstly, I find that 'visualisation' is not my strong point, and so simply talking about the park may have generated ideas, but actually physically going to the park, I feel, enabled us to really think about the science behind the rides. It certainly helped me to come up with key questions and ideas for different investigations which I doubt I would have thought of from the classroom.</p>	

Session at the Wetlands

Subject: The Wetlands Centre	Topic: Thoughts on Sessions
Author: Alexander Sinclair	Date: 29 October 2007 7:21 PM
<p>As always I am interested in what we have learnt in session and what independent learning may have taken place. I was blown away by the Wetlands Centre - initially because of the fact that I could see how powerful a venue it was for learning science in an environment other than the classroom. I seriously do wonder if the effect would have been as powerful if it hadn't of been such a beautiful day.</p> <p>My concern would be that we didn't talk much about the venue and there has been no follow up sessions. Can you help me regarding what you learnt about the visit and if it sparked you to think about anything other than the visit itself? Thanks</p>	

Reply	
Subject: Re:The Wetlands Centre	Topic: Thoughts on Sessions
Author:	Date: 30 October 2007 9:42 AM
<p>Yeah I think the weather played a big role in the day. It was nice to go there and see what the place was like, but I think I would have benefited more from possibly doing some of the activities that children might be expected to do or we could have followed up the session by considering activities that we might like to do with children there.</p>	
Reply	
Subject: Re:The Wetlands Centre	Topic: Thoughts on Sessions
Author:	Date: 30 October 2007 3:03 PM
<p>I found the centre really interesting and would love to go back and explore it some more. I did however think that I was just appreciating it as a nice place to visit and didn't think much about how I would use the centre if I were to bring a class there. A follow up session or more time at the centre would have allowed us to think of such. To be fair I think the lady who showed us around probably had lots of ideas for activities we could do but we were just stuck for time. After coming away from the centre not really thinking about how I could use it with children, it has made me make a mental reminder to consider this more in future visits to outdoor learning environments.</p>	
Reply	
Subject: Re:The Wetlands Centre	Topic: Thoughts on Sessions
Author: Alexander Sinclair	Date: 30 October 2007 3:44 PM
<p>How do others feel? Because of time constraints, can we use this as a forum to develop ideas around how we would use the Wetlands Centre? Can anyone think how they would use ideas from the day? Just by looking at the 'passport sheet' we were given I thought there were ways of developing some of the process skills such as observation and measuring.</p>	
Reply	
Subject: Re:The Wetlands Centre	Topic: Thoughts on Sessions
Author:	Date: 01 November 2007 2:59 PM
<p>I agree that due to limited time, we did not have the opportunity to stay and explore the centre further to see what it had to offer for the children. The lady that showed us round was very enthusiastic and I also agree that she seemed prepared to show and engage us in a lot more activities. I loved the 'Passport Book' and know that it can definately be used to explore the skills of measuring and observation. This would easily be done without the children thinking it was 'boring'. I agree, we need a follow up session though so that we can discuss the centre more fully. Have we got time in the session after River Crane to quickly talk about it? Is it worth visiting it again? Would we have to pay this time round or can we use our time productively and just use our memory of what we were shown and go from there???</p>	
Reply	
Subject: Re:The Wetlands Centre	Topic: Thoughts on Sessions
Author:	Date: 01 November 2007 9:30 PM
<p>I agree, I thought that it would be a fantastic place to take a class, even if it was raining (think of all the fun you could have splashing in the puddles with the ducks!!) It would have been great to have a session to discuss how this experience could be used in the classroom and help develop the process skills further but obviously we ran out of time.</p>	

Reply	
Subject: Re:The Wetlands Centre	Topic: Thoughts on Sessions
Author:	Date: 02 November 2007 11:05 PM
<p>I enjoyed the Wetlands Centre because of the differernt activities which we got to experience ourselves. Children love to be able to touch and feel and being able to feed and possibly touch the ducks can be an amazing enough experience for them. I must admit though that I wasn't able to hear all the time and still not precisely clear as to how you can link this to science more specifically. I know migration was mentioned and I suppose this relates to patterns, but how Science again? Maybe this can be quickly clarified at the start of the next lesson.</p> <p>Also it might be useful if we were able to visit a place along with a class of childnre to observe what goes on and possible misconceptions as we see them. We could also see the types of links and activities that teachers make with science when they take children to places. i realise that this would probably be almost impossible to coordiante though.</p> <p>Thanks, *****</p>	
Reply	
Subject: Re:The Wetlands Centre	Topic: Thoughts on Sessions
Author:	Date: 05 November 2007 9:53 PM
<p>I really enjoyed the Wetlands Centre and would look forward to taking a group of children there. Yes i think the weather helped, but no matter what the weather was like on the day, this could just be used as a learning/teaching point. For example, where would the animals go in the rain, cold, heat and so on.. Would rain give a good/bad opportunity for feeding....</p> <p>Obviously the time restraint restricted our learning but it was clear to see that the Wetlands Centre had alot more to offer than what we saw. The short time spent there was probably alot more beneficial than just reading about the centre online.</p> <p>Some more feedback time about the centre would have been useful for everyone to bounce ideas off each other. Maybe a booklet/sheet could be produced before going to the centre with a variety of the wildlife that could be found there. Then the children could tick off if they saw/recognised any of the animals and maybe where they found them.</p> <p>It was great to see such a superb open wildlife reserve so close to the busy and polluted city. This could also be a talking point for the children... where would these animals go if this centre wasnt here?</p> <p>Overall I thought the trip was beneficial and was a good chance for some out of lecture based learning.</p>	

APPENDIX 2

Transcripts from interviews with students

STUDENT A

What did you use smo for?

Looking at lecture notes, you put them up quite promptly, so if there's something I didn't get in the lecture, I'm not very good at putting my hand up and saying, I don't like to look silly and, I know you should ask but I found it easier, I like to look in my own time, without there being a time schedule and if there was something I still didn't understand I would email you

So lecture notes, anything else?

The discussion board, I found quite useful, like when you're in schools, I might not have asked a question, if you're struggling with something then the rest of the people that had used it so then you could kind of see what other people were doing

So, do you think facebook would work?

I think a lot, especially our age group, will use facebook and look at facebook a lot, more than SMO.

And why is that, what is the difference?

I suppose because we don't look at facebook as being part of uni, but then, if you started a group then, it wouldn't be as formal I suppose.

Why did you get involved in the discussions?

To help other people and to help me.

And how did it help you?

To, I suppose it made me feel like if I was struggling and people had written comments about not being able to think about something or not being able to do a lesson, if something went bad it made me feel like I'm not the only one and we're all in the same boat, quite reassuring.

And what about the discussions around the sessions?

Like the ones when we went to the park?

Yes

It kind of consolidates – laughs – it kind of makes you think and go back about what you have done in the lesson rather than, you actually have to think about what you have just done.

Did you look at other people's comments?

Yes

And did they affect you?

If I read a comment and they said they really loved it and I didn't, I wouldn't just say yeah I loved it too, I would say no, you know, or yes I would agree, but I wouldn't be swayed by what other people are thinking.

And what about comments that I made?

I think the comments you made prompted me to think further than what I was doing on my.... so you might, you know, ask a direct question which would then lead off to other things.

STUDENT B

Why did you use smo?

I used it to, on the whole to find out about assignments, just sort of the basic information and finding out what the criteria for assignments, dates and possible things I might need for the assignment

Did you look at the websites, the readings?

Not especially, I'm not going to lie, No. I looked at some of them like the one that we had to do the planets one, I looked at all the websites there. Readings, probably not.

You did get involved about the directed task which was about the river crane and the discussion forum.

Yes, I tried to do that, I know you wanted interaction after most sessions. I tried when I could, partly my own laziness, and apathy, but I thought when I had something worth saying I tended to

Was there a benefit to making a comment about the sessions?

Yes, I think so, I think it's really useful I think it's one of those things, the more you put in the more you get out of it and the more, more people get involved, it's good to see other peoples point, I did quite enjoy that, I did read other people's stuff

Is there anything I could do to get you to use the discussion forum more than you do?

I think if it becomes habitual, then you do it, I don't think it became habitual for me I don't think maybe, you did ask us to do a lot.

But I never wanted to make you feel forced to do it.

No, no, it's not obligatory, but I think you have a good enough rapport with us to ask us to do things like that, we'll all be happy to do it. You're right you can't force us, but I think I'm generally apathetic about a lot of things

What things are you not apathetic about?

I don't know if it's the right word, unless I really see a point to something I will tend not to get too involved. I did see a point to some of them and even if I do see a point sometimes I still...if the moment passes and if I lose that inspirational feeling.

STUDENT C

What did you use smo for?

Downloading lecture notes and for the websites that you put up, downloading criteria for our assignments and notes so that I can print off and make my own notes on them and stuff

What did you do with your own notes? Where did you go with that?

I go through and highlight it and then highlight the important bits and then , so for my presentation I looked at what I had to do to get a high mark and then for my lecture notes I highlight bits and then some of the stuff from the lecture notes I would refer back to it

What about the discussion forum? You contributed fairly regularly – was that because i just asked you to go on there and do it?

It did make me think about it, but yeah, because you said you needed, that's why I went on there. I always looked to see if there was anything new on there every week. You put one up about the museum a separate one from the discussion forum so I thought I'd, I'm quite glad that you did, cos it makes me think about it otherwise I wouldn't have thought about it by myself.

Did you read other peoples' discussions?

Yes, I read, I did skim through what other people had read, but I probably didn't think quite as much as what I could have. When I commented on the session it made me think about it whereas reading some of things I did read from other people I thought I don't necessarily agree with that but then I didn't really pay attention to other people comments really. I did read them, but not ...

Was it more for your own evaluation?

Yes.

Do you ever think there will be a time when you think you may get into a debate with someone?

I think I would but like I said, not to place less emphasis on your sessions, but because it was only about your sessions, it wasn't about something, you know if you'd put a discussion up there for is, rather than about your sessions, then I might have gone up and carried on, but because it was about your session everyone has their own opinion about it

Can you give me an eg of a title for a discussion ?

Like some of the safety things that we talked about today, you know about that person who said that they wouldn't have scissors, our own opinions on our own practice, where there's not really a right or wrong answer.

So did you feel the things i put forward about sessions were sort of black and white?

Yes I suppose, I just never really kind of, I put my opinion across and that was it really, it wasn't sort of , there wasn't a kind of debate about it, there was no moment for a debate to be had

How could I have promoted some sort of debate?

It was good to have the sessions up there, it made me think about what I knew about the sessions, but I'd put up like a question each week after the session and ask people to do it each week, but on I suppose an ethical issue that came from the session

Why do you think you got involved in smo and not others?

I dunno I just I try to get it out of the way I try to keep up to date with downloading all my lecture notes, to help you with your masters. If you ask me to go on there and do something I will.

STUDENT D

Why did you use the science specialist's page on smo?

I used the core more

You used the discussion forum more.

Yes, but that was nice, because when we were away from college, it was nice to talk to everyone else, especially when we were out on teaching practice and stuff to keep in touch with people, that kind of way. That was really good and then obviously coming up to assignment time, it was handy to log on and have it all there, and i could start looking for things on my computer, rather than cluttering up my desk. And then just silly things like, you know, little videos that I show my parents

Did you feel there was any benefit of being part of the discussions?

I suppose it made me not just forget the lesson when it was over. I went back and sat down and it made me think, what did we actually do and think it over. But I think I tended to, once I'd left a comment I left it at that, I know sometimes you used to put probing questions, that's just too much thinking.

So why didn't you respond?

I think probably by the time I'd logged on again, the lesson had probably been a week. Originally at the beginning to be able to go back, sit down and actually think OK what did I get out of that was helpful

And what about other people's comments?

I think a lot of time people tended to, you'd read the previous comment and then you'd say the same thing but in a different way, I don't know.

So you felt you were almost duplicating it?

Yes, I think sometimes it would have been better if I hadn't read anyone else's comments and I would have gone with what my – not that I did that all of the time, I think a lot of the time, just in general you are led by the person who goes before you almost. I did feel then, when I used to get up and read through the comments, that everyone was kind of saying the same thing, so why repeat it.

Would facebook be a more appropriate tool to use?

What, like setting up a group?

Yes, but would it have been more appropriate during your university years?

For that kind of thing (school experience) I think yeah facebook would be good, but for the more academic stuff regarding like the lessons and all that, probably best to go on SMO

And why is that?

I don't know I think people see facebook as.

A chat forum?

Giving a chat, I think it would kind of take away from the focus of it.

I think that facebook could have some value and that value would be keeping you all together.

I thought you meant that you were going to do what you did with us and put lessons on facebook. Regarding lessons I think better on webct.