

## **TEAN Conference: Can blogs enhance HE students' understanding of LOC?**

This paper sets out to examine the issues and opportunities presented by a curriculum project based on an enquiry based approach to learning involving a cohort PGCE students working collaboratively. The key questions underpinning the study include - What were student perceptions of enquiry? What were student perceptions of their learning needs? What were their perceptions of the way in which they could be addressed? How effective was the learning approach in addressing their needs? This final question was particularly given that the students which engaged with producing a group based blog based work undertaken both collaboratively, independently when they were not based at the university.

### **Context**

The research project was built around the structure of our PGCE course in 2014-15. The curriculum was divide between preparing students to teach core subjects - English, Mathematics, together with Science/Technology and the Wider Curriculum, which comprised Physical Education, Art, Geography, History, Modern Foreign Languages, Music and Religious Education, together with technology enhanced learning. The first four of the Wider Curriculum Subjects had a time allocation of six hours together with a learning outside the classroom day supported by a lecture. Most teaching was undertaken at the beginning of the course in September with a small number of sessions during the year. This provided opportunities to provide subject expertise in all four subjects, together with enhanced technology, including how to produce the blog. In previous years this module had been assessed through group presentations, group displays and from 2013-14 and

This last assessment approach had been introduced not only to ensure that technology enhanced learning was integrated and given a central place in the learning process, but also because we felt that it provided opportunities for students to collaborate over the year during a period when they were in school and direct contact opportunities were limited. As such it provided what was felt both a pragmatic and appropriate learning approach for a course in which students were away from the university for much of their course.

The research was underpinned by three considerations. Firstly, enquiry based learning underpinned our approach to the course which relate to producing a group based blog related to learning outside the classroom. This provide both a stimulus and focus for assessing the course. This approach with student teachers resonated with enquiry based learning with children. Pickford et la (2013) argue that

Learning outside the classroom can motivate the children in their learning: learning outside the classroom through enquiry fully engages and challenges the children, ensuring real learning takes place and so maximising achievement ( Pickford et al, 2013, p39.).

Beames et al argue that this should be seen as integral to the classroom and provide opportunities to develop the curriculum in an informal context. Given this focus it remained to be seen how far the students appreciated and responded to this approach to learning. Secondly, our approach to learning was based on the premise that students could develop their knowledge and skills through working in groups. The socio-constructivist approach drew upon our understanding of metacognitive (Gunawardena 2009; Mason and Rennie 2008): shared metacognition, group-mediated cognition as knowledge is created, shared, remixed, repurposed, and passed along; collective competence and a shared repertoire of resources and strategies. Thirdly, given that students were producing a blog offsite using technology we felt that this has implications for the teacher-student role. PAH: Pedagogy, andragogy, heutagogy (Luckin 2010): moving away from teacher-directed pedagogy to generate a flexible learner-directed approach; active knowledge building using collaborative technologies; redefinition of teacher-learner roles.

## **Methodology and approach**

Given that the research was related to our PGCE course results drawn from it were course specific. We therefore regarded it as a case study, although the intention is to compare it with other teaching and learning contexts which involve enquiry-based learning, together with collaborative and offsite learning contexts, supported by technology. As such it related to Bassey's (1999) definition of 'fuzzy generalisations' by which we hoped to be able to use our findings to compare with learning approaches in other contexts. The research was interpretative and set out to triangulate data related to student perceptions of their learning experiences through questionnaires and focus groups both pre and post teaching the course together with a discourse analysis of the blog.

The questionnaires and focus group interviews were undertaken at the start of the module immediately after the learning outside the classroom activity in September and in March immediately after the blog had been submitted. The blog was analysed at this point. The questionnaires were given out to the whole cohort and, although they had choice to take part or not, this did ensure a high response rate. The questions included.... **HELEN**

A focus group of 8 students was interviewed at the start of the module in September immediately and 5 students were interviewed in March immediately after the blog assessment had been submitted. Students were invited to join the focus group by an email to the cohort during a week when they were at the university. The data from this indicated that those who attended were self-selecting volunteers and represented a small proportion of the cohort. Only two members of the second group had attended the first focus group, the second group attended the second. Clearly the dynamic between members affected responses of members within them and they cannot be said to represent the cohort as a whole. Nevertheless, the focus group responses provided for triangulation with data from the questionnaire and provide rich data based on dialogue between the students at critical points in their learning. The questions included - **PAUL**

**The blog was based on one group - BECKY**

Ethical considerations adhered to both BERA (2011) and the University Ethical Code of Practice and was given institutional approval. At all stage students had the choice to be involved in the project and its purpose and implications for our teaching were provided. Anonymity was guaranteed for all aspects of the research with respect to publication.

## **Findings**

### **Questionnaires:**

Pre- and post-module questionnaire

Pre n=56, Post n=28

1. Understanding of foundation subjects
2. Confidence in developing children's skills
3. Beliefs about integrating subjects
4. Value of LOC and need for guidance
5. Blog assignment and digital literacy

Findings:

1. An increase of 19% in the number of students who felt that their own understanding of foundation subjects was good or very good.
2. An increase of 25% in the number of students who felt that their confidence in developing children's skills in foundation subjects was good or very good.
3. 100% thought that teachers should look for ways to integrate subjects. 39% also thought that they should be taught separately.
4. 100% agreed that LOC should be on the curriculum. 68% felt that they did not need further guidance on LOC. 86% reported that they felt confident about engaging children with LOC.
5. 100% thought that children should be taught to be digitally literate, A high majority also thought that a sense of audience and sharing beyond the classroom is important .
6. 100% thought that creating the blog helped them understand more about LOC.

Quotes:

'Digital literacy is a vital skill that will be as relevant as English and maths'

'LOC allows children to make connections across subject boundaries and demonstrates how these subjects can be relevant in the real world.'

'You can learn more in social situations than individually'

## **Focus Groups**

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**Example of a Student comment (pre )-different to quotes on the prezzi**

*I think it's enquiry based learning and then through that you learn the subject...I am going to plan...in a way where they have an activity, where they enquire and they discover it...*

### **1. LEARNING THROUGH FOUNDATION SUBJECTS**

A. Comments overwhelmingly positive 15 pre /22 post comments

- emphasis on enquiry - pre and post groups explicit in latter
- emphasis on how rather than what to teach

b. Concerns/issues - 5 pre/ 0 post

- teaching specific subjects
- 1 comment school using topics whereas university subjects

### **2. LEARNING OUTSIDE THE CLASSROOM**

a. Fewer comments but all positive 5 pre/ 4 post

- emphasised distinctiveness/flexibility from classroom both pre and post groups ( ref.Waite,2010; Beams et al,2012)
- application in science

b. ***My observation -gap/silence? Did we need to ask more directly?***

- *possibly timing of placement but Waite,2010 raises issue LOC v formal curriculum pressures*

### **3. TECHNOLOGY ENHANCED LEARNING**

a. Most comments positive 8 pre and 6 post

- pre -range of approaches/resources/modelled in university session/ blog focus for assignment
- post group application in school

b. Issues/concerns 2 pre 3 post

- pre -anxiety about own skills/challenge of blog assignment
- post - schools do not have comparable resources to university which affects potential application.

### **4. ORGANISATION OF LEARNING - EQUAL NUMBER CONCERNS/ISSUES IDENTIFIED**

a. Positive comments 7 pre and 9 post

- learning through blog groups -both pre and post com
- learning through groups and dialogue with other students
- length of assessment period time to develop and make links with school

b. Issues/concerns 7 pre and 8 post

- expertise base in groups - pre and post
- personalities in groups
- difficulties meeting/time when in school

**My observation-** *given focus of our project should we have put more emphasis on building learning communities?*

## **Learning**

### **Blogs**

**Research overview:** student voice

### **Summary of findings:**

Evidence that students engaged in social learning, learning communities, self-directed, inquiry-based learning, embedded technology

Recognised relevance to classrooms: transferred learning styles.

**Themes to explore:**

**LOC extending formal and informal learning boundaries**

Increase use of blended and flipped classroom approaches: extend the boundaries of formal and informal learning, student control over time, pace, place. Replicate the authenticity of the inquiry led approach to teaching across foundation subjects, first hand experiences.

Interdisciplinary use of blogs and communities.

**Blogs facilitating cyclical learning**

The LOC practices shared included generation of the students lesson plans, examples of their practice and understanding of theory. The students reflection occurred both in action, on action and for action (Schon, 1983; Cowan, 2006). This reflective process enabled a cyclical process of learning to occur (Kolb, 1994) The students were therefore able to use the blog to reform their thinking around LOC practices and implement new actions as a result.

**Communities of practice enabling co-construction of knowledge**

Blogs have enabled participants to co-construct knowledge by documenting learning that took place in a number of different contexts.

**MultiModal learning multiplying learning opportunities**

We make a case for 'multimodal learning', which mixes physical interaction with asynchronous learning (Hammond, 1998). Contemporary communities of practice, such as we describe, can combine physical and virtual spaces and so the learning trajectories of the participants move in and out of a number of 'digital habitats', multiplying the opportunities for learning (Wenger, White and Smith, 2009).

**Self-directed learning within socio-technological learning environments**

Online communities of practice in the form of blogs and communities, such as G+, can provide a fertile ground for social learning and facilitate collective knowledge construction

As the group solved problems together, sought help from each other, reused solutions and evaluated new apps, they developed a 'collective competence' and a shared repertoire of resources and strategies (Wenger, 2011, pp1-6).

Learning can be amplified and accelerated due to the number of opportunities learners have to engage with others who are exploring the same topics in different contexts, bringing together different perspectives and experiences.

Extend use of online classroom approach to foster communities of practice among a group of ITT students with a shared common purpose but who are dispersed due to geography and placements. Embed collaborative tools: prezi, popplet, google docs, padlet, blogs, wikis, google communities. Our emphasis has been on active knowledge building using collaborative technologies, moving away from teacher-directed pedagogy towards a flexible learner-directed approach. The Pedagogy-Andragogy-Heutagogy (PAH) continuum suggested by Luckin et al. (2010) offers a useful way of considering the redefinition of teacher-learner roles in this context.

Seek ways to further align educational practice with ways in which digital technology is changing disciplines outside schools.

**Research implications:**

**Next steps:**

