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## **Web conferencing and blended learning: Using webinars as a bridge between formative and summative assessment on a part-time BA programme.**

This paper begins by explaining why I decided to undertake this particular approach to teaching and learning and pays attention to the web-conferencing tool Adobe Connect (AC) and how it has been used. The first section explains how the redesign and redevelopment of the BA Education and Professional Development (BA EPD) impacted upon, and influenced my experimental session. This section also discusses AC and explains how it was used as a bridge between formative and summative assessment. In section two, I describe the methodology used and in the third section, the implications of using AC are further explored. Finally, conclusions are discussed and recommendations for future developments made.

### **Rationale and Background**

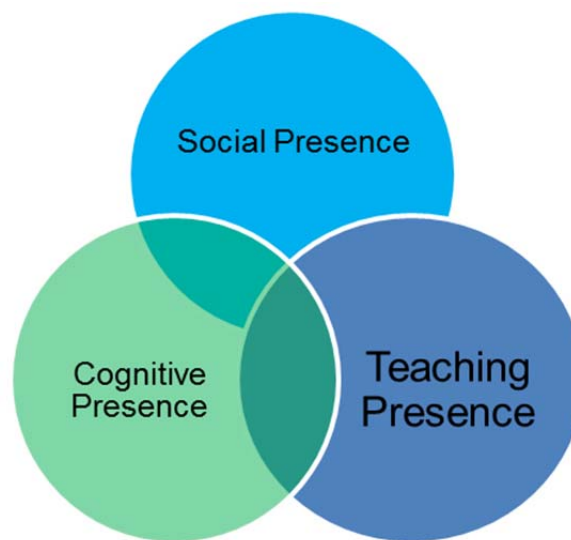
The BA EPD is a two year, part-time Bachelor of Arts, top-up degree, delivered across a consortium of Further Education Colleges (FE) that includes 16 partner colleges across the North of England and the parent Higher Education Institution (HEI). From September 2012, face-to-face contact became limited to nine Saturday day schools across two academic years. The new blended learning approach was, an integration of face-to-face sessions and an online environment, that was developed to support the BA EPD students learning in a community of inquiry and practice (Van Swet et al., 2009).

In redesigning the BA EPD, the work of Garrison and Vaughan (2008) was implicit, with the redevelopment focusing on the design, facilitation, direction and assessment of the new blended learning version of the BA provision. Particular attention was paid to the community of Inquiry (COI) framework that Garrison, Anderson and Archer (2000) devised and this informed key elements of the redesign process. From the outset, the redevelopment team were clear that, "...just blending face-to face learning with information technologies cannot provide effective teaching and efficient solutions for learning" (Hadjerrouit, 2008, p. 29).

The premise of the COI framework is based on higher education (HE) being both a constructivist learning experience that is individual, yet also a collaborative endeavour.

A COI was fostered so that BA EPD students could develop a sense of connection and support in the pursuit of shared educational goals and knowledge. The curriculum was redeveloped to allow the BA EPD educational COI to be formally constituted by the students. It had an academic purpose and interest and students were encouraged to work collaboratively toward intended learning goals (Garrison and Vaughan, 2008). A number of synchronous and asynchronous communication applications were utilised to develop and sustain the BA EPD COI.

For a collaborative COI to be developed, three mutually reinforcing elements, social, cognitive, and teaching presence had to be given consideration.



(Garrison and Vaughan, 2008, p.18)

### **Social Presence**

According to Garrison and Vaughan (2008), whilst it is open communication that is utilised to establish a COI, it is sustained by social cohesion. Consequently, the establishing of social presence is of vital importance when a COI is being created. As Vaughan, Cleveland-Innes and Garrison (2013) point out that "...social presence creates the environment for trust, open communication, and group cohesion". However, whilst a sense of belonging, support freedom of expression, and sustained cohesiveness is created by social relationships, they do not structure and focus academic interests among the

students. The educational goals of the BA EPD students could not be sustained by social interaction alone.

### **Cognitive presence**

Garrison, Anderson, & Archer suggest that cognitive presence can be defined “...as the extent to which learners are able to construct and confirm meaning through sustained reflection and discourse in a critical community of inquiry” (2001, p.11). It is the basis of the inquiry process and includes the combination of interactive and reflective processes. Cognitive presence is progressive in nature and moves from a triggering event through to exploration, integration and finally resolution (Garrison and Vaughan, 2008; Vaughan et al, 2013).

### **Teaching presence**

There is evidence which suggests that if a COI is to be a success that teaching presence is paramount, as it is essential to bring all three elements together for a COI to flourish (Vaughan et al, 2013). The design, facilitation, and direction of a COI is associated with teaching presence and it brings together the social and cognitive processes (Vaughan et al, 2013).

From the outset, the BA EPD team were keen for the members of the BA EPD COI to take some responsibility for social, cognitive, and teaching presence. It was viewed that members of the COI held a shared responsibility, with the redevelopment team ensured that teaching and learning strategies were put in place that helped to ensure members felt that they belonged, so that they were “...comfortable contributing to the discourse but also prepared to challenge ideas respectfully” (Vaughan et al, 2013, p.14). As Reynolds, Wormald and Bailey (2013) discuss, it is well documented that high drop-out levels in blends of e-study can be attributed to the lack of a sense of belonging and this further supports the emphasis on the social element of online learning. The blend arrived at by the team therefore, endeavoured to make provision for the interplay of social, cognitive and teaching presence.

In its previous incarnation, a key delivery strategy on the BA EPD was the provision of regular, iterative dialogue (Reynolds et al, 2013). Such an approach enabled students to develop their confidence, both verbally and when writing. Having weekly classroom sessions helped to facilitate such an approach. Therefore, "...in redesigning the programme around radically curtailed class contact time, it was essential to find spaces in which this dialogue could be maintained and developed" (p. 2). This paper charts my attempts to try and maintain a dialogue space for BA EPD students.

My experimental session was carried out on a key second year module (Research Methodologies; DHM1020). This module introduces students to some of the different ways in which research happens.

The intention of the experimental session was to give the students extra face-to-face time, albeit virtual, to discuss, analyse and critique key issues linked to assessment and the module more generally. In spite of the time and effort that was put into the design of the BA EPD, students asked for additional face-to-face group contact. I looked in to AC to try and address this issue, as classroom time was not an option. Synchronous communication tools like AC allows instructors to communicate with learners in a synchronous format that offers immediate feedback (Hotcomm, 2003 in Wang and Hsu, 2008). Whilst I was not completely au fait with the working of AC, I saw potential in it. Whilst AC had been used by other members of the BA EPD development team, I had not used it.

What I found is that AC is a web conferencing platform for web meetings, eLearning, and webinars that bring together people who are separated by distance (Wang and Hsu, 2008). It is a tool for synchronous communication over a network. As an example of synchronous learning, it allows real-time presentation of content and interaction through two-way interactive television or video conferencing and it allows students and instructors to exchange ideas, offer feedback and discuss issues (Wang and Hsu, 2008; Hudson, Knight and Collins, 2012). Synchronous environments allow students feelings of immediate contact, feedback and clarification (Ng, 2007) and can offer opportunities for social interaction (McBrien, Jones and Cheng; 2009).

Having familiarised myself with AC, I offered a group of 10 students the opportunity to attend a webinar. The session was one hour long, with the first 15 minutes being set aside for my assessment headlines (discussion notes see figure 1). I chose to limit my use of AC to discussion notes, text chat and discussion, so as to not cognitively overload both the participants and myself, as we were all new to web conferencing. Splitting attention among textual, auditory and visual material was more than enough for a first attempt (Kear Chetwyn, Williams and Donelan, 2012).

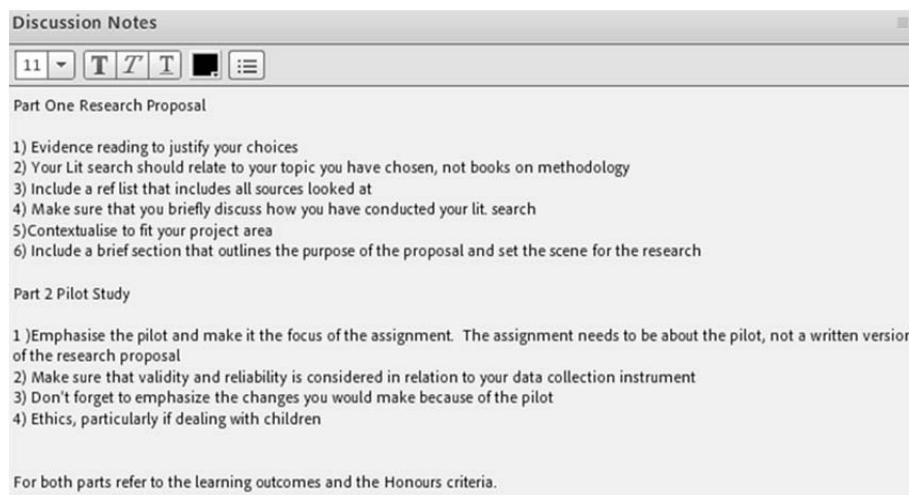


Figure 1

## **Methodology**

I undertook an interpretivist action research study which utilised qualitative data. The main research question was; 'Does the synchronous communication tool employed have a positive impact on student engagement and learning and is it a bridge between formative and summative assessment? A case study was conducted, using action research as the basis of the methodology.

The piece of action research aimed to develop knowledge that could be acted upon during the 2014-15 academic year. This study is seen as part of a developmental action-reflection cycle, as outlined by McNiff and Whitehead (2006, p 9).

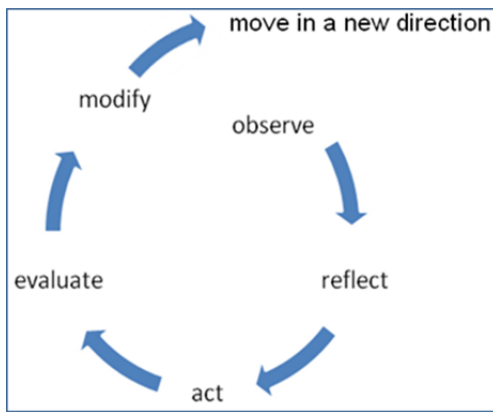


Figure 2

One method was used to gather data, with three interviews being undertaken. Interviews were used to gather rich qualitative data from the participants. Using semi-structured interviews enabled the meaning of the central themes to become visible (Kvale, 2007).

Thematic analysis was used because it helps to identify, analyse and report the themes that emerged from the data. I deliberately chose to make this research inductive, but to some extent this was an iterative process that saw me move between my data and the literature (Braun and Clarke, 2006).

## **Findings and Discussion**

Whilst I was not looking for a predetermined list of specific codes and themes, I did take account of Garrison and Vaughan's (2008) COI framework (see above) in order to evidence and explain social, cognitive and teaching presence. For example, when reading the transcripts, I looked for codes and themes that might help to explain whether the use of AC aided understanding through reflective processes (cognitive presence). I also looked for codes and themes that might explain how webinars encourage social cohesion and belonging within the group (social presence), I looked for evidence of contributions from both tutors and students (teaching presence). Gray (2009) points out, it is not the case that an inductive process takes no account of pre-existing ideas or theories.

Consequently, when considering whether a particular synchronous communication tool had a positive impact on student engagement and learning this inevitably influenced some of the areas probed throughout the interview process and the coding process.

Having worked through the coding process the following broad themes were identified:

- Preparedness
- Participation
- Practicalities

## **Preparedness**

All of the participants referred to the preparation of the tutor. Reference was made to key elements being highlighted from their draft submission and that these 'headlines' were discussed by the tutor prior to the session starting, this allowed some questions to be answered quickly and before they were even asked. As Kear et al (2012) concede, design and planning are of key importance, if synchronous e-learning events are to be a success, as the real-time nature of the medium means that teaching and learning in such environments are rarely predictable.

Participant 2 was particularly complimentary of the fact that the tutor related the feedback to 'key highlights', this allowed her to use the feedback and find examples of areas where she could improve her work, through the critique given by the tutor and other members of her COI (cognitive presence). Participant 3 alluded to the fact that:

...the structure was well planned thought out and this meant that the tutor could give clear and concise feedback in specific areas without repetition or long-winded explanations.

AC allowed the creation of a classroom environment that suited the specific needs of my group (Kear et al, 2012; Hudson et al, 2012) and as West and Jones, (2007) propose, strategies that provide convenient online instruction, combined with access to real-time interaction are essential. I was also mindful that planning such an event was important, but that moment-by-moment adaptation may also be required (Kear et al, 2012).

All three participants talked about the session being a good use of their limited time and were positive about the tutors approach. It was commented upon that key areas were covered and addressed, whether questions were typed or asked directly. Participant 1 made an interesting observation:



The tutor did not let people dominate and he went back to other questions to make sure that they weren't missed and that students were happy that they had been fully answered. The tutor multi-tasked well.

Of particular interest was the consensus that the session was facilitated not 'taught'. This was a particular strategy of the tutor, and as Schullo, Venable, Barron, Kromrey, Hilbelink, and Hohlfeld, (2005) explain the role of the tutor, as a facilitator, is important if maximum benefit is going to be gained from such interactions. Participant 3 gets to the nub of this issue when she described that the feedback became a living thing through meaningful discussion and reflection and that this made it exciting as she had other people to bounce ideas off "...the tutor just conducted the band" (participant 2). The participants made it clear that the tutor was thoughtful and considerate of those unfamiliar with this kind of technology and that instruction was clear and concise. This was particularly gratifying as lack of student engagement and participation has been offered as a particular problem, within online instruction (Hewitt, 2005).

I was also mindful of the criticisms that Laurillard (2002) has levelled at synchronous events, this session was not about delivering new material, it was for student-led discussion. I made sure that I left sufficient time for the participants to reflect and let the session run at their pace (Defeitas and Neumann, 2009). However, there were some underlying criticisms and contradictions, with reference being made to some issues being superfluous, and the fact that the session should have been about building new knowledge, rather than revisiting information that students could find the answers to elsewhere (participant 1).

Participants also made reference to their own preparation. The session made the participants review their formative feedback in detail, reflect and consider ways of improving their work prior to the session. Participants also liked the fact that they were in the comfort of their own home, this relaxed them.

In considering teaching presence (Garrison and Vaughan, 2008), I was clear that the participants should quickly assume increased responsibility for the session, so that they had some control over their learning, they seemed to relish this. I wanted this to be a shared responsibility, not just my own. Whilst I was mindful of the design of the session and my own role as facilitator, my aim was for participant to become more meta-cognitively

aware. I was pleased to see evidence of reflection and the participants discussing the strategies that they might potentially use, whilst taking account of potential problems and various solutions (Vaughan et al, 2013). As Resnich (1991) in Defeitas and Neumann, (2009) outlines, whilst collaboration is a key ingredient for cognitive development, cognition should not be seen as separate from social context (Garrison et al, 2000).

## **Participation**

Being involved was a recurring theme that was present in each of the interviews. Participants discussed the implications of being on a blended learning course and that they often had moments when feelings of isolation threatened them completing the course. I was adamant that there would be a dialogue throughout the session, as dialogue is an important element of teaching and learning. In taking account of Moore's transactional distance theory (1993), which considers the 'sense of distance' learners can feel during the learning process, I wanted to make sure that there were ample opportunities for dialogue to take place between myself and the students, but also between students themselves. I was keen for student interaction and engagement to take place within the learning experience. AC enabled the participants to 'attend' a session within a personalised environment and this appeared to reduce anxiety levels (Wang and Hsu, 2008). Participant 2 explained that:

This session was a perfect opportunity to interact with the tutor and peers which helped negate these feelings of isolation. I was at home with all of my post-its and notes around me.

It was suggested that, through the use of a webinar that a framework for discussion was provided. It was a place to explore pertinent themes and issues in a conducive environment (participant 1); it offered a space for learners and the tutor to socially interact with one another (Defeitas and Neumann, 2009). It has been well-documented that synchronous communication can help to enhance a sense of social presence and that it can help people to feel that they belong (Short, William and Christie, 1976; Haythornthwaite, Kazmer, Robins and Shoemaker, 2000 in Kear et al, 2012) and this was backed up in the interviews. Participants referred to being comforted by the fact that they could 'lurk' until ready to contribute and that they felt part of a COI. Synchronous platforms

have been shown to help shy students feel more comfortable to give their opinions and to empower students to become more autonomous and independent (McBrien et al, 2009).

...I got to chat! A part-time student on a blended learning course does not get a lot of opportunity to develop learning relationships with peers. This session was an opportunity to do this (participant 3).

Hudson et al, (2012) make an important point when they discuss that instructors should take advantage of text based chats, as this allows interaction and provides the opportunity for questions and comments and the gathering of feedback. This is something that I tried to utilise.

The social benefits of AC were alluded to by all three participants. The participants talked about feeling more connected to group members. The idea that others were struggling with the same issues appeared to give them a stronger sense of being part of a group. Rich synchronous technologies, have been shown to enhance social presence, as they provide a human feel and this appeared to be the case for the participants of this study (Loch and Reushle, 2008). Working with people who were not part of their immediate peer group was seen to add a new dimension to the participants' social relationships – this was viewed positively. The participants felt that being on a blended learning course offered few opportunities to meet others regularly. This session seemed to improve the participants' perception of the BA EPD and seemed to increase their own motivation (Hudson et al, 2012). Participant 3 pointed out that the session created a sense of community. She also discussed how it had the real benefit of interacting directly with the tutor, in a process that felt empowering and personalised. "Even the slowest typists could join the conversation, no one minded waiting" (Participant 3). It certainly appeared to be the case that the session had a positive impact on developing relationships and that it had the potential to increase student participation (Hudson et al, 2012). The session seemed to have helped to develop open communication, group cohesion and above all else trust (Vaughan et al, 2013).

However, there were some concerns that were voiced. Reference was made to not being able to get questions in quickly enough and that some members asked questions that could have been easily answered by referring to class notes or module guidance. There was also some trepidation and nervousness pertaining to the use of a new type of

technology, and that this led to more frustration. Reference was made to not wanting to “...hog the airway” (participant 1), as a result questions were not always fully answered. So whilst the intention of the session was to give assignment feedback and support, something that has been shown to be problematic on courses of this nature (Defeitas and Neumann, 2009), there are clearly some issues that still need to be addressed.

## **Practicalities**

Whilst the participants were quick to point out that they were sent tutorial videos on how to access and use AC, there were clearly several practical issues that limited its potential. All three participants discussed not having enough training prior to the session and that a pre-session would have been useful. Again, all three, whilst appreciating time was of a premium in day schools, would have liked AC to have been discussed in detail in the first taught day school. Wang & Hsu (2008) make it clear that instructors should make sure that those attending webinar sessions have prerequisite skills. This is something that will need to be given greater consideration with future cohorts.

Reference was also made to accessibility issues, with internet connection and broadband speeds having the potential to impact on the usefulness of the session (Wang and Hsu (2008). Technical problems have been shown to cause some students to feel that they have lost control which can lead to the feeling of reduced autonomy, as technical issues can lead to learning halting (McBrien, et al, 2009). As Moore (1993) suggests, technical issues can have a strong impact on experiences of ‘distance’ in online learning. The use of AC was viewed as a steep learning curve for the participants and they did not feel adequately prepared by the tutor to make the most of the session. Participant 1 makes some useful points:

With new technology the first couple of times you use it, it's hard, it's only by using it that you learn, it's one of those that you have to learn by doing. For me, I would have liked to have used it more consistently throughout the course. In the second year when the modules were getting harder, it would have helped me to iron out issues within those modules.

It was clear that the participants thought that the use of AC should have been incorporated in all modules, from the outset of the course. Had that been the case and had they been

aware, they believed that they would have been able to get more out of this particular session.

### **Conclusion and recommendations**

This paper has addressed issues that relate to the redevelopment of the BA EPD and how its redesign, and in particular the utilisation of Garrison and Vaughan's (2008) COI framework, influenced my experimental session. In meeting the overall philosophy of the BA EPDs, I was eager for those students who attended the AC session to take some of the responsibility for their own learning and for them to engage in the session. I was keen for the session to help to maintain and develop the BA EPD COI and for the small number of participants' interviewed, it appears to have done that. Whilst all three participants strongly suggested that the use of AC should be offered for all modules and be a more fundamental element of the course design, it is clear that a second cycle of action research is needed, with a much larger sample, before I would recommend such incorporation.

### **Recommendations**

- More training for both students and tutors to deal with the steep learning curve.
- A second cycle of action research with a larger sample of students.

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