

# Synchronous or Asynchronous? That is the Question: Are Online Classrooms the Answer?

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## Abstract

As distance and blended learning becomes more popular with both students and Higher Education Institutes (HEI), methods of developing student engagement and experience are becoming increasingly more important. This investigation examines a case study of three programmes delivered at one HEI. The programmes were part of a pilot project employing an online classroom to develop synchronous communication. This study examined the development of a Networked Learning Community using both synchronous and asynchronous communication. The findings highlighted a variety of issues such as the importance of tutor experience of online teaching, positive experiences using the online classroom which develops social capital, enhances students' self motivation and the importance of preparing students to engage with online programmes before they begin.

Distance learning is growing rapidly, increasing the need for effective communication strategies (Allen & Seaman, 2011; Durrington et al 2006). As there is little or no face-to-face interaction, it is important for online instructors to establish their presence in the course to ensure students feel there is a familiar presence with whom they can relate to. There are a variety of ways to accomplish this, through communicating with students on a regular basis, sharing course content, and building a sense of community within the class (Palloff & Pratt, 2003). Using web 2.0 tools can enhance instructor presence through a wide array of collaborative learning experiences (Solomon & Schrum, 2010), one way of addressing this issue is to use an online classroom. There are a many on line classrooms available to Higher Education Institutes (HEI) and there is a lot of evidence to support their use in blended/distance programmes (MacDonald, 2008). Studying the current module has developed my interest in methods of communication and student engagement in order to develop a Networked Learning Community (NLC). Improving student engagement in an online programme is an on-going issue that many researchers are trying to find the answer to. This paper investigates the findings from a project using an online classroom involving fifteen programmes which have used synchronous communication to support the online students' experience. The findings highlight the importance of tutors understanding the different needs of online students and how traditional pedagogy must be adapted to meet these needs in an online environment. Use of a combination of synchronous and asynchronous approaches was found to have the most success, however tutor presence was the essential element in ensuring student satisfaction and achievement.

## Keywords

Synchronous, asynchronous, communication, networked learning, community

## Research Context

This research examined the principles behind the adoption of a blended approach for the programmes involved in the case study. By questioning the students and tutors involved, I determined their views on synchronous and asynchronous discussion, what the tutors' motivation for developing synchronous communication was and what they hope to achieve from this.

There is a literature review examining the research underpinning the practice of Networked Learning Communities, the use of synchronous and asynchronous communication strategies and ways of promoting student engagement.

Issues have been identified and discussed alongside the students' and tutors' feedback in the questionnaires. This identified their motivation for engaging with the programme, their behaviour and what affects this. The experiences are then analysed to assess if a Networked Learning Community was established and what the contributory factors were that enabled this to happen. The findings are then summarised and discussed and possible implications for future practice highlighted.

The main question asked was: How does the use of an on line classroom involving synchronous communication enhance communication and collaboration in blended learning programmes?

## Design

I looked at the experiences of four cohorts of students on 3 separate blended programmes who have experienced the sole use of asynchronous communication and then the introduction of synchronous communication and their views on the effects both of these methods had on the development of a Networked Learning Community. The case study approach lends itself to this investigation as it is bounded by time – one semester and place - one HEI (Creswell, 2013). Robson (1993:146) describes a case study as “An empirical investigation of a particular contemporary phenomenon within its real life context using multiple sources of evidence.”

The questionnaire for students included one dichotomous question, four multiple choice questions and twelve open ended questions. Dichotomous questions give very little information and while good for clear, simple questions, simply to produce a statistical response, they tell the researcher very little (Cohen et al, 2007). It is however useful for directing respondents to further more appropriate questions and in this instance the initial question asked “Have you engaged with the online classroom?” A ‘yes’ response led to the question “How do you find using the online classroom? Please expand on your experiences either good or bad” and a ‘no’ led to the question “You have not joined in with the online classroom, can you explain your reasons for this?” These questions elicited a more detailed response. Multiple choice questions can also result in “crude data” (Cohen et al, 2007: 324), in order to enhance this, I included space for comments and several of the participants used this to explain their responses.

## Discussion

The main research question is ‘How does the use of an on line classroom involving synchronous communication enhance communication and collaboration in blended learning programmes?’

The literature review revealed that communication is necessary for human survival (Gill & Adams, 1988; Dabaj, 2011); it involves both verbal and non-verbal aspects. From birth we learn to read the different cues sent to us to enable us to fully understand the messages given. Communicating through the use of technology removes these non-verbal cues and to some extent the verbal as text speak becomes more widely used resulting in shorter, less descriptive communications (Dabaj, 2011; Preece, 2010). The students’ responses highlighted not being able to see the person they were talking to, worrying that they would ask a silly question or give poor responses. A participant who clearly had these concerns indicated that they preferred face to face sessions, would she worry about her contributions as much then, or is her lack of confidence more to do with communicating in a way she is unaccustomed to?

The findings from the data demonstrated the importance of tutor support in developing students’ confidence in online communication and the students confirmed this. They commented upon lack of motivation if the tutor did not engage and how having the opportunity to ask questions and receive immediate responses gave them confidence to move on. One participant answered that while she much preferred traditional teaching, she really valued the support the online classroom gave her. The students involved in the project were mainly mature, part time people, studying alongside full time employment, this may have skewed the results if we are to believe Prensky's (2010) digital native theory, but as Jones (2012) discovered, there was little difference between the experiences of younger or mature students.

Technical difficulties were highlighted as an issue in both the literature and the data and this emphasises the need for good preparation and training for both students and tutors as well as HEIs who must ensure that the infrastructure is a well-supported high quality provision to minimise risks

In what ways does the use of synchronous or asynchronous communication result in a different experience for the students?

The literature shows that using asynchronous technologies removes the issue of one time one place and enables students to participate at a time of their choosing and many through the use of mobile technologies have the opportunity to study in any place (Haythornthwaite & Andrews, 2011; Gerbic, 2011). It also allows for time to think and consider responses and then the opportunity to edit them, giving students more confidence to respond without fear of ridicule (Hiltz and Goldman, 2005). The students do need to be self-motivated to do this and synchronous communication does give extra impetus to this. The student has to attend at a certain time and join in with the sessions. Two student participants indicated that they either did not engage or had difficulty with the online classroom, the rest responded in a positive manner when asked about it. The tutors indicated that many more students participated with the asynchronous technologies than the online classroom but were very positive about the impact it had had on those that did engage with it. Benbunan-Fich et al (2005) highlight the fact that

while these technologies have the potential to make online communication richer, they must be easy to use and accessible, if students do not have the equipment or training to engage successfully they will quickly become disenchanted and lose motivation (Dabaj, 2011).

The skills of the online tutor are clearly paramount to the success of an online programme, the literature explains how the technology for learning is continuously changing and that this leads to a change in online teaching styles, enabling tutors to develop a more social constructivist approach with the interactive technologies now in use. Hodgeson et al. (2012) discuss the pedagogy of networked learning, as mentioned earlier there are many different names and approaches to online learning and in several texts the terms are interchanged, suggesting little difference between them. Hodgeson et al attempt to clarify this observing that while there are differences, online tutors will place emphasis on the areas most important to them. The students clearly expressed the importance of the tutor's online presence, guiding and supporting them. The tutor's confidence in the technology as well as knowledge and understanding of how to use them to enhance learning is of paramount importance. The tutors themselves when explaining their roles in the online programme, demonstrated their own confidence and understanding from their responses. Hartley (2010) examined the development of online learning as technology developed and enabled new approaches. Initially tutors would adopt a behaviourist approach, software gave little opportunity to communicate and relate to others. As the technologies improved the focus moved to a cognitive approach, problem solving became the focus; activities were set in real situations to make the learning more logical. This progressed to a constructivist approach as a result of technology becoming more interactive, enabling students to collaborate with peers and tutors to develop a deeper understanding of the concepts being taught (Cox, 2013).

One of the tutors had studied and understood how to introduce and adapt support for the students to enable them to engage in depth, the other tutors, while successful had less of an understanding of this and were learning and adapting as they went along. This enforces the need to examine online teaching methods and create training for any tutors who are to deliver an online programme.

Hodgeson et al (2012: 295) created a comprehensive list of what is needed to create a Networked Learning Community and the research findings support this. The importance of good communication in developing a NLC has been discussed. Self-determination in being part of the learning process is implied by the responses from both students and tutors about the level of engagement in the whole online process. There is a high incidence of non-engagement, or intermittent engagement mentioned in the responses and this may indicate that both students and tutors are not prepared for the demands of engaging in an online programme. We are all results of traditional teaching since early childhood. It is ingrained into us that face to face teaching is the correct way, we are now being asked to accept a different way. This on the surface may seem easier, more convenient and less stressful, so students apply for it not realising the demands it will make on their basic understanding of learning and the amount of commitment and self-discipline required. Tutors are often asked to deliver these programmes by managers who have no understanding of the differences in online teaching requirements and they again think it will be the same as traditional teaching. This demonstrates the need for clear explanation to prospective students about the demands of the course, the time commitment, the level of technology required and the need for them to ensure they have sufficient self determination to engage fully with an online programme. Salmon (2011) discusses the skills tutors need to guide students through the online learning process. The most important factors therefor, in creating an NLC are the engagement and commitment of the tutors and students, alongside the reliability of the technology.

The tutors all agreed that using the online classroom had improved the learning community for those who engaged in it. They realised that sound support and guidance in the early stages encouraged the students understanding of expectations and that role modelling good online practice underpinned the development of the community.

The implications of this research are that tutors need to receive training to ensure they understand the importance of preparing students for the demands of studying in an online environment. They need to realise the importance of community when developing their programme and have the skills necessary to support the cohort in developing one.

## References

Allen, I.E., & Seaman, J. (2011). "Going The Distance: Online Education In The United States, 2011." Babson Survey Research Group And Quahog Research Group, Llc.  
[WWW.Onlinelearningsurvey.Com/Reports/Goingthedistance.Pdf](http://WWW.Onlinelearningsurvey.Com/Reports/Goingthedistance.Pdf).

- Benbunan-Fich, R. Hiltz, S.R. And Zhang, Y. (2005) The Online Interaction Learning Model: An Integrated Theoretical Framework For Learning Networks. In Hiltz, R. And Goldman, R. Eds (2005). Learning Together Online. New Jersey: Lawrence Erlbaum Assoc.
- Blaikie, N. 2010. Designing Social Research. Cambridge: Polity Press.
- Cohen, L., Manion, L., & Morrison, K. (2007) Research Methods In Education, 6th Edition. London: Routledge.
- Cox, M.J., 2013. Formal To Informal Learning With IT: Research Challenges And Issues For E-Learning. Journal Of Computer Assisted Learning, 29(1), Pp. 85-105.
- Creswell, J.W. (2013). Qualitive Inquiry And Research Design: Choose Among Five Approaches. London: Sage.
- Dabaj, F., “Analysis Of Communication Barriers To Distance Education: A Review Study”, Online Journal Of Communication And Media Technologies, Volume: 1, Issue: 1, (2011)
- Durrington, V., Berryhill, A., & Swafford, J. (2006). Strategies For Enhancing Student Interactivity In An Online Environment. College Teaching, 54(1), 190–193. Retrieved From [http://www.redorbit.com/news/technology/433631/strategies\\_for\\_enhancing\\_student\\_interactivity\\_in\\_an\\_online\\_environment/](http://www.redorbit.com/news/technology/433631/strategies_for_enhancing_student_interactivity_in_an_online_environment/)
- Gerbic, P., 2011. Teaching Using A Blended Approach – What Does The Literature Tell Us? Educational Media International, 48(3), Pp. 221-234.
- Gill, D. And Adams, B. (1988). ABC Of Communication Studies. London: Macmillan.
- Hartley, R., 2010. The Evolution And Redefining Of ?Cal?: A Reflection On The Interplay Of Theory And Practice. Journal Of Computer Assisted Learning, 26(1), Pp. 4-17.
- Haythornthwaite, C. And Andrews, R. (2011). E-Learning Theory And Practice. London: Sage.
- Hiltz, S. R. And Goldman, R. (2005). Learning Together Online. New Jersey: Lawrence Erlbaum Assoc.
- Hodgson, V., Dirckinck-Holmfeld, L., & McConnell, D. (Eds.) (2012). Exploring the Theory, Pedagogy and Practice of Networked Learning. New York: Spring.
- Jones, Chris (2012). Networked learning, stepping beyond the net generation and digital natives. In: Dirckinck-Holmfeld, Lone; Hodgson, Vivien and McConnell, David eds. Exploring the Theory, Pedagogy and Practice of Networked Learning. New York: Springer, pp. 27–41.
- Macdonald, J. (2008). Blended Learning And Online Tutoring. Aldercroft: Gower Publishing Ltd.
- Palloff, R. M., & Pratt, K. (2003). The Virtual Student: A Profile And Guide To Working With Online Learners. San Francisco: Jossey-Bass.
- Preece, J. (2010). Research Speaks To Practice: Interpersonal Communication. In: Donelan, H., Kear, K. And Ramage, M. Online Communication And Collaboration. Abingdon: Routledge. P 161-176.
- Prensky, M. (2010). Teaching Digital Natives: Partnering for Real Learning. London: Sage Publishers.
- Salmon, G. (2011). E-Moderating: The Key To Teaching And Learning Online. 3rd Ed. Abingdon: Routledge.
- Solomon, G. & Schrum, L. (2010) Web 2.0 How-To For Educators. Eugene, Or: International Society For Technology In Education.
- Yin, R. K. (2009). Case Study Research: Design And Method. 4th Ed. Thousand Oaks, Ca: Sage.