EXPLORING THE INFLUENCE OF COLLABORATIVE LEARNING IN BLENDED LEARNING ENVIRONMENT

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ABSTRACT

The pandemic COVID 19 has accelerated the uptake of blended learning approaches all over the world. The need to restrict human interaction to reduce the possibility of infection has led to a full lockdown of all educational institutions. Blended learning is a new teaching style combining traditional and modern learning models, where the digital methods of teaching students do not completely replace the ways in which the traditional teachers used to interact with and teach the students. However, there are several challenges associated with the understanding of blended learning models and their implementation in an educational institution. With the development of these blended learning models, there have also been several challenges associated with the different ways of accepting the learning models and using them in combination. The use of new technology encouraged exploration of the effectiveness and difference of collaborative learning in blended learning environments. This study investigated the social interactive network of students, level of knowledge building and perception level on usefulness in online and mobile collaborative learning environments in higher education. Blended collaborative learning and teaching approach is fast getting more popular in higher education, and its impacts on students' and teachers' involvements are yet to be fully explored. A very few research has been carried out to contextualize the learning and educating impacts of this instructing and learning approach. This paper gives a report of a qualitative study of the experiences of concurrently teaching online and face-to-face students in a university wide entrepreneurship development studies course. It expects to increase enhanced understandings of the effects on the students' learning and teacher's instructing in regarding three dimensions: instructional, social and learning, in the introduction of information and communication technology. This paper emphasizes on the capability of blended collaborative teaching and learning impacts for quality educational experiences.

Keywords: Collaborative learning, Blended learning, Online learning, Face-to-face learning Peer learning; Constructivist learning.

INTRODUCTION:

Blended collaborative methods to learning and teaching are fast gaining weight in the shifting higher education landscape. Many teachers are of the believe that when this kind of learning is put in place, it can involve the students that are online and are located at different places in suitable learning with the students are resides within the campus premises, hence it broadens sharing of knowledge and student's participation. However, some few researches (Szeto, 2014; Nicolau, 2015; Szeto and Cheng, 2016; Wang et al., 2017) of this method have given positive outcomes, yet just a little research has carried out in order to get a much better understandings of its effects in higher education on online and face-to- face students' learning and instructors' teaching. A few person could disagree with the significance of the classroom as a place for formal learning (Tomlinson, 2014; Brookfield, 2015). Nevertheless, sometimes some students have to

miss the face-to-face class for some certain reasons. For example, some working adults might not be able to frequently attend the face-to-face class probably because of their jobs and family obligations (Ursin et al., 2016). In view of weakness or terrible climate conditions, Students might be kept from going to class in certain days (White et al.,2010). Moreover, physically Handicapped children may never have square with chances to go to class as others (Bruce and Sundin, 2012). It accordingly winds up plainly important to investigate how to create technology enabled learning environments that enable individuals to go to classroom while they are far from the premises. The main purpose aim of this research is to examine how both teachers' and students' experiences are being affected with the development of technology enabled learning environments. What were these effects in a blended collaborative learning situation? What kind of impact do these effects have on achieving the proposed learning outcomes? The results gotten from this study are meant to inform teachers' teaching and learning practices which involve ICT. With respect to this research purpose, this study addressed two questions:

(a) What are the experiences of teachers and students online/face-to-face approach in the blended collaborative learning situation?

(b) How did these learning and teaching experiences have effect on achieving the proposed learning outcomes?

One of the best alternatives to accomplish this is the use of blended models of learning. Blended learning (BL) is an instructional methodology that combines face-to-face and ICT mediated activities alongside integration of synchronous and asynchronous learning tools to transform learning into an enjoyable edu-enterprise. BL has never been a substitute for face-to-face learning and is also not merely a mixing of face-to-face and online mode; rather it is a well-planned combination of meaningful activities in both the modes. Real Blended Learning environment requires that both the students and the teachers are physically located in the same learning space. Blended Learning environment ensures increased student engagement in learning and enhanced teacher-student interaction, greater responsibility for learning, more flexible teaching and learning ecosystem, promotes self and continuous learning, offers better opportunities for experiential learning, and improved learning outcomes.

LITERATURE REVIEW:

An increase in technology enabled learning and teaching has lately presented numerous chances in education for online and face-to-face students in higher education (Simonson et al., 2014; Anderson, 2016; Thai et al., 2017). Similar researches have spread across a variety of topics, for instance, the evaluation of the effectiveness of online and face-to-face learning (Summers et al., 2005; Ni, 2013; Moon et al., 2014; Xu and Jaggars, 2014) and students' satisfaction and learning attainment (Means et al., 2013; Chang et al., 2014; Auster, 2016). Nonetheless there are no complete outcomes with reliable indication that is made available to the management team of the higher institution, teachers and students. Certainly, face-to-face and online approaches are not unavoidably contradicted in university learning and teaching. By blending these two approaches, the students can profit from improved teaching and timely interactions (Szeto, 2014; Jacob et al., 2016; Harris, 2017), whereas teachers are able to explore inventive teaching for the enhancement of educational experiences which involves technology enabled learning (Kale and Goh, 2014; Ata, 2016). Nevertheless, the impacts of blended collaborative learning and teaching are quiet as instructionally and technologically disputable as the outcomes of the evaluation of the whole online and complete face-to-face approaches. The encounters that have arisen in the blended collaborative learning process have stayed unattended. The instructional and the learning effects which develop in synchronously blending collaborative online and face-to-face approaches in a course is what is missing. (Garrison et al., 2001) first proposed the Community of Inquiry (CoI) framework for studies of educational experiences in asynchronous/synchronous online teaching and learning. As a widely-adopted framework, quality education experiences begin at the juncture of the teaching, social and cognitive presences. This research adopted the CoI framework as a theoretical focal point. The notions of the three presences represent three dimensions: instructional, communicative and learning, by which the effects of the learning and teaching were examined.

What Is Blended Learning?

Blended Learning is a mixture of learning methods that incorporate multiple teaching modals–most frequently eLearning and traditional face-to-face learning. Blended learning is a natural development to the growing accessibility of eLearning, online resources, and the continued need for a human component in the learning experience. A blended learning approach ensures that the learner is engaged and driving his or her individual learning experience. This approach also helps cater to the individual needs of the learner, most students have unique learning styles and a blended approach is more likely to cater to those needs than a traditional classroom teaching experience.

Blended Learning Models: As a quick overview, know that due to its modular design, blended learning can come in numerous shapes and sizes and be personalized to fit the individual. These types of modals can include:

Online – Instruction occurs via an online platform, with periodic face-to-face meetings.

Rotation: Student rotates between self-paced online learning and face-to-face instruction. Schedules are fixed but flexible.

Flex: Most instruction is delivered online, with teachers providing as needed support in small-group settings.

Personalized blend: Teacher designs face-to-face and anywhere, anytime learning options that straddle the physical classroom and virtual spaces. Learning is the constant and time is the variable.

Online lab: Instructions takes place in a brick and mortar lab. Delivered by an online teacher and supervised onsite by paraprofessionals.

Self-blend: Students take online courses to supplement their tradition schools face to face course catalogue.

Face-to-face: Teacher offers primarily face-to-face instruction, supplemented with technology in the classroom or computer l

Collaborative blended Learning:

Collaboration is key to an effective history classroom. Discussion, peer work and learner engagement facilitate the development of historical thinking skills, understanding of historical content and a careful engagement with the ethical issues posed in studying history. The realities of teaching online and then in a blended learning environment during COVID-19 have created challenges for maintaining this collaborative environment. The article discusses a number of techniques that have been employed to foster general engagement and also to scaffold assessment. The use of new technology encouraged exploration of the effectiveness and difference of collaborative learning in blended learning environments and foster the education process.

Developing a digital culture and pedagogy to enable blended learning:

Investment in digital has been significant and strategically focused on the core requirements such as improved channels of communication, an 'anytime, anywhere, any place' approach to accessing learning material and to provide tools to enable learners to participate regardless of level or ability. The college is a Microsoft Showcase College and benefits from a strong and supportive partnership that champions our ongoing position in the skills sector for Worcestershire.

Digital Learning Advisors at How have developed a robust digital induction that supports learners of all abilities by offering tailored digital solutions to ensure they are equipped with the right tools required for them to engage, progress and thrive. Additional integrated tools for accessibility such as Immersive Reader and Read Aloud are introduced at this point to encourage learners to explore these technologies and build up a unique toolkit to use as part of their everyday academic life.

To be fully successful staff need to embark on a degree of re-framing their teaching and support methods in order to learn new approaches. This must be done with encouragement, care and support to ensure successful adoption if sustainable change is desired. It is easy to become overly focussed with the development of the *digital* skills of staff who may indeed need some CPD in these skills over the pedagogical changes they will need to explore before successfully experimenting and adopting blended learning approaches in their own practice.

As a priority teachers need to be supported and given the freedom to utilise traditional classroom methods while engaging in enhanced training to develop skills targeted for online learning environments as they too learn to build, develop, teach, and learn in a blended way. This process done well should seek increased user-generated content from learners to be truly successful.

Collaboration to drive the national productivity and skills agenda:

This 'new normal' prepares us comprehensively for the increasing move away from anachronistic approaches, environments and pedagogy. Methods of teaching and support which prop up simple transmission of content are already under scrutiny in the new framework which seeks to balance less data weighting with more examination of knowledge, skills and behaviours of learners: what do learners know (knowledge) that they didn't before, and how well can they demonstrate (skills) it but also how well do they understand that progress in order to be able to apply it for the setting for which they have trained (behaviour)? This fine balancing act is at the heart of the challenge for most educators today who are still required to meet qualification criteria and curriculum policy expectations, themselves areas arguably due an upgrade. In all circumstances, the additional use of technology-enabled learning should never determine teachers' decision making rather, pedagogical goals and objectives should always govern whether a blended lesson model is the best approach for each particular topic/outcome sought.

Despite the many benefits we have set out in this paper it remains central to any strategy that, like all approaches to pedagogy, different methods work well for different objectives. The intended outcomes should always be the determining factor in deciding an approach; blended learning done well may be a longer-term choice to consider rather than just a lockdown solution and a fantastic opportunity to truly engage all learners whilst ensuring no one gets left behind.

Peer-to-peer collaboration and the importance of community channels:

The recent increases in remote learning offer opportunities for wider peer-to-peer learning through digital mediums. This enables learners from different campuses, institutions, even countries to work, share,and curate and create together. Not only does this encourage development of professional communication and networks, it helps to maintain presence and the development of critical thinking skills. Teachers can facilitate sessions, rather than taking a didactic approach to delivery where learners are often passive and can instead begin to focus on the development of 21st century skills such as problem solving, social and cross-cultural interaction and productivity. During the lockdown, HoW College have employed cross-campus approaches to delivery and brought together learners from a variety of different courses and backgrounds to work together – the limitations of campus travel have been removed and learners have been exposed to a breadth of peer learning opportunities. Although formal learning is the core of life at college, an integral aspect to character development is informal and social communication. Working remotely offers flexibility, although learners still require a 'social space' to encourage what would normally be corridor conversations. These informal discussions often build relationships, offer a sense of belonging to the institution and can spark relevant conversation around study. Whilst delivering wholly remote learning, HoW have ensured that 'community channels' are available across cohorts within Microsoft Teams to enable learners to build on the vital social aspect of their time. Feedback from staff and students confirm that community channels, or a small amount of time for informal conversation allocated before lectures, enables lessons to be more focused.

Careful consideration is required to ensure teachers, support staff and learners are well supported to manage the online space as part of a blended learning environment. Support needs to be given to help teachers and learners develop enhanced communication skills; neither can rely on non-verbal cues to address misunderstandings or observe needs or disengagement. Time management and workload can be a challenge in asynchronous classes with learners expecting to be online at any time, so teachers cannot predict when heavier workloads will occur. Teacher planning time may need to be extended at least initially and enriched content developed. Finally, as in the traditional classroom, teachers must be able to adapt online content for reaching students with physical or learning disabilities although huge progress has been made with resources to support these additional needs by software providers over the last few years.

How Does Blended Learning Foster Collaboration?

According to Fullan (2013), collaboration is one of six qualities key to student and societal well-being, Though collaboration may occur in faceto-face and e-learning environments, it may be best fostered in blended classes, where students receive a mixture of face-to-face and virtual instruction. The following are three ways blended learning can foster collaboration among your students.Collaboration refers to the ability to co-labour (i.e., work effectively with others to achieve common goals). According to various sources (e.g., Fullan, 2013), collaboration may entail:

· Demonstrating social networking skills.

· Being flexible and helpful in making compromises.

· Recognizing, respecting, and showing empathy for diverse people and viewpoints (e.g., different experiences or cultures).

· Providing and receiving feedback respectfully.
· Contributing meaningfully to teams and in various ways (e.g., expertise, leadership, information, resources, or support).
· Interacting positively with others while producing new products.
· Using a variety of information and communications technologies to communicate with others (e.g., social media).
· Assuming shared responsibility for collaborative work.
· Promoting critical thinking to solve problems and make decisions.
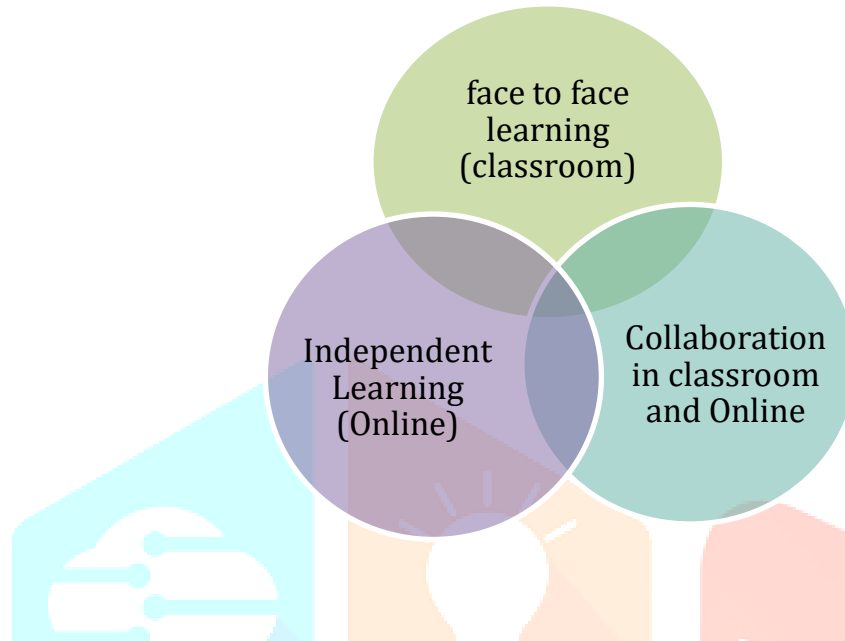
1.The provincial virtual learning environment (VLE) allows students in blended classes to collaborate by using various communication and assessment tools to provide and receive feedback based on success criteria. These are only two of the secure tools in the VLE:
· Blogs – Students can collaborate by receiving feedback on their blog entries and leaving comments on others' blogs. All blog entries are contained within the VLE and are only accessible to those with a password.
· EPortfolio – Students can also receive and provide feedback on their electronic portfolios. EPortfolios can contain artifacts, collections, reflections, and presentations, which can be shared with and commented on by others.
2.The provincial VLE helps you know and track who is assuming responsibility in collaborative tasks. Depending on the permissions assigned to you and your students in the system, all exchanges may be archived or easily accessed. For example, private and group chat sessions are automatically archived after chat sessions end, posts in group or class discussion areas may be read and re-read and even logins to the system itself may be reviewed. This data can provide you with critical information about patterns in group interactions.
3. Blended learning allows students to use safe, secure, password-protected technologies to learn, communicate and work with others, and create products. The provincial virtual learning environment (VLE) offers many tools useful for collaborative tasks within and beyond the school day.
The illustration of the application of the model focuses on the aspect of student collaboration in a blended learning environment and shows how the original process planning model was adapted and applied during the re-planning phase of the project. The final deliverable is a set of action plans for future collaborative learning that could strengthen student-centred learning experiences in a context which still bears the scars of an unfortunate segregated past. asier to meet students face-to-face. Collaboration is not something new in e-learning. Discussion forums, chats, videoconferencing, whiteboards were and still are available technological tools in almost all course or learning management systems. Today's collaboration is socially new. It is brought from ideas that web 2.0 (World Wide Web new wave) brings to society and education. It is two-way collaboration, collaboration using social networking tools, communities of learners, social bookmarking, mush-ups, and reusability – ideas that follows web 2.0.

Conclusion

All students no matter their age learn differently and teaching methods should reflect this, by designing teaching programs in a way that reaches visual, auditory, and kinetic learners alike. The blended learning approach offers a fantastic opportunity to meet these multiple outcomes. Instead of asking 'what do you want to do when you leave education?' our focus and our curriculum content should be more focussed on 'how do you want to go about solving problems?' and 'what is your analysis of this information?' along with encouraging debate. Approaching the learning experience much more as a constructive participatory experience where learners develop meaning from what they learn and teachers means they can evaluate that learning against application in the real world/employment. Most of the lecturers said that they like to use collaboration in face-to-face lectures better than in e-learning settings. As there is not clear definition about in what proportions blended-learning can happen, one of the models can be that learning resources are delivered by e-learning tools and collaboration happens in face-to-face lectures. And in this model there is timesaving effect because Lecturer does not have to take time from face-to-face session for theoretical issues but can use it for student collaboration and practices. Main effort in collaborative learning is on collaboration between students and students and lecturer. To provide collaboration lecturer can use face-to-face environment but in blended-learning settings there are possibilities to use also technology.

References

Bell S, Lane A (1998) From teaching to learning: technological potential and sustainable, supported open learning. Systemic Pract Action Res 11(6):629–650

Betz M (2005) Facilitating team learning means more than just assigning team projects. Online Classroom, pp 4–5

Conrad R, Donaldson JA (2004) Engaging the online learner. Jossey-Bass, San Francisco
Daradoumis T, Xhafa F (2005) Problems and opportunities of learning together in a virtual learning environment. In: Roberts TS (ed). Computer-supported collaborative learning in higher education. Idea Group Publishing, Hershe

DiRamio D (2005) Measuring online community. Online Classroom, 2–6

Elearnspace (2002) Online facilitation. http://www.elearnspace.org/Articles/onlinefacilitation.htm (29 September 2005)

Fisher M (2003) Online collaborative learning: Relating theory to practice. J Educ Technol Sys 31(3):227–249

Kelly H (2004) Enhancing interpersonal interaction in online courses. Educ Technol 44(1):53–55

Kirkley SE, Kirkley JR (2005) Creating next generation blended learning environments using mixed reality, video games and simulations. Tech Trends 49(3):42–54

Learnonline (2005) General tips for online success. University of Saskatchewan. http://www.learnonline. usak.ca/tips.html (10 September 2005)

Macdonald J (2003) Assessing online collaborative learning: Process and product. Comp Educ 44(4):377–391

McMillan JH, Schumacher S (2001) Research in education: A conceptual introduction. (5th edn). Longman, New York

RIT (Rochester Institute of Technology) (2005) Blended learning pilot project. Final Report for 2003–2004 and 2004–2005. http://online.rit.edu/blended/files/RITBlendedPilotReport04_05.pdf (31 October 2005)

Roberts TS (2005) Computer-supported collaborative learning in higher education: An introduction. In: Roberts TS (ed). Computer-supported collaborative learning in higher education. Idea Group Publishing, Hershey, pp 1–18

Bhadoria, R. S., Chaudhari, N. S., & Samanta, S. (2018). Uncertainty in sensor data acquisition for SOA system. Neural Computing and Applications, 30(10), 3177-3187.

Samanta, S., Dubey, V. K., & Sarkar, B. (2021). Measure of influences in social networks. Applied Soft Computing, 99, 106858.

Smith BL, MacGregor J (1992) Collaborative learning: A sourcebook for higher education. NCTLA, University Park, PA

Samanta, S., & Pal, M. (2018). Link prediction in social networks. In Graph Theoretic Approaches for Analyzing Large-Scale Social Networks (pp. 164-172). IGI Global.

 Van Eijl P, Pilot A (2003) Using a virtual learning environment in collaborative learning: Criteria for success. Educ Technol 43(2):54–56

Weaver C (2005) Planning and facilitating academic discourse in discussion boards. Online Classroom, May 2005 4–7