USE OF ONLINE COLLABORATIVE E-LEARNING ENVIRONMENT TO ENHANCE STUDENT ENGAGEMENT IN CLASS

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Abstract

The education sector has already embraced the new generation of technology and started working towards the enhancement of various teaching and learning strategies. With the involvement of various e-tools, teaching and learning process is reaching its next level of implementation. At present, almost every educational establishment is working on implementing various e-resources on their own Virtual Learning Environment. Some of these are even cloud-based and hence enable the end-users (teachers and students), to access the e-resources and collaborate in-class activities even from remote locations. When it comes to group assessments, various collaborative tools come into the picture. Many educational organizations allow their students to access social media platform such as Facebook etc and conduct collaborative exercises on it. One of the critical aspects of enhancing learning through social networks is the fact that distance or off-campus students are limited from meeting with their teachers and addressing them face-to-face. However, both on-campus and off-campus students do have a Facebook account, thus breaking the distance barrier between students and teachers. By using Facebook chat, students can communicate in real-time with each other or with their lecturers. Other such platforms include Microsoft Kaizala, which is becoming popular during these days since it doesn’t require the participants to share their private accounts or mobile numbers in order to do an online collaboration for academic purpose. This research paper contains a study of various online collaborative tools, their pros and cons, recommendations for usage and implementation. Finally, the authors will reflect on their studies and suggest various ways of implementations for different purpose and nature of assessments, in order to cover the learning outcomes of the session.

Keywords: Smart education, e-resources, online learning, education technology, social media for education

1 INTRODUCTION

Throughout the years, social media has risen to be one of the fastest growing sources of information and connection establishment between organizations and people worldwide. Social media is a prominent aspect of our lives and it has evolved from a pastime activity to an essential platform that builds careers. The endeavour to intertwine education with social media has already started for the past few years, depending on
the social media relevance with the teaching and learning content in improving the educational experience. The higher education sector is allowing the students to bring their smart devices to the campus and many organizations have campus wide internet access in order to enable the usage of various e-learning resources. Based on the nature and content of module / subject, collaborative learning has been identified as one of the most effective teaching and learning methods, especially for group-assessments and activities. Blend of collaborative learning methods with e-learning platform is the really needed these days so that group members could connect even from remote location and contribute to the group activities.

2 LITERATURE REVIEW

2.1 Collaborate E-Learning:

These days, professors and students need to be more digitally connected to their coursework and one another. Fewer in-person interactions can often make students feel disconnected from their learning experience. Sometimes it is hard for the students to be there in person with all the other demands on their time which makes it nearly impossible to attend class. Collaborative e-learning offers a level of connection and engagement that allows professors and students to share their work and ideas which provide a fully wide-ranging learning environment. Collaborative e-learning has been confirmed by many studies to help construct knowledge through group interactions and help develop critical thinking skills such as analyzing and evaluating information which is needed for the real world. (Mohammed et al., 2019)

Students will acquire collaboration skills which will develop through effective communication in online environments which will make students reach out to each other to solve problems and share the knowledge that will lead to even deeper learning and understanding of the subject. This study showed that collaborative e-learning is indeed effective especially for the teachers who plan to conduct group-based projects and activities where they can measure individual contribution and the outcome. (Mustafa et al., 2019)

Different teaching methods can be used in different situations when it comes to collaborative learning such as discussion methods, problem-solving, case study or debating. It occurs as the students are actively involved in the process of constructing meaning and knowledge from the course content as opposed to passively receiving the information. Students will be able to exchange some data or ideas where it blends with other students’ experience where they can all benefit of others contributing knowledge. (Mohammed et al., 2019)

2.2 Student Engagement:

Student engagement represents a wide range of tasks that involves the student's participation and development within management, research, education and community. It focuses on the interaction between the effort, time, and any resources that involves the investment of together the institution and its students with their reputation and performance. Student engagement in a collaborative manner leads to a collaborated outcomes of institutes and their students.

The engagement includes student's involvement in peer support, extracurricular courses, educational provision programs and governance and curriculum development. Not only it induces a culture that authorizes students to be involved but also it induces a formal framework for students’ involvement, where the relationship between students and faculties are clearly and explicitly explained. It maximizes the two way feedback between students and faculties. Diligently engages students in curriculum development and design to have a positive effect on their academic performance that provides development in certain skills such as leadership, teamwork, personal, professional and critical thoughts. (Peters 2018)

2.3 E-Learning Environment:

E-Learning Environment is a main part of the education institutions, since the last decade people have been using e-learning more and more often and there have been studies that show that the environment of e-learning is even more healthy and effective for the new generation of students bringing positive results such as: Easy Assessment Tracking, Effective Delivery, Savings on Finance, Flexibility and Time Saving. Countless studies and researches were conducted to influence and capture a student’s performance using E-Learning to conclude if the E-learning Environments was positive or otherwise.

With the use of internet and its improvement over the past decade people have been using the internet on a daily basis, with more and more articles and studies posted online it is easier for teachers and students alike to find information online easily and it has improved the e-learning environment, the quality of information is precise and the flow of information shows exactly what the students and teachers are looking for making
One study was conducted to view the results of student engagement and outcomes using e-learning taking in many university students and colleges into consideration, there were many results varying from engagement and access but all of them had one common results showing an improvement in the results of passing and how the students engage with the material proving that the e-learning environment is the future of education (A.Boulton, 2018).

A different study was also conducted to view the students’ performance using E-Learning Environments, taking age, gender and the year of degree respectively, the results were positive showing improvement in the number of students accessing the e-learning environment and students passing the e-learning environment, of course there were a number of students that failed but there was a significant difference between the students that passed and failed (Alves, 2017).

### 2.4 Social Media in E-Learning:

Since the technology is improving, so are ways of teaching and learning. As social networking started taking over people’s lives, students from all over the globe are investing an enormous amount of time using social networks. In 2011, it was documented that Facebook was the most used website on the internet, with over 606 million audience (Ryan & Xenos 2011). Facebook was originated in Harvard University which gave a new look to the used technology such as Emails, with its variation in communication delivery such as writing on walls, and party invitation distributions. This has driven researchers to figure out a way to enhance learning through Facebook-based social networks.

Many studies and researches were conducted to enhance the student outcomes through Facebook to push forward flexible learning. Using Facebook as a learning tool and environment gave a win-win situation to the institutions, allowing them to offer dual-mode courses to both on-campus and off-campus students, by developing online communities that increases the positive outcomes.

One of the critical aspects of enhancing learning through social networks is the fact that distance or off-campus students are limited from meeting with their teachers and addressing them face-to-face. However, both in-campus and off-campus students do have a Facebook account, thus breaking the distance barrier between students and teachers. By using Facebook chat, students can communicate in real time with each other or with their lecturers.

During the past decade there has been a significant change in the communication to the Computer Mediated Communication (CMC) as many users have started accessing and using the web to communicate with each other. Several researches conducted by Barnes, Marateo and Ferris (2007) as well as Oblinger and Hagner (2005), have assured that today’s students are easily bored with traditional ways of learning, and that CMC is an essential tool in teaching.

One of the limitations argued by VanDoorn and Eklund (2013) is that in order to maintain a video-conference, text-based chat, or deliver material, a fast bandwidth connection is required. Moreover, in technologies such as emails and text messages, shortened and informal language can be used which can be inappropriate.

Although Facebook has many uses as mentioned above, the case study is focused more on the synchronous text-based CMC. The text-based communication in Facebook is free of charge regardless of the area or the distance between the users, enabling teachers and students to interact through typed messages in real time.

It was conducted through the volunteered students – both day and distance students – who added their lecturer as a “friend” on Facebook through permission, that the instant feedback received from the lecturer using Facebook chat has decreased the time which is usually lost in seeking certain information. Thus, benefiting the final learning outcome. Furthermore, by using CMC to communicate with the lecturer, the distance students that have no access to face-to-face communication with the lecturer had the opportunity to interact in real time with the lecturer and get direct feedback which would not be possible otherwise.

The beneficial points of using text-based communication through Facebook, is that it works directly from the website, without having the need to download and learn any additional software. Moreover, text-based communication is a series of short and simple messages, which does not need a high speed internet connection to use compared to video conference. Furthermore, the “Faceless” anonymity of text-based communication gives the students an opportunity of asking questions that might not be asked during face-to-face communication. However, using the CMC can apply more pressure on the lecturing staff as increasing
the workload by having to be online and replying as soon as possible. Another potential issue would be the exposure to commercial enterprises. As it is known that Facebook and other social media platforms are commercial enterprises, the students and the lecturers are exposed to advertisements which are not within the protection of the university. Since CMC is not only limited to Facebook, an option to resolve this issue is to create a platform within the university.

3 ANALYSIS

A short questionnaire was distributed among students of one the higher education institutions, asking about student-engagement as well as their take on collaborative learning and to check if the use of applications or social media is incorporated to the teaching methods in their classroom. Following analysis is the resulted from the questionnaire consisting of 5 questions, distributed among higher diploma and bachelor level students.

3.1 Question 1: Do you think student engagement in class needs improvement?

![Fig 1. Student Engagement needs improvement](image)

Fig. 1 shows, all the students who answered the questionnaire agreed that the student engagement needed improvement or at least a change in order to better their experience in the classroom.

3.2 Question 2: Do you think online collaboration between teacher and students enhances student engagement in class?

![Fig 2. Online collaboration between teacher and students](image)

The second question was asked in order to know if the students are willing to engage in an online session using an application or a social media platform with the teacher to enhance the student experience in the classroom. All of the students answered yes which indicates that students are in fact willing to engage in an online session in the classroom to enhance their classroom engagement with each other as well as with the teacher.
3.3 Question 3: How often are you exposed to collaborative E-learning?

![Collaborative E-learning Chart]

The third question is aimed to observe if students are exposed to collaborative e-learning in the classroom. The students answered as follows: 4.5% answered very often, 22.7% answered often, 27.3% answered sometimes, 40.9% answered rarely and finally 4.5% answered never. That indicates that the majority of the students rarely get exposed to collaborative e-learning methods in their classrooms.

3.4 Question 4: Do you use e-learning applications in the classroom to learn lessons? If yes, can you mention the name of the used application?

![E-learning Applications Chart]

The aim of the question was to find out if students are being taught using online applications and to find out which applications are being used in the classroom. 68.2% answered No, while 31.8% answered Yes, and that indicates that more than half of the students do not get taught using online applications. Furthermore, the students that do get taught using online applications answered the sub-question with Moodle, and one of the students answered with “Youtube for discussion materials mostly”. Some students also mentioned that their teachers have used some mobile applications such as Padlet, LiveBoard and social media apps such as Whatsapp and Microsoft Kaizala.

3.5 Question 5: How effective do you think collaborative learning methods are in covering the learning objectives in class?

![Effectiveness Chart]

The students answered as follows: 59.1% answered Very Effective, 13.6% answered Effective, 27.3% Neutral, and 0% Not effective.
The last question was asked in order to observe the students' point of view in covering the learning objectives that are to be achieved in class, since many students have engaged in collaborative learning and they can observe their understanding of the lessons that are being taught to them in the class. 27.3% answered very effective, while 59.1% answered effective and 13.6% answered neutral. This indicates that most of the students find the collaborative learning method of teaching is positively effective in helping them understand lessons and achieve the learning objectives of the class.

4 RESULT

The analysis of all the questionnaire shows that students in general do feel the need to improve the engagement and the experience of the classroom. Furthermore, they are accepting the incorporation of applications and social media to enhance their learning experience, which is found to be much better than the traditional methods of teaching and learning.

5 CONCLUSION

Technology has both positive as well as negative aspects on human life. Especially in education sector, monitoring the usage of technology is really important. This research paper has shown very positive results on usage of collaborative e-learning platforms to enhance teaching and learning experience in education sector. But at the same time, the teachers and the network administrator must ensure that the implementation of this method is being monitored and data must be analyzed for future enhancement. There are many chances of getting deviated from the intended class activity and get involved in personal usage of social media during the class sessions. And hence, the collaborative activities must be defined in such a way that all the group members could participate actively with full interest.

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REFERENCE LIST


