

Help of FB IN Distance Learning: A Case of Covid-19

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Abstract - The purpose of this research was to examine the viability of using Facebook's Group feature for distance learning as an alternative to other learning management systems, particularly during the COVID-19 pandemic. The 102 Business administration students at Shivaj College, Delhi were subjected to a pre-test, post-test, control group design employing a quasi-experimental research strategy. Researchers used a custom-made exam to gauge students' academic abilities. The results showed that compared to pupils taught using a modular method, those who participated in virtual classrooms where Facebook Groups were used had much higher academic achievement. Students also reported that, despite some difficulties, they were able to use Facebook throughout the new normal teaching to supplement their learning.

Keywords - COVID-19, Pre-test, Post-test, Control group Design, Quasi-experimental

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1. INTRODUCTION

Because the COVID 19 Pandemic had such a wide-ranging impact, the traditional classroom setup had to be changed immediately in every country. The trend suddenly shifted away from traditional classroom settings and toward alternative models of education such as online education, blended learning, flexible scheduling, homeschooling, modularization, asynchronous and synchronous communication, and technology-enhanced instruction. As the number of confirmed cases of COVID-19 in Delhi continues to rise, the city's Department of Education and Commission on Higher Education have enacted new policies to promote the use of non-traditional methods of imparting knowledge from kindergarten through college. Since COVID-19, schools and educators have been rushing to adapt to "New Normal Teaching," also known as distance and online education.

In order to facilitate student-teacher collaboration and interaction, educators can use Facebook by creating a Facebook Group and inviting students to join. As the group's moderator, a teacher can use Facebook as a replacement LMS by posting materials related to the class's topic on the page. These materials could take the form of videos, files, texts, or links. He or she can also use the "On-Live" feature of the Zoom Meeting

app to broadcast their presentation online in real time. Students will engage in synchronous learning thanks to the availability of real-time feedback in the form of comments, emotions, and emoticons that may be used to spark conversation. Facebook users in the same group can comment and use emojis in real time during a live broadcast of a teacher's video lecture, prompting the instructor to answer to questions and contextualise emoticons in real time. Students can access the live videos and uploaded videos as supplementary learning tools and to better grasp the unfinished content by visiting the Facebook group and browsing the postings according to the dates on which they were made.

Therefore, during the COVID-19 pandemic lockdown, integrating Facebook and using it as a virtual classroom set-up and employing its Facebook Group feature can be used as more accessible, more flexible, cheaper, and convenient means to provide lessons. In addition, it is crucial because of its adaptability, which permits interactivity and enhanced communication, and the ability to increase the quality of learning for better student engagement. And in the "New Normal Teaching" setting, the researcher thinks that using Facebook Groups can effectively increase the learning retention as

students and teachers may revisit the contents uploaded in their Facebook Group and thus improve the academic performance of students after they switch from traditional classroom to virtual classroom.

2. REVIEW OF RELATED LITERATURE

A) E-Learning, or Distance Education Taken Online

After the spread of the COVID-19 pandemic, preserving high standards in education became an international priority. In order to maximise the potential of online education, Heller and Cassady (n.d.) created a Global Learning Model that incorporates novel and coordinated approaches to training. When adopting digital tools for learning at a distance, they came up with an iterative cycle of instruction and assessment. Learners can use this model, which resembles a ladder, to progress from student to practitioner to trainer and leader, and it incorporates information and communication technology (ICT), a global context, multidirectional learning, a focus on further educational developments, and lifelong learning through career progressions. In addition, the incorporation of any technology in an open distance and e-learning environment can play a key role in facilitating the dissemination of knowledge and the expansion of educational opportunities to anyone, anywhere, using any device or platform (Makina, 2020).

As a result of the proliferation of OER in the classroom, educators now have access to a wealth of customizable teaching materials on a variety of low-cost digital platforms that can have an effect on and sustain instruction even in the face of widespread crises. University students' readiness for online distance learning was investigated (Dikbas Torun, 2020) after the COVID-19 epidemic forced a rapid shift away from traditional classroom settings. Teachers should carefully consider analysing all education steps necessary to supplement quality learning activities using online platforms, as its rapid transition will carry a wide range of challenges, including infrastructure and readiness of schools to shift to distance education within a very limited period. Students may easily manage their time, maximise their effort, and arrange their learning with the help of cutting-edge technologies like social media, according to a study on the predictive role of e-learning style and e-learning preparedness (Ergün & Kurnaz Adbatmaz, 2020). In addition, (Ilgaz & Gülbahar, 2020) used a holistic approach to analyse e-learner preferences and readiness satisfaction, discovering that adaptable structures used in online and distance learning can ultimately lead to satisfaction that can be used as LMS in delivering the instructional content while maximising

its usability. Beaven (2018) agrees, arguing that educators should actively seek out, create, modify, and reuse OER across the wide variety of online distance learning tools at their disposal. Furthermore, (Bossu & Stagg, 2018) (Bozkurt & Akbulut, 2019) argued that educators should make use of preexisting digital educational resources to increase access among students, whereby it guarantees learning experiences guaranteed by the use of open technologies and new open pedagogical approaches that can integrate some of notable transformation in pedagogical practise into the curriculum. Since this is the case, universities may employ digital connectivity to modify their pedagogical offerings (Domnguez Figaredo & Alvarez Alvarez, 2019) (Bonafini, 2017) in order to produce the desired results in their curricula. Even if kids have to stay home because of a lockdown, they still need a place to learn that can accommodate their unique set of skills, interests, and backgrounds, and where they feel safe enough to engage in self-directed study.

B) Benefits of Social Media for Education and Training

It is possible to alter the pedagogical views of teachers, school administrators, students, and parents through the use of social media in education and evaluation. Although e-assessment and online learning have greatly benefited from technological advancements, cheating and plagiarism continue to be major problems in the higher education sector, thus it is important to employ e-assessment with caution by making the most of the authentication process.

Using social media in a virtual classroom setting has attracted a large number of studies because of its potential educational benefits. Daher and Shahbari (2020) acknowledged that teachers and policymakers should involve students' access to instructional support, services, and technical support when using social media in virtual teaching, as this is thought to effectively create a collaborative learning environment and experience among the students, leading to improved academic performance (Manickam, Selvam, & Ahrumugam, 2020). Since students believe that currently available learning management systems are complicated and isolated, educators should think carefully about what technology and platform would work best for their students (Avila & Lavadia, 2019).

Before using social media groups as a teaching alternative to the current learning management system, teachers using technology-aided instruction,

especially on the use of social media platforms, should understand the factors affecting the students' participation to online classes, such as family problems, unexpected commitments incurred at home, technology-related problems, computer, device, and hardware issues, and internet connectivity (C. Moore, 2014). Although social media can be used as an innovative form of technology in education because it facilitates communication among people who share common interests like lessons and concerns (Zdener et al., 2010)(Zimmerman et al., 2020), it does not come without risks for students in that the public display of educational, technological, and economic factors can have an impact on how they choose to make use of existing infrastructures and resources. To determine whether or whether a resource is "open to open practise," though, one needs do extensive research (Knox, 2013). To ensure its efficacy (Peter & Deimann, 2013), educators who choose to use social media as a learning platform, especially as a virtual classroom, should look beyond its convenience and ease of use and consider its implications for rapidly evolving forms of educational delivery, particularly during paradigm shifts. In addition, most students are now working from home as a result of the COVID-19 lockout, which means that the stresses of online learning are influencing other areas of their lives in addition to academic performance. Moreover, as most students are more active in social media platforms during quarantine periods, using Facebook as a virtual classroom is regarded the ideal alternative. As such, employing it as a tool for online and collaborative learning is strongly suggested. Educators can use platforms like Facebook and Messenger to have online discussions with their classes and facilitate student-teacher communication.

Therefore, the use of the aforementioned technology can play an important role in supporting learning opportunities for academic collaboration while students unknowingly enjoy the use of the aforementioned platform, extending the learning opportunity even without in the university and breaking the boundaries of their home (Ajayi & Ajayi, 2020) and fostering self-discovery, social identification, gratification, and diversity through the application of socialisation among learners and their teachers (Lin et.al., 2020). Students can independently verify the efficacy of social media as a platform in online learning by conducting research on the topic, focusing on Facebook and its Facebook Group feature.

3. SIGNIFICANCE OF THE STUDY

After the Delhi government declared a lockdown, also known as a community quarantine, on March 25, 2020, the researchers in this study decided to form a Facebook group in order to complete the Second Semester's worth of Science, Technology, and Society lectures that had to be postponed. This study examined data from two classes of first-year Business Administration students in the researcher's Science, Technology, and Society course. The researcher provided the first group with a set of modules and reading materials to cover the remaining three topics of the said subject, while the second group was invited by the researcher to join a Facebook Group he created to watch live and uploaded videos, read the outlined contents posted in the Facebook Group wall, and comment their answers to the comment section.

The research was conducted during the lockdown that occurred when COVID-19 was first discovered in the Delhi, when the government cancelled all in-person classes in an effort to stop the spread of the virus. The researcher used the Facebook Group to distribute the final set of materials and discuss any outstanding questions. The students' post-test scores were compared to see how well they did in the research-based course. Therefore, the results may provide sufficient data and insight into how Facebook can serve as a viable alternative LMS by cutting costs, alleviating worries of educators and students, enhancing delivery mechanisms, and uncovering novel approaches to facilitating online education without imposing undue stress on the students themselves.

4. REASONS FOR THE STUDY

The goal of this research is to systematically examine the efficiency of Facebook Group in Distance Learning during the COVID-19 Pandemic. The following are examples of the precise research questions that were asked:

- In the context of remote learning, how do students who make use of Facebook Groups fare in comparison to those who opted for modular learning?
- Secondly, how do students evaluate Facebook's potential as a replacement for the current LMS and for use in distant education
- How did students who tried using Facebook for remote education find it challenging?

Students majoring in Human Resource Management and Marketing Management in the Science, Technology, and Society course taught by the

researcher were split into two groups for the study. In this study, we employed a genuine experimental design by adopting a pre-test, post-test, control group research setup.

5. RESEARCH METHODOLOGY

A. Sample Size

The 102 participants included 51 male and 51 female students from both classes. Both groups were studying a Science, Technology, and Society course at a university during the experiment, which was conducted by the researcher himself.

B. Instruments used

The instrument used in this study was a 100-item pre- and post-test the researcher developed and validated for reliability using the Split-Half Test and the Pearson-Product Moment Correlation of Coefficient; the index of discrimination calculated using these methods was 0.30, which was deemed Good; and the reliability of the whole test was 0.7169, with a computed t of 10.6492, which was deemed highly reliable above the 0.001 level of significance.

Procedural Considerations

One group of students was randomly assigned to act as a control group, and all students were told that they had been selected to participate in the study on the first day of the modular and virtual classes using Facebook Group. Following collection of parental and student agreement forms, the instructor set up a Facebook Group for the study group and emailed the Module in PDF format to the control group. The experimental group's students had access to lecture videos and transcripts posted on the group's Facebook wall. On Tuesdays and Fridays in March 2020, the instructor held "live" sessions in the Facebook Group to cover the remaining six (6) lessons by sharing his screen via the Zoom meeting software. During those real-time sessions, students could type in comments and questions and get an immediate response from the instructor. The instructor asked a series of questions in the Facebook Group, to which the students responded with brief comments; the instructor then used emojis to provide feedback on the students' responses, such as a thumbs-up for a good guess or a crying face when an answer was incorrect. Participants were asked to complete a 20-item Google Forms quiz at the end of the session, while those in the control group were given self-paced modules to complete the remaining lessons and take the post-test at their own time.

Finally, students in the experimental group were given an open-ended question on whether or not a Facebook group could replace a traditional LMS in order to gain insight into the challenges they faced. Justify your answer with a yes or no. They were also requested to share any challenges they had encountered while trying to study with the help of the aforementioned social networking site.

6. RESULTS AND DISCUSSIONS

A. There is a Statistically Significant Difference Between the Groups on the Post-Test

Table 1 shows that using a Facebook group as a virtual classroom led to a statistically significant difference in post-test results between the two groups of research participants. The t-test for the dependent population yielded a p-value (0.000) lower than the -value (0.050) since the computed t (19.921) exceeded the tabular t (0.001). hence, the null hypothesis was rejected.

Table 1: t-test analysis of the difference between the post-test scores of the experimental and control groups

Group	N	Mean	SD	df	t	Sig.
Experimental Group	51	84.90	5.040	94	19.92	0.000
Control Group	51	37.68	6.380			

This suggests that there was a statistically significant difference in post-test scores between the two groups of participants. Since there was frequent contact and sharing of insights throughout the class, students learned more effectively while using social media platforms in learning compared to a modular learning setup. They also report higher levels of learning satisfaction because they find that working together improves both their ability to absorb information and their ability to apply it.

Students in the experimental group can afford the quality of interaction that their peers in the control groups, who are taught using the conventional approach, are unable to experience (Luengo, Bezerra, & Santana, 2020). This has the dual effect of lowering the barriers to learning and the anxiety they cause by making it easier for students to work together effectively. Based on the evidence presented (Chaka & Govender, 2020) Therefore, during the epidemic, using Facebook for online instruction can substantially benefit not only the education sector, but also the parents and the

society, as competent graduates are thought necessary.

The Experimental Group Showed Substantial Post-Test to Pre-Test Improvement (B)

Table 2 displays the statistically significant gains made by the experimental groups from their pre- to post-test scores. Findings show that students' grades increased significantly while using Facebook Groups for online instruction and distant learning. The calculated results of the t-test for the independent population showed that the p-value (0.000) was less than the -value (0.050) since the computed t was 6.944 which was greater than the tabular value (0.001), hence the alternative hypothesis was accepted.

Group	N	Mean	SD	df	t	Sig.
Experimental Group	51	76.015	7.32	47	6.94	0.000

Table 2 shows that there was a statistically significant increase in test scores from before to after the experimental group used Facebook Group as a distance learning platform. As a result, it is certain that the students' exposure to the aforementioned strategy greatly improves their academic performance. Since knowledge sharing via the internet helps learners and teachers switch roles whether in sharing common goals to improve the quality of learning outcomes (Ganapathy, Kabilan, & Devi, 2020), it can be safely implied that online teaching using social learning is as useful as the various existing learning management systems. Because of COVID-19's time constraints, this study also affords teachers the chance to learn why students prefer engaging in online discussions to in-person ones, and what motivates them to do so. (Flores et al., 2018)

C. How Facebook, as an alternative to the conventional LMS, is viewed by distance education students.

Students' comments on Facebook's usefulness for distance learning and as an alternative to the current learning management system were categorised and coded according to the topic of the supplementary educational resources they mentioned.

Helpful resources for students

The students' responses largely centred around the importance of having access to helpful study materials.

"It's much more flexible and user-friendly than zoom meetings." (17th and 23rd and 18th graders)

"I know my way around Facebook inside and out." (1st, 15th, 25th, and 30th Students)

Facebook, which does not require its own installation, is readily available, and can be used much more quickly than alternative learning management systems. Numbers 11, 17, 5, 8, and 9 (Students)

"I can speak and express my thoughts freely through chat, and I enjoy doing so using emojis with my friends." (Number 13, 27, 35, 42, and 45)

Students' Struggles with Facebook Groups as a Distance Learning Tool and Replacement for the Status

7. CONCLUSION

Using Facebook's Group function during the epidemic was found to significantly boost students' academic achievement, therefore this conclusion was drawn from the study's findings. Even though they have trouble using it, students agree that the aforementioned social media can be used effectively in the classroom, according to qualitative data. Since students often utilise the platform, they have acquired expert knowledge of Facebook. In order to maximise the learning process and the transfer of learning using collaborative and asynchronous modalities on learning, schools, school administrators, parents, and teachers should address their demands prior to the exploitation of the aforementioned technology in teaching. Because of the time and money it takes to use Facebook in a virtual classroom, it is crucial for both students and teachers to know when to stop. In spite of the COVID-19 epidemic, schools should still confront the limitations and concern caused by the New Normal Teaching, as students and teachers alike are still motivated to achieve compliance with the remaining skills.

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