Online Education Effect on Learning

Pratiksha Balwant Gade
University of Mumbai Institute of Distance &
Open Learning (IDOL), Information Technology, University of Mumbai

Abstract:- **The study explores the effect of online education on university level learning.online education enables through online communication. The objective of this study was to explore the effect of online education and to analyze the online education on students academic learning.this study enlightment how the online learning bring out effect for students achievements. 20 students as participant in this study.The descriptive qualitative was used as method of the study. Based on the result of questionnaire 80% of online learning is interesting for students. 65% of students answer that online learning class are easier that regular class and 5% answer not. 85% of students always prepare their learning with taking notes or record it. 90% of students answer online learning practical for them.When talking about the time of online learning 7% of students feel disturb and hurry but 70% are not. 75% of students ask that online learning is cheaper than they should go to class, because they need to pay for bus fare, lunch, clothes etc. 68% of students always join discussion along the online learning. 75% of students feel more confidence joining online learning can improve high quality of learning. And 70% of the teacher always accommodate their students in learning. They teacher also give them feedback after they send their assignment and more of the students feel more confidence with online learning. In summary, online learning provide students practical and flexible way in learning, it also make them more creative and active, online learning give them some benefit in learning.**

Keywords:-*Online learning, effect of online learnig, information and technology.*

I. INTRODUCTION

Education is the back-bone of a nation as well as a key to the progress of a country. In this technological era, education is inadequate with the offline because online also leads one of the vital roles in studying. At present time, it goes without saying that the education system has significantly changed since last year the crisis period COVID-19 pandemic. While a good number of positives can be obtained from the new teaching process, having some dark sides it cannot be denied. Education can become transformative when teachers when teachers and students synthesize information across subjects and experiences, critically weigh significantly different perspectives, and incorporate various inquiries. Educators are able to construct such possibilities by fostering critical learning spaces, in which students are encouraged to increase their capacities of analysis, imagination, critical synthesis, creative expression, self-awarness, and intentionality. A byproduct of fostering such new approaches has been the creation of online courses developed in the United States and worldwide at exponential speed. It is becoming increasingly common at many higher education institutions, offering fully online and /hybrid/blended courses combining online instruction with face-to-face teaching.Online learning is form of distance learning or distance education, which has long been a part of the American education system, and it has become the largest sector of distance learning in recent years (Bartley & Golek, 2004; Evans & Haase, 2001). Online learning become most popular form of distance education today. In this study explore about students experience of online learning and how it bring advantages or disadvantages for them. As in Steamarticle explain that online learning which often referred as e-learning is one of the type of distance learning where the teacher and learner can place anywhere.Another benefit of using online learning is that here is a need to explore new teaching strategies and principles that positively influence distance education, as traditional learning methods are becoming less effective at engaging students in the learning process. Finally, e-learning can solve many of the students learning issues in a conventional learning environment, as it helps them to attend classes for various resons, as it has made the communication/interaction between them and their instructors much easier

II. ONLINE LEARNING EXPERIENCE

There are many motives behind the emplementation of the online learning experience. The online learning is mandatory nowadays to all audience due to COVID-19 pandemic, which forced the higher educational authorities to start the online teaching. We believe that we reached a tipping point where making changes to the current learning process is inevitable for many resons. Today learners have instant access to information through online learning. As a result, traditional teaching and learning methods are becoming less effectiove at engaging students, who no longer rely exclusively on the teacher as the only source of knowledge. Indeed, 90% of the respondents use internet as their major source of information. So the teacher is new role is to be a learning facilitor, a guide for his students locate information, but more importantly question it and reflect upon it and formulate an opinion about it. Another reson for the adoption of the online learning is that higher institution did not hesitate one moment to intergrate it as a primary tool of education. So, it transformed the conventional course and current learning process into e-learning concept. The integration of the online teaching into the curriculum resulted in several issues to instructors, starting from the infrastructure to online teaching and assessment. Does the current IT infrastructure support thes integration?What is the direct effect of the online learning on students performance?.

With reference to the survey findings, the majority of students were among the staunch supporters of online learning taking into consideration the imposed COVID – 19 lockdown circumstances, as they expressed their full support and confidence in computer skills to share digital content, using online learning and collaboration platforms with their peers, and expressed their satisfaction with the support of the online teaching and learnig

However, a small percentage of the survey respondents, expressed their below average satisfaction when higher educational institutons have invested in digital literacy and infrastructure, as they believe they should provide more flexible delivery methods, digital platforms and modernized user-friendly curricula to both students and teachers. On the same lines, the higher education aurthorities regard the quick and unexpected development of the UAE's higher education landscape, ICT infrastructure, and advanced online learning methods, imposed by COVID – 19, have had a tremendous adverse impact on the students culture thus leading to students social seclusion from their peers, imposing new social norms and behaviour regarding plagiarism, affecting students cultural ethics and learning and collaboration with their peers, when adopting the digital culture.

We recommend that all these questions should be taken into consideration when designing a new course i.e. the e-learning strategies, the learners and instructors new roles, course content and pedagogy and students performance /achievement assessment (Figure 1). In this experience, we focus only on the implementation of new learning academic objectives how the are infused into the curriculum and how they are assessed. The ultimate objective of implementing a new learning process is to design a curriculum coveyed by a creative pedagogy and oriented towards the cultivation of a creative person yearning for the exploration of new ideas. The afore – mentioned objectives lead to design a comprehensive learning experience with new learning outcomes where instructors infuse new practical skills – critical thinking and problem – solving Tasks, Creativity and Innovation, Communication and Collaboration. Other skills are implicitly infused into the curriculum such as, self – independent learning, interdependence, lifelong learning, flexibility, adaptability, and assuming academic learning responsibilities. Online learning is defined as virtual learning using mobile and wireless computing technologies in a way to promote learners lerning abilities. In (Figure -2), each component of the e – learning process is defined clearly below.
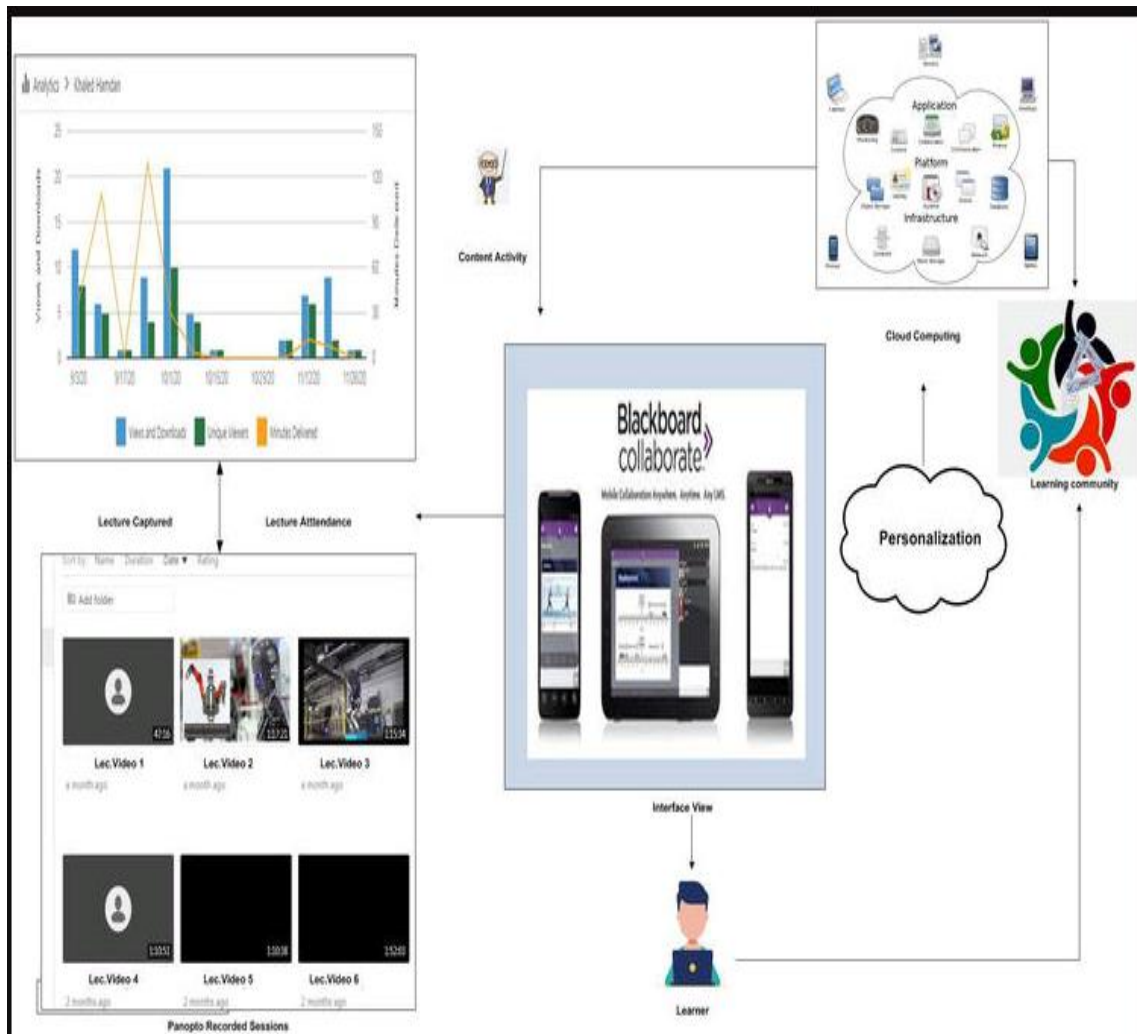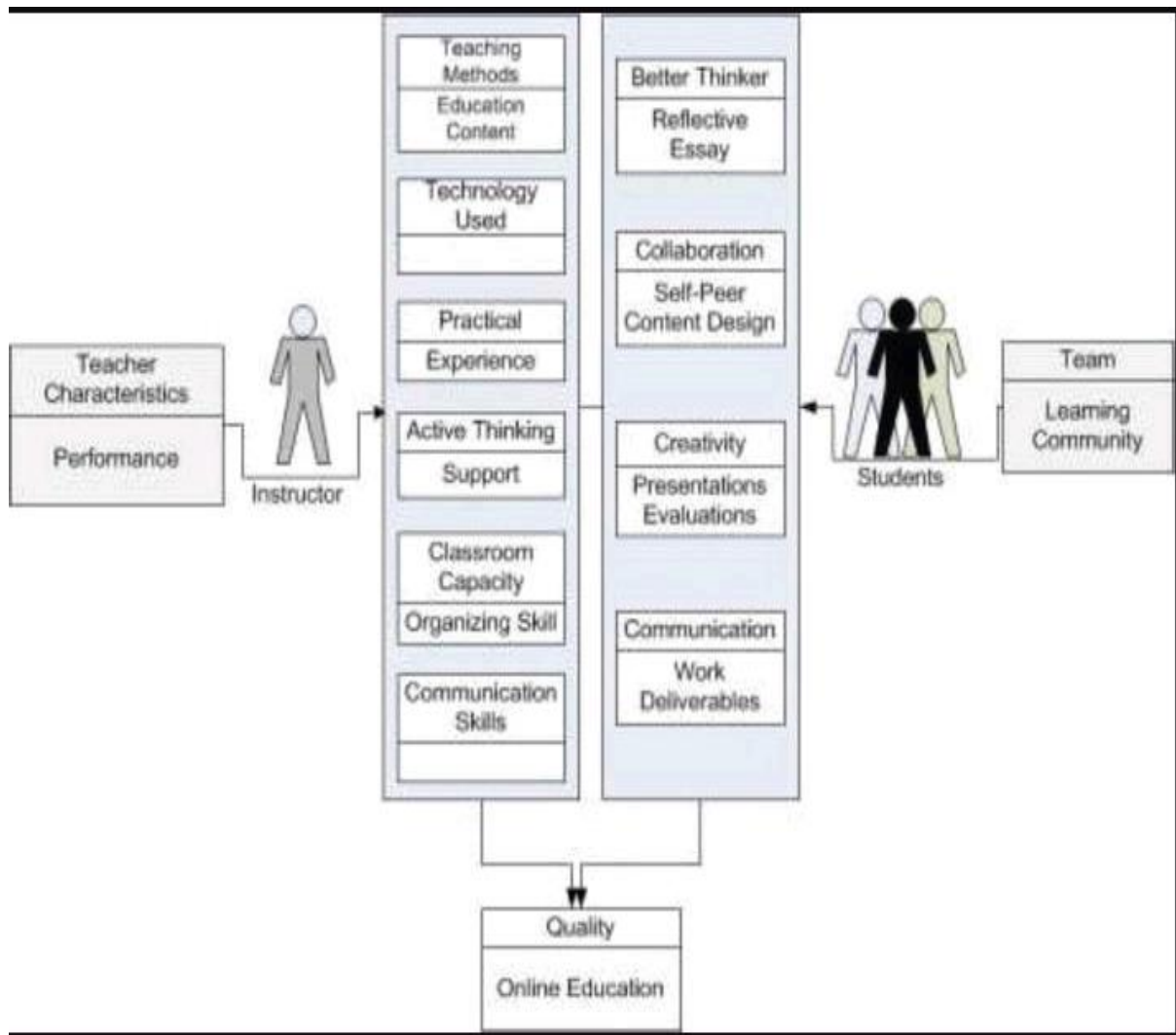

Fig. 1: E-learning approach

Fig. 2: E-Learning Process

III. METHOD

We studied the impact of online learning using technology in virtual classromms and the effect of performance factors on students learning behaviour and achievement. The study focused on a sample of 6045 students, collected from the enrolment of University College students in spring 2020, at United Arab Emirates University has used online teaching strategy in comparison to fall 2019 teaching/learning experience, which used conventional teaching strategy involving 7369 students (See Table 1). The study shows the learning outcomes are similar for both virtual and conventional learning, although the assessment methods are different. They include students learning outcomes assessment, testing (assessing prior and post knowledge acquisition) and quantitative versus conventional research. The findings of the survey are discussed below. Descriptive statistics were obtained to summarize the sample characteristics and performance variables. Pearson Correlation was used to evaluate the association between the learning outcomes dimensions. Independent Samples t – test was used to compare the mean overall performance of the online learning. Linear Regression was used to determine the impact of the learning characteristics (Critical thinking, Creativity, Communication and Collaboration) on the overall performance score. Factor Analysis was used to study the inter – relationships among the learning characteristics and compare the online methods.

Term	Pass	Not Pass	Total
Fall 2019 (FOF)	6839	530	7369
Spring 2020 (OLA)	5488	557	6045

Table 1: Students population

The objectives of the learning process consist of providing a diversified learning environment. The positive effect of this diversity is reflected in the students performance. Students in various represented colleges have similar passing grades as high (80 – 98%) for both Online approach (OLA) and conventional learning Face – to – face. The University College is the largest college in the University with more than 4000 students. Most of UAEU stuents start their study in UC ; they take English, Arabic, IT and Math (Figure 3).
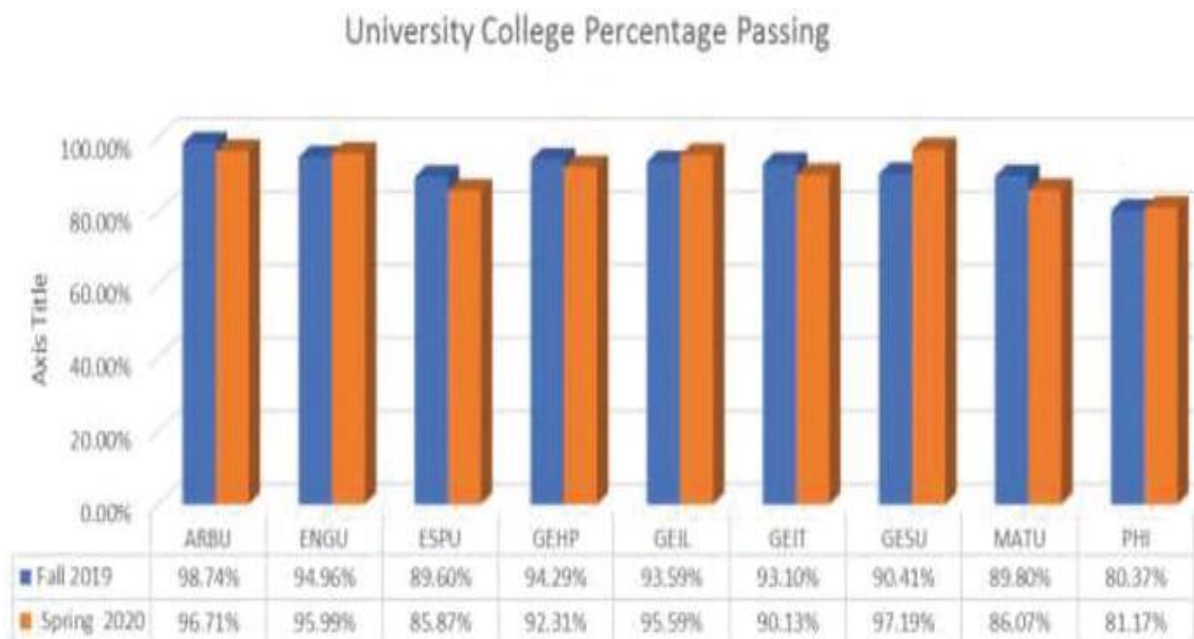

Fig. 3: University college percentage passing rate

	ARBU	ENGU	ESPU	GEHP	GEIL	GEIT	GESU	MATU	PHI
■ Fall 2019	98.74%	94.96%	89.60%	94.29%	93.59%	93.10%	90.41%	89.80%	80.37%
■ Spring 2020	96.71%	95.99%	85.87%	92.31%	95.59%	90.13%	97.19%	86.07%	81.17%

This study was limited to GEIL101 foundation students. Surveys were sent out to all information literacy sections at the end of the first semester 2019/2020, but there were only 87 respondents. The survey had 2 parts, one part is about students achievement/performance, and the secong part use is about online learnig in a virtual classroom. All sessions were conducted online by trained instructors in tandem with the University library delivered by professional librarians. In this report, fall 2019 students data are used as the sample for the study (Table 2).

Course title	GEIL101 Information Literacy	Cohort:	Fall 2019
Total number of students	930	Passing	889
Average class size	30	Average grade	95.59%

Table 2: GEIL students

Overall, the results indicate the online learning was beneficial for students as is shown in their academic achievements and in tables below. A significant number of students reported high comfort levels of attending online courses in virtual classroom instead of conventional learning. Results indicated students have a positive reception to online approach rather than traditional classrooms. Additionally, qualitative data identified a clearconsiderations for the integration of new technology into the new teaching and learning experence.

IV. RESULT

Table 3 shows the IL students pre and post tests performance. The analysis on the pre and post – tests, using the means comparison and one sample test, shows an increase of students performance by 84%, the mean of the pre – test is around 7.5 and the post test is 13.85, a significant difference of 6.35.65% of students score above 60% (passing rate for the course) in the post – test, only 2.4% of students scored above 60% in the pre – test. This means that 97.6% of students did not have basic information literacy knowledge, but after going through intensive 12 week learning under e – learning conditions, 65% achieved the course outcomes with higher score.

Aspect	%Yes
Operational Skills	89%
Use of Technology	90%
Communications Skills	69%
Problem Solving	69%
Formulate Critical opinion	79%
Evaluate information	84%
Collaboration	88%
Sharing findings and ideas	86%
Taking academic responsibilities	88%

Table 3: Students academic performance

The following tables (Tables 3 and 4) shows the students performance by each learning activity :

Item		Participation Engagement (5%)	Individual Presentation (5%)	Reflective Essay (5%)	Quizzes (10%)	Midterm (20%)	Final (20%)
Average		4.61	4.42	4.04	8.85	14.60	12.90
Students	Total						
FoF	796	4.59	4.44	4.02	8.83	14.19	12.44
OLA	930	4.64	4.33	4.12	8.94	16.43	14.78

Table 4: Students learning activity

The scores in the post – test ranged between 11 and 20, whereas it ranged between 6 to 9 in the pre – test (Figure 5).
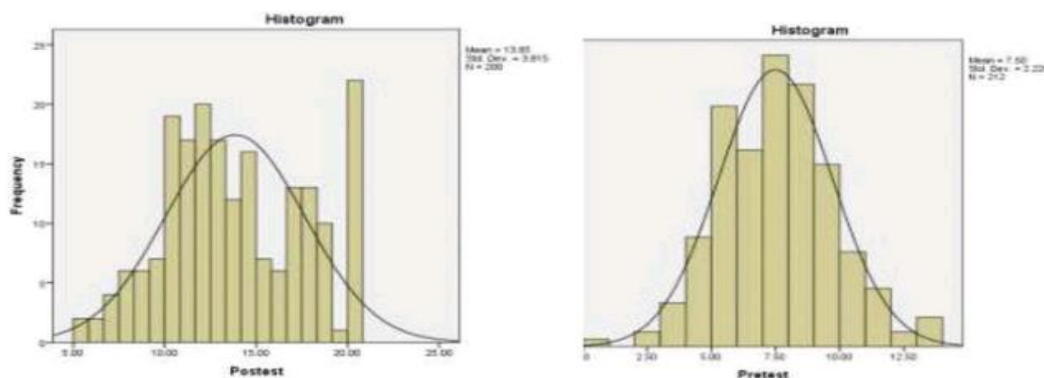

Fig. 4: Pre and post – tests comparison distribution

The abouve results show that OLA students scored higher than the FOF in the majority of the learning activities. There is and important performance of online students in the midterm and final exams though both approaches where offered the similar assessments criteria under the same test conditions. In the next section, the online learning process validity, the online learning activities, and the learning outcome achievements, will be discussed in greater details. Several statistical models, qualitative and quantitative analysis have been applied for this purpose.

V.   CONCLUSIONS AND DISCUSSION

Considering the developments during the pandemics, it is thought that the diversity in online education applications as an interdisciplinary pragmatist field will increase, and the learning content and process will be enriched with the integration of new technologies into online education processes. Another prediction is that more flexible and accessible learning opportunities will be created in online education processes, and in this way, lifelong learning processes will be strengthened. As a result, it is predicted that in the near future, online education and even digital learning with a newer name will turn into the main ground of education instead of being an alternative or having a support function in face – to – face learning. The lessons learned from the early period online learning experience, which was passed with rapid adaptation due to the COVID – 19 epidemic, will serve to develop this method all over the world, and in the near future, online learning will become the contribution of new technologies and systems. If we look at it from this point of view, there is a necessity to strengthen online education.

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