

ANALYTICAL STUDY ON ONLINE ACTIVITY BASED LEARNING IN COLLEGE STUDENTS

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ABSTRACT

Introduction: Online activity based learning or the distance learning is the current and favoured form of education network. Within the past decade, it had a marked influence on higher secondary students, college students' part time working students. There has been a drastic shift from the past to the current scenario and the vogue is still shooting up. **Aim:** The aim of this study is to know about the online activity based learning engages the students who are unable to throw oneself into conventional classroom learning. **Materials and Method:** The pivot of this study concentrates on the effective online based learning by a group of students from the age group of 19 – 20 years of Saveetha Dental College (26 students) over a time period of 1 week. The method incorporated was that of a combination of both online and live teaching where video calling apps were used and the session was conducted. **Results:** The results were obtained based on the study conducted through a questionnaire consisting of 11 questions distributed to a set of 26 questions and the results were cumulated using a doughnut chart which divulges that majority of the students are interested in online activity based learning activity than in conventional classroom learning. **Conclusion:** This study can be concluded by saying that majority of the children experienced a shift from conventional classroom learning to online activity based learning which turned out to be positive.

KEYWORDS: Online activity based learning, distance learning, classroom learning.

INTRODUCTION

Distance based learning have exhibited a momentous shift from monotonous teaching system to a collective platform, wherein, both students and teachers are given tasks. This course of action have refined the dexterity and apprehension of the young minds. Online activity based learning which are rather more enthralling for students have thus, evolved as an objective for training. The strategies incorporated in students are far more of an interactive and collaborative perspective, wherein, both the learners and the instructors conceive the learning process which involves the "guide on the side" methodology rather than "sage on the stage".^[1] It reveals enhanced learning along with profundity in understanding and retention of the course constituents, consequential discussions, accentuation to writing ability, mastering the automated skills, and also mastery in time management, self-discipline etc. The playing field of online learning have revamped the energy of shy students because of the anonymity in the online environment, thriving their scores in the learning process. Interaction oriented in this line of edification is active learning rather than passive learning. A facilitator role comes into play in compiling the activities and engaging the students or the trainees rather than tedious dull lectures and memorisation.^[2] Providing training and

tools for ePedagogy is a way to build confidence and create successful outcomes in the online classroom.^[3] A new market source of reaching out to students without much of campus infrastructure, congestions in a classroom, all can be eliminated with this advanced mode of edification.

There had been many coherent or logical ways of online learning experimented on students, out of which the online-activity based have been emerged to be the unrivalled. An empirical study was performed by Lim et al in 2008 comprising of researchers who conducted the study in 3 different modes namely: traditional face-to-face learning, online activity based learning and a combination of both. 153 students participated in the survey and the results were cumulated as those who participated in the online activity based learning and combining both traditional and online learning methods proved to have statistically significant scores than those who participated in traditional methods.^[1] An experimental study was carried out in the year 2015 by a group of researchers to learn the impact of video based learning in postgraduate students in biostatistics of Saveetha University. Results of this experimental study have been proven to express that there has been no significant change in altogether academic

accomplishment of the students in both test and control groups.^[4] Another study comprising of two experiments with two pairs of student groups were conducted in two semesters. T-test comparison analysis was performed in order to examine the differences of mean scores between two treatments. Results showed that there are no statistically significant differences in all measurements.^[5]

E-learning which has evolved through all these years have definitely a surprising effect on students worldwide. Students across the globe have definitely opted to this kind of learning to improve their knowledge and also for better opportunities in their field of study. The traditional system is irreplaceable, no doubt, however the virtual classroom is a significant part and a central player in today's educational group rather community. The market for this type of learning is expanding and so are the demands from the students. Activity based learning, video incorporation in distance based learning etc. are some of the methods that have been amalgamated in my study. Rather than, online games, activity was given to students which were to be completed in a limited time. Quiz, assignment, video based learning (topics distributed among students and their videos submitted a day prior to their scheduled online classes) were all integrated in my class of 6 hours. The aim of this study was to inculcate more of activities rather than online games used in learning, which is why I chose to pen and paper test, mind mapping or concept maps prepared by students using pen and paper, also, the video consisted of students having their notes handwritten for presenting during the scheduled online class [figure 3 and 4]. These type of classes which included more of activities with pen and paper inspite being a distance education process, rather than online games have been more of self discipline and also an appropriate way to have continuation with the topics covered. Students have been inculcating this online activity based since the start of this curriculum but have been not efficiently trained to do so on a daily basis and as a routine work.

“Guide on the side” should be practiced as a routine rather than just activating the policy once in a while. The

Some of the concept maps included are:

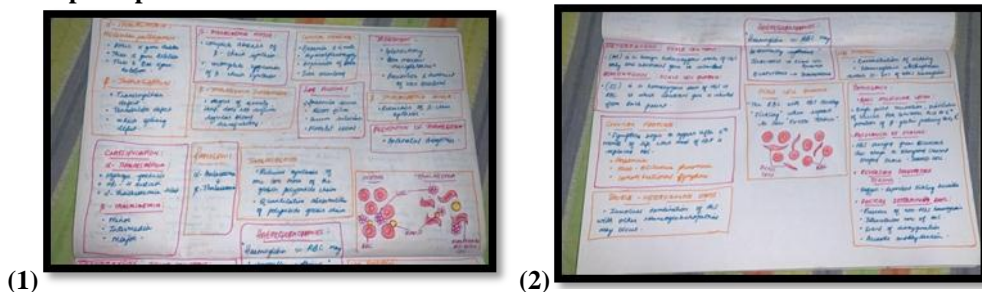


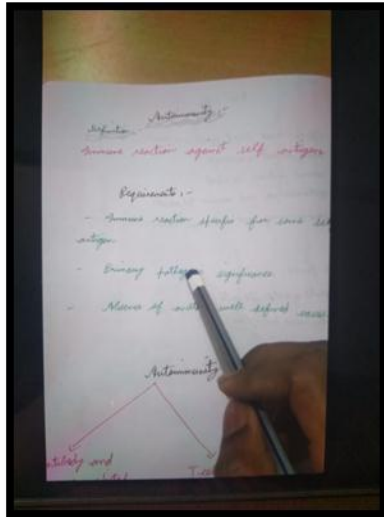
Figure 1 and 2: Depicting the concept maps written using pen and paper.

aim of my study in this research is to enhance the online activity based learning in students of age group 19-20 years maintaining the conventional pen and paper modus operandi but at the same time, metamorphose through online activities. This study has been conducted for over a period of 1 week in college students. The study has been conducted for 7 long hours with an hour of break for their indispensable needs. The basis of my study is to cultivate the students to eliminate the longhand notes to assimilate diagrams, videos to their material of study. The chosen age group has been tuned in so that the aptitude of this current community can be utilised for betterment in future. The videos that have been embodied consist of notes which are handwritten by the students and explained to other fellowmates for easy understanding. The concept maps [figure 1 and 2] encompasses their work with pen and paper in winsome flowcharts so as there is no need for them to memorize the concept or the subject. Tests have also been conducted at the end of each session to ensure that students have fully understood the concept that has been explained or not.

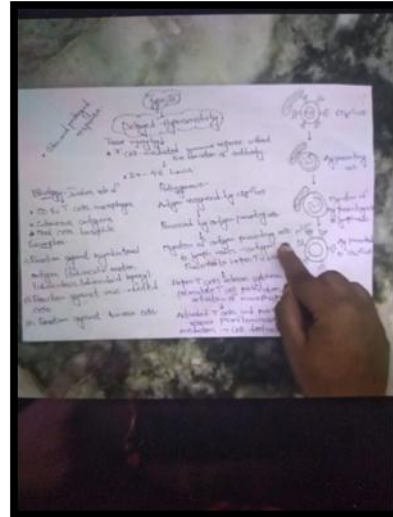
MATERIALS AND METHODS

This cross-sectional study has been focussed on IInd year students (26 in no.) of Saveetha Dental College, Chennai for over a period of 1 week wherein they were accustomed to attend their classes through online and also through live teaching. The live teaching were incorporated through various video calling apps such as, Google meet, Google Duo [figure 6,7,8] etc. wherein each student will be asked to present a specific portion of the topic and were awarded marks accordingly. There were concept maps given to the students which were pen and paper based (attached below), also incorporation of periodic tests in the form of quiz (for which an app called Kahoot [figure 10]^[6] was used). A captivating animated movie were also given to the students so as to make learning more easier even in distance learning. The animated movie was created using Vyond [figure 9]^[7] animations where the voices to the movie was given by me.

Some video presentation screenshots are



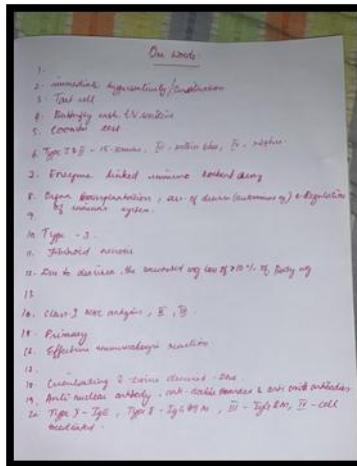
(3)



(4)

Figure 3 and 4: Depicting the video presentation.

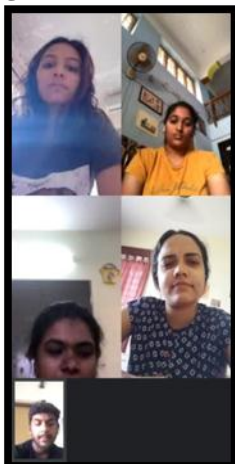
A sample picture of the pen and paper test conducted:



(5)

Figure 5: Depicting the sample test paper using pen and paper method.

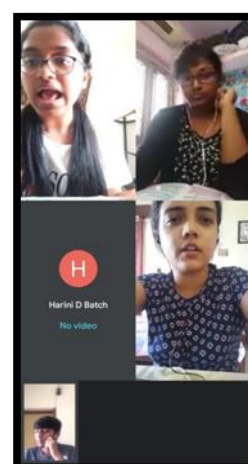
Sample Video Calling Screenshot



(6)



(7)



(8)

Figure 6, 7 and 8: Depicts the sample video calling screenshots taken during the class presentation while explaining the topic assigned for the respective day.



(9)

Figure 9: This is the screenshot of the animated movies given to students done by me to study a topic named: Hypersensitivity.

Tissue repair and regeneration - Report
 Hosted by: dtanjali_path2020, 01 Apr 2020

This challenge is active Deadline: 0d - 3h - 49m

Invite players by sharing the link or PIN

Challenge link: <https://kahoot.it/chal...> **Copy** Or Challenge PIN: **0628342** **Copy**

Share directly on: Google Classroom, Remind, Microsoft Teams

Players (12) **Top 5**

Rank	Nickname	Accuracy	Final score
1	Jeyashree	74%	19550
2	Sowbaraniya	57%	16284
3	Ashwin	57%	15188
4	Vaishu	61%	14515
5	Deepika	57%	14486
6	Rinki	52%	13475
7	Arunn	48%	12901
8	Rajasri	52%	12609
9	Blessy	48%	12421
10	Kowshihan	43%	10211
11	Kaviya	35%	8128
12	Sharmila	30%	7185

[Show less \(5\)](#)

(10)

Figure 10: The quiz conducted through Kahoot displays the correct answers of each students like illustrated below.

RESULTS AND DISCUSSIONS

The results were cumulated using a questionnaire consisting of 11 questions distributed to a set of 26 students aged 19-20 years from Saveetha Dental College

after observing them for a time period of 1 week. The results have been then penned down using a doughnut chart for better and easier understanding.

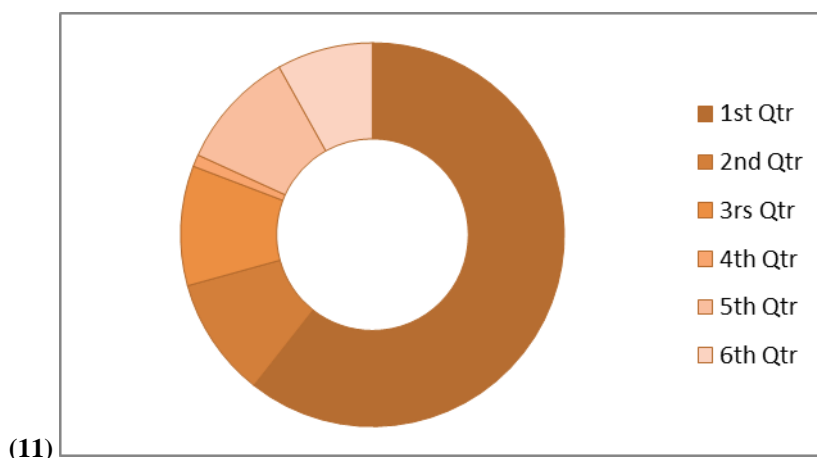


Figure 11: This chart reveals that:

This chart reveals that

- 61% --- of the students said the class was interactive and easy to learn than the conventional one. The method incorporated to learn included concept maps or mind maps, video presentation by the students, and quiz at the end based on the topics assigned to each one of them.
- 10% --- of the students felt that the class was tiring and needed more of breaks rather than continuous 3 hours and then an hour of break followed by another 3 hours at a stretch.
- 10% --- this group of students felt very uncomfortable sitting in front of the gadget, or any electronic devices made their eyes itchy and reddened. Thus felt that online classes again should be given breaks in between or else the conventional classroom method should be followed with this online based activity as an adjunct.
- 10% --- This strata of students preferred the conventional pen- paper method inspite of having online classes as that have diverted their eye off the screen of laptop, ipad, mobiles or any other electronic gadgets.
- 9% --- Only 9% of the students preferred online games over the traditional pen – paper method during online activity based learning as they felt that games would make them learn easier, faster and with clarity.
- 1% ---- These were the set of students who completely preferred the conventional classroom setup over the online based activity learning, as they felt that sage on the stage strategy is ideal and the hallmark in learning process.

CONCLUSION

Thus the study can be concluded by saying that majority of the students are interested in online activity based learning rather than the conventional classroom learning method and have shown a snowball effect.

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