



A STUDY ON ONLINE TEACHING AND EVALUATION OF STUDENTS' PERSPECTIVE IN INDIA

Dr. T. Vidyullatha, Assistant Professor, Dept of English, School of Technology (GITAM deemed to be University), Bangalore, India. vtata@gitam.edu

Rohit Sood, Assistant Professor, Mittal School of Business, Lovely Professional University, Phagwara, India sd84rohit@gmail.com

SAS Phani Kumar, Assistant Professor, Vignan's Lara Institute of Technology & Science, Vadlamudi, Guntur, India. sivas393@gmail.com

Dr. Marimuthu KN, Assistant Professor, Dept. of Management Studies, Manonmaniam Sundaranar University, Abishekapatti, Tirunelveli, Tamilnadu, India. marimuthu@msuniv.ac.in

Boppudi Swanth, Assistant Professor, Vikas Group of Institutions, Nunna, India. swanth.72@gmail.com

Dr. S. DurgaSasiKiran, Associate Professor, Dept of English, School of Technology (GITAM deemed to be University), Bangalore, India. ssaripal@gitam.edu

Abstract- E-learning utilized in educational approach is synchronous and asynchronous. Synchronous learning occurs in real time live instructions with teacher & student participants interacting & exchanging ideas at an equivalent time. Synchronous e-learning - teacher conducts classes over the web. The synchronous technology allows people to interact with peers and experts within the virtual class room. A virtual classroom duplicates the capabilities found during a real classroom (Anne Dennon, 2020). Students and teachers use their computers to travel to a virtual forum rather than a classroom (Azzi&shmis, 2020). An inventory of student's attendance is recorded. Due to the pandemic covid-19, all the educational institutions, offices are dependent on online for teaching and to conduct meetings and conferences. During the quarantine period from March 2020 onwards, there were massive online classes for the students to complete the end semester. An online survey for the student community on the 13th of November 2020 was done; the responses were collected using a Google form. The questions asked in the study are related to the online classes and online exams. There is an impact on online teaching during the covid-19 with explained variables identified from the multiple regressions.

Key Words: E-Learning, online class, online exams & student satisfaction.

I. INTRODUCTION

Learning will inevitably transform all sorts of education and learning within the 21st century (Tori, 2010). Traditional educational institutions are not using e-learning. Enhancement of current practices will do better understanding. Broadly defined, e-learning is networked online learning that takes place during a formal content and uses various multimedia technologies (Shahzad et al., 2020). E-Learning pioneer Bernard Luskin (2001) explains as exciting, energetic, enthusiastic, emotional, extended & educational (Natl, 2020). At the core of the e-learning, transformation is that the internet. E-Learning is an open system with the facility of the web; teaching and learning became unfathomable amounts of data. This exposure may be a tremendously powerful attraction to teachers and learners. However, its engagement might not always be sufficient or efficient. The basal characteristic of e-learning extends beyond its admittance to content and builds on its abstraction and interactive features. This interactivity may be a method of transmitting content where the learner becomes isolated and features a lot of independence. This e-learning is going to be much useful for distance education and correspondence courses. Communication goes on multiple formats like the text to voice audio and video.

Due to the pandemic covid-19, all the educational institutions, offices are dependent on online for teaching and to conduct meetings and conferences. During the quarantine period from March 2020 onwards, there were massive online classes for the students to complete the end semester (Affounneh et.al, 2020). An online survey for the student community on the 13th of November 2020 was done; the responses were collected using a Google form. The questions asked in the study are related to the online classes and online exams. One hundred and fourteen students from different branches of the various institutions took part in the survey in all over India. Quantitative analyses with description are carried out and written. After five months, students who had taken online classes were taken for study to know the impact of online teaching-learning and examinations. The respondents responded in a positive way.

Technology differentiate shapes our experience and the way we see the planet. Definitely e-learning may be a tool which brings impact on education .One should have the ability to access and understand information i.e. ability to order and construct knowledge. The main target of pedagogy movement in the event of critical thinking and self oriented acquisition quality, which will suffice the individualist over a life time. The specified consequence of instruction must prepare students to be continuous learners. We believe that e-learning will definitely be the dominant technology in supporting new approaches to teaching and learning. E-learning utilized in educational approach is synchronous and asynchronous (Ayebi, 2020 & Baytiyeh, 2020). Synchronous learning occurs in real time live instructions with teacher & student participants interacting & exchanging ideas at an equivalent time. Synchronous e-learning - teacher conducts class with the help of web. The synchronal technology allows group to act with peers and experts within the virtual class room. A virtual classroom twinned the potentiality found during a real classroom. Students and teachers use their computers to travel to a virtual forum rather than a classroom. An inventory of student's attendance is recorded to deliver lectures, teachers can choose from a spread of synchronous technologies including slide presentation, audio and video conferencing, and application sharing and shared whiteboards.

Shared Whiteboards: A shared whiteboard lets a group of people communicate by typing comments drawing, highlighting and pointing. A shared whiteboard common feature within virtual classroom software packages (Vidyullatha, 2013).

Application Sharing: this will be difficult to demonstrate to remote learners the way to use software applications with application sharing. A teacher also can let the learner pay control of the appliance to practice performing tasks (Brianna et.al, 2019 & Vidyullatha, 2013).

Instant Messaging: this is often almost like chat where one person communicates to a different through typing. Instant messaging provides a list of people that you might like to chat with whether they are online/ offline/ available /busy. These features make instant messaging a superb tool for learning from peers (Vidyullatha, 2013).

Purpose of the study

The purpose of the study is to know about the online teaching and evaluation system for the students of engineering and management at the institutional level. Apart from the self/peer review during continuous evaluation in the class, a final module evaluation at the end of each module is tested online. This pattern was followed for all the five modules designed for all the courses. As a part of continuous evaluation Online course from Coursera was adopted by University to enhance more skills in each subject, along with this they have to submit assignments too.

Background of the Study

Flipped class with audio visual aids teaching is carried out. Zoom is used as a flat form for online classes. Screen sharing will be given to students to show their practice exercises. Peer review and faculty review will be done. Internal assessment will be done for forty marks, which will be segregated into five modules testing for thirty marks each module comprising the questions of easy level ten MCQ's of one mark each and difficult level ten MCQ's of two marks each with total of thirty marks. It will be uploaded on LMS (Learning Management System) for testing the quiz. Rest of the twenty marks will be tested as five assignments for ten marks and online Coursera course for a four week certificate course for ten marks will be taken for assessment. Sixty marks will be assessed for end semester exam through co-cubes flat form both descriptive and quiz questions are taken for assessment with duration of three hours. These online exams were monitored by the faculty on the screen. There were a few problems arises if there is a lack of proper internet connection, like the student is unable to submit exam at the end. There is minimum grace time to extend time for the faculty to help student to submit the final sheet.

II. REVIEW OF LITERATURE

The majority of the world slowly underwent quarantine with the advent of the outbreak of the global pandemic Covid-19, and therefore, many cities have turned into phantom cities, and its effects can be seen in schools, colleges, and universities too (Ayebi,2017). E-Learning became a panacea for all educational institutions, such as school to college and university level. Even the practical classes too were taken in virtual mode. With the advent of covid-19, there was a large change in the educational institutions to undergo e-learning. In this pandemic situation, all the institutions, which were earlier reluctant to change and accept E-Learning technology (Azzi&Shmis, 2020). This adversity will pretense us the profitable

broadside of online education. E-Learning helped to a greater extent to all sorts of educational institutions without taking a break to complete the academic year (Shahzad et al, 2020). It is time for all educational organizations to have different options of e-learning, pedagogical approaches and use technology in a better way (Dhawan, 2020). The current situation made us think to go for digitization to meet the needs of the pupils. With the advent of this online learning, pupils were in chaos. Eventually, there exists the need for quality improvement of online teaching-learning became pivotal at this stage. To a greater extent, online education in universities has increased than before because of the pandemic situation Covid-19. The entire pedagogical approaches were changed to make students understand in a better way and concentrate for a longer time in the classes meet the deadline of completing the course in the stipulated time (Zang, et al 2020).

Impedance to consequence will not assist any instructive component across the world. Learners will be decided on their rate to accommodate the consequence in a momentary period and their ability to hold up the attribute. The reputation of educational units is at stake and under scrutiny. How well listener behaves and how well experts maintain their quality of education amidst this juncture shows to accommodate potentiality. The shift from regular class lectures to online classes is the only possible solution. Indeed, academic institutions would not be able to transform all of their college curricula into online resources overnight (Brianna et al.,2019). There are many challenges to overcome and meet the needs of an average, fast learner. Modern methods by the organization can solitary assist us in understanding this epidemic (Liguori & Winkler, 2020). There are various tools to be used online on the Google flat forms such as Google meet, Google Hangouts, Google classrooms. In addition, other platforms such as; Moodle, LMS (Learning Management system) Cisco, WebEx, which helps to a greater extent to meet the requirements (Basilaia et al, 2020).

Problem of the study

Due to the pandemic covid-19, all the educational institutions, offices are dependent on online for teaching and to conduct meetings and conferences, etc. During the quarantine from March 2020 onwards, there were massive online classes for the students to complete the end semester portion as well as exam. None of the students can't move either there institutions or to stay in hostel for completion of the syllabus and exam were found as problem during the pandemic (Dhawan 2020 & Liguori, 2020). As per the UGC, AICTE & HRDC ministry regulations, started to take class through online platforms at several colleges, universities and other higher educational institutions also.

Objectives of the Study

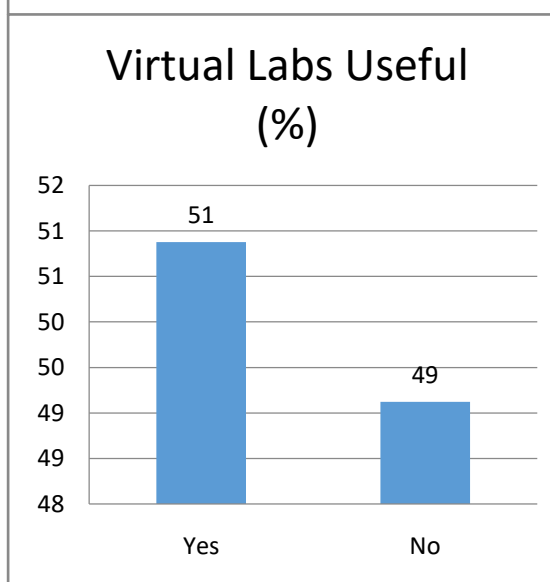
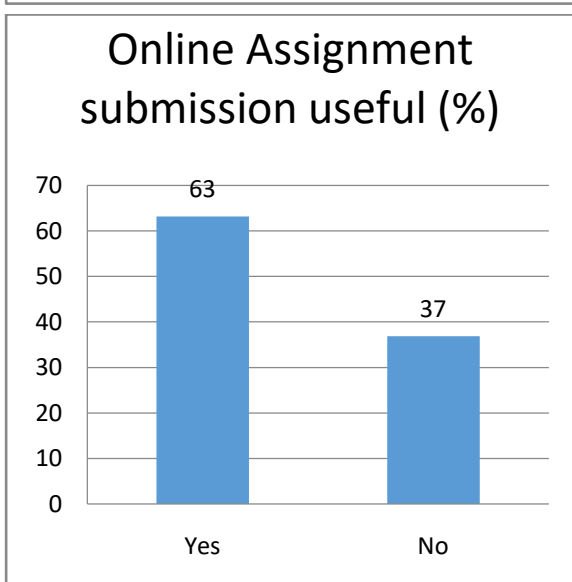
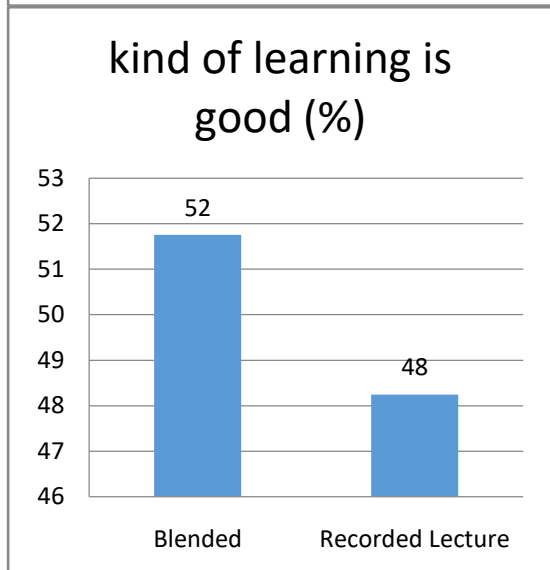
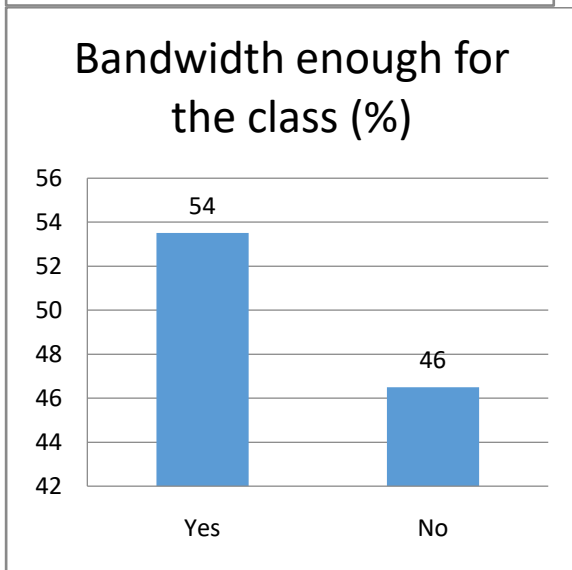
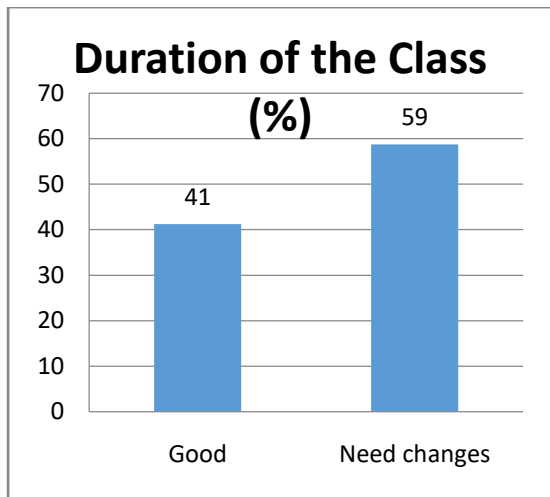
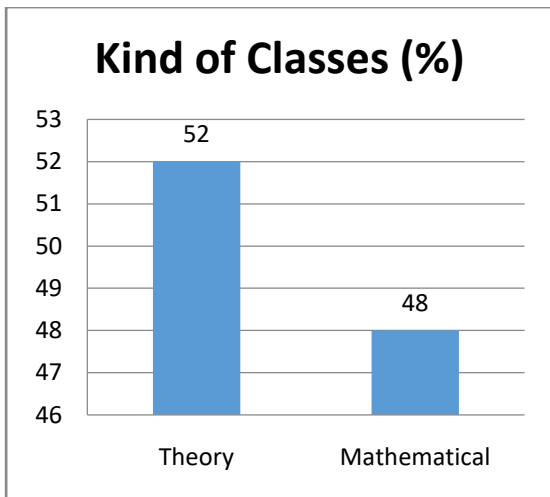
- To find out the Impact of online teaching and learning methods of college students
- To study the impact of online evaluation pattern and performance of college students

III. METHODOLOGY

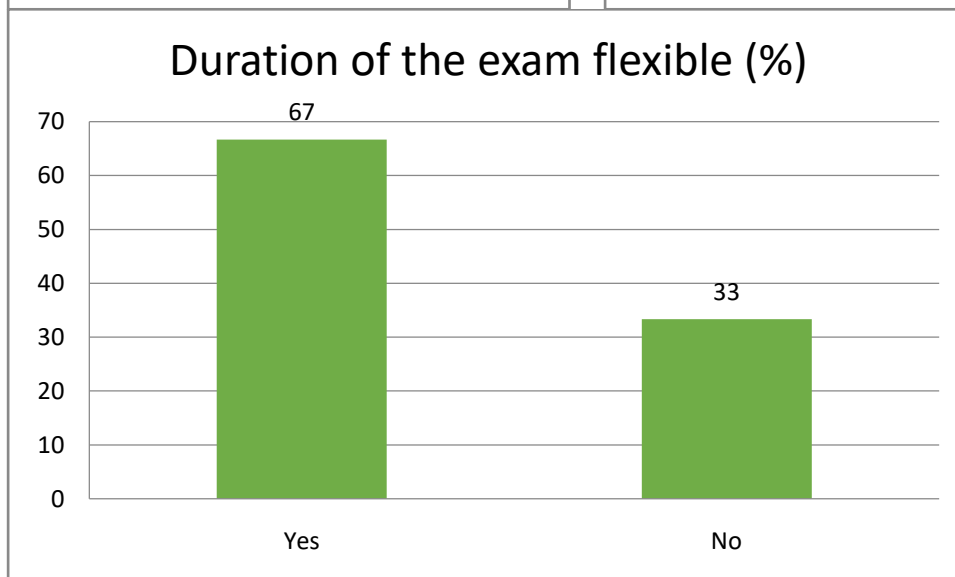
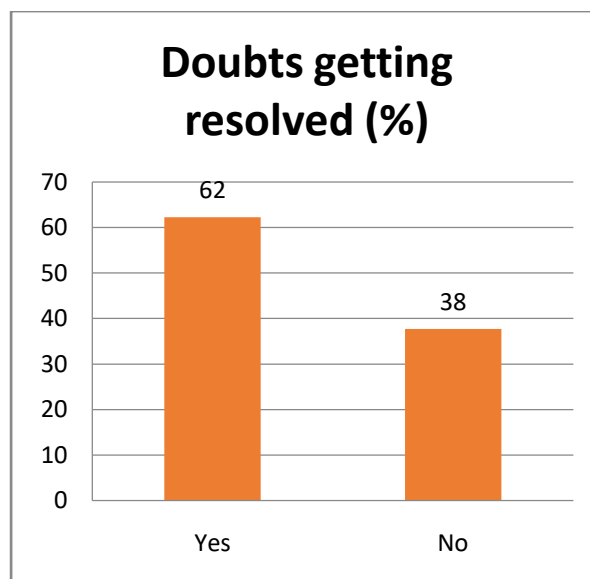
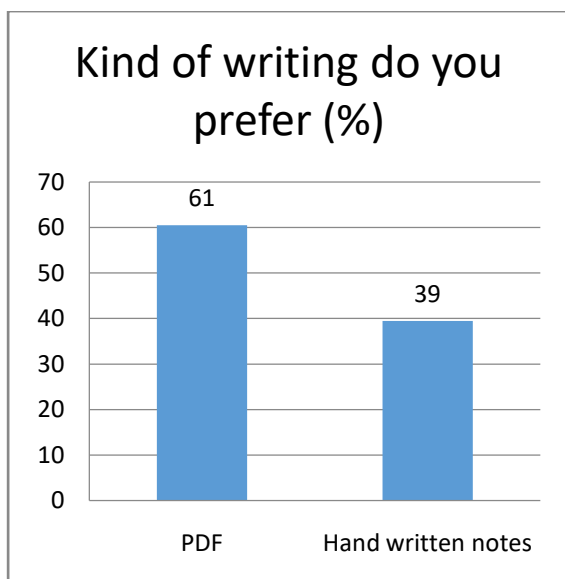
This study is basically qualitative analysis using the convenience sampling method. The required data is collected through online using Google forms. This study is used 114 UG students of engineering and management at the institutional level. The data is collected in the month of November 2020 and it also checked the reliable test before the analysis.

Analysis and Interpretation:

A set of questionnaires was framed and posted to the students on the Google platform. Students were asked about either a theory or a practical class is better to learn online. Most of them responded that theory class is easy and practical to understand. 52% answered that theory, and 48% said it was a practical session. The duration of the class is 50 minutes for a theory, and the lab is for two hours. Out of that, 41% agreed, and 59% denied about the timings for changes.



It is very difficult to be online for a longer time. Students were asked about the bandwidth is sufficient to carry with online classes. 54% agreed and 46% denied due to interruptions and failure in power.



Either a blended or a recorded lecture is better- responded that, 52% likes to have blended learning and 48% likes to have a recorded lecture. Regarding the submission of online assignments useful or not: 63% said it's useful, and 37% said not useful. Students were asked to rate the virtual labs: 51% said useful to them and 49% not useful.

The research result shows that, 51% are unable to follow. It is not the same as every student. The capacity of imbibing knowledge differs from pupil to pupil. Pupils with high IQ grasps very fast in online class when compared to a slow learner. In a regular class teacher pays much attention on slow learners and encourages peer learning to enhance the skills of average and slow learners. What sort of material, either PDF or hand wrote notes to upload for the students in the LMS: 61% likes to have PDF and 39% likes to have handwritten notes.

The important thing in online teaching is whether the students are able to resolve the doubts from the faculty: 62% of the pupils are able to get resolved doubts, but 38% are unable to do. Most of the students who are inactive will face problems.

At the end of each module teaching, pupils were tested using the online quiz method with MCQs. students were asked whether the duration of time, i.e., 30mts, is sufficient to do the exam: 67% said yes, and 33% said no. It is possible only to complete the test when they prepare well.

Impact factors of online teaching on Students Satisfaction:

From the various review of literature researcher identified few variables which are notified to impact on student's perception. High benefit is fee structure changes and most of the institutions were asked to pay less amount due to online class there is no need for tuition fee etc. research is also identified few other

factors were dominating such as; network, proper connectivity, interruption, voice audible and video visible, mike response, doubt clearance, face to face interaction, subject syllabus coverage, time etc in online class raised question using five point scale.

Model Summary					Durbin-Watson
Model	R	R-Square	Adjusted R Square	Std. Error of the Estimate	
1	.516 ^a	.266	.195	.845	2.013

a. Predictors: (Constant) All other Independent Variables.
Dependent Variable: Student Satisfaction on Online Teaching

The R Square column represents the R² Value (Coefficient of variation), which is the proportion of variance in the dependent variable that can be explained by the independent variables (technically, it is the proportion of variation accounted for by the regression model above and beyond the mean model). Here R-Square value of 0.266 (explained variable) that independent variables explain 26.6% of the variability of dependent variable. It means, all those independent variables are not impacting on online teaching of student's satisfaction. There are more than 73.4% of other hidden variables also impacting, which couldn't able to found from the research i.e; the unexplained variable.

ANOVA

Model	Sum of Square	Df	Mean Square	F	Sig.
Regression	29.639	10	2.664	3.735	.000 ^a
Residual	73.466	103	.713		
Total	100.105	113			

F-ratio (1.164) in the ANOVA table tests whether the overall regression model is a good fit for the data. The table shows that the independent variables statistically significantly predict the dependent variable, $F(10, 103) = 3.375$.

Unstandardized coefficients indicate how much the dependent variable varies with an independent variable when all other independent variables are held constant. Consider the effect of Video clarity (-.129), interruption from others (-.064) in this example. The unstandardised coefficient, network (0.564), Double Clearance (0.348), face-to-face interaction (0.316), continuous connectivity (0.297), time & exam (0.184), voice audible & syllabus coverage (.011) will impact positively on dependent variable with significant & non-significant respectively, means that for one unit change will impact on online teaching of student's satisfaction.

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.866	1.524		-1.225	.223
	NETWORK	.564	.138	.408	4.088	.000
	Continuous Connectivity	.297	.139	.199	2.128	.036
	interruption	-.064	.123	-.047	-.516	.607
	Voice Audible	.011	.098	.010	.114	.910
	Video Clarity	-.129	.148	-.082	-.876	.383
	Chat Query and Mike response	-.036	.123	-.026	-.290	.773
	Doubt Clearance	.348	.148	.231	2.354	.020
	Face-to-face interaction	.316	.108	.291	2.935	.004

Syllabus Coverage	.011	.095	.011	.114	.910
Time & Exam	.184	.082	.215	2.253	.026

a. Dependent Variable: StudentSatisfaction

This tests whether the unstandardised (standardized) coefficients are equal to 0 (Zero) in the population. If $p < .05$, it can conclude that the coefficients are statistically significantly different to 0 (Zero). The t-value and corresponding p-value are located in the “t” and “sig” columns, respectively, as highlighted.

At final, it concludes that, multiple regressions are also given result that, there is an impact of online teaching on student’s satisfaction from the above explained variables.

IV. FINDINGS AND SUGGESTIONS OF THE STUDY:

After the research analysis and interpretation, researcher can able to suggest on the students from the responses that;

- 1) Researcher suggests that students should get in touch with the faculty who will always be ready to help for them.
- 2) Researcher viewed that students have to prepare their own notes which will helps them in touch with the subject.
- 3) It is also suggested that it will be better to keep in touch with their best friends because when students are unable to clarify doubts with the faculty, it can to get help from their peer group.
- 4) Students also felt that exclusively for the branches which have more practical problem solving subjects, students felt that need more time to solve. So research is requested the faculty look into it and get the issues solved.
- 5) Students wishes to have more practical assignment rather than a theoretical assignment during the class time.
- 6) Multiple regressions are also found that, from the explained variable having impact on online teaching with significant and non-significant respectively.

V. CONCLUSION AND SOCIAL CONTRIBUTIONS OF THE STUDY:

As this situation is the most unexpected situation and even though some of us are facing issues but in these tough times, research suggest that this is the better way to learn because learning is not a process that can be postponed and be stopped, so it need to get adjusted to this new in a normal pace, and there will be some issues from both ends, but research strongly believe that this issues can be sorted out with interactions between faculty and students. But definitely, this research cannot compare it with that of having a class in the classroom, and the faculty who were always helpful and friendly understands even the student situation as in-home students may not be as comfortable as they used to be in the classrooms as they might have a lot of distractions in the home. At the same time, After all this discussions research concluded that, students have to adjust to the normal.

This study is looked on the student’s perspective and there is a vast scope to look into the faculties’ and institutions wide, as well as government side to bring out the next level issues to overcome in the future.

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