

A STUDY ON DETERMINATION OF FACTORS AFFECTING ONLINE LEARNING FOR POST GRADUATE STUDENTS WITH SPECIAL REFERENCE TO MANAGEMENT

A Johri¹, R.Praveen² and S. Marhatta³

¹Lexicon, MILE, Pune

^{2,3}ASM IBMR, Pune

¹dranuja.johri@gmail.com, ²thammaiah.roopa@gmail.com, ³ashu.shakti@gmail.com

ABSTRACT

Education system witnessed a tremendous change. The COVID pandemic enforced global shutdown of numerous activities, including educational activities, and this resulted in crisis-response movement of universities with online learning serving as the educational platform. The education fraternity viz schools, teachers, and students increasingly adopt e-learning technologies that permitted teachers to instruct interactively, part resources flawlessly, and facilitate student collaboration and interaction. The present research has been undertaken with an objective to gauge student's perception about online learning and teaching as well as to have an insight on what are the factors, on which online learning is dependent on. Primary data of 113 students was taken, who were pursuing management education in Pune through self-structured questionnaire. Analysis comprised of demographics, perception towards teaching learning process, factors related to teaching and learning process. Major finding talked the most decisive factors in impacting the use of online mode. Engagement of students and adaptability of the students in dealing with the use of technology are the greatest influence which would decide the success of the online mode of teaching.

Introduction

"Necessity is mother of invention"

The above said lines reflect the truth that human being discovered or innovated whenever there is a need or whenever they faced any kind of crisis. COVID 19 Pandemic was one such human, economic and social crisis which changed the whole canvas of how businesses work. COVID 19 posed challenges and problems for all the human community. The pandemic had a major impact on education. According to a World Bank report, the education sector was one of the worst hit sectors amid the coronavirus pandemic surrounding the world. Education system witnessed a tremendous change. The COVID pandemic enforced global shutdown of numerous activities, including educational activities, and this resulted in crisis-response movement of universities with online learning serving as the educational platform. The education fraternity viz schools, teachers, and students increasingly adopt e-learning technologies that permitted teachers to deliver interactively, share resources flawlessly, and facilitate student collaboration and interaction. In the given situation It was mandatory to understand the nuances of online learning. It was imperative to analyse and understand whatkind of challenges and difficulties are posed by stakeholders of online teaching.

The present research has been undertaken with an objective to gauge student's perception about online learning and teaching as well as to have an insight on what are the factors on which online learning is dependent on.

Objectives

1. To gauge and analyse the student's perception about changes in teaching & learning process during pandemic COVID 19.
2. To analyse the factors affecting the outcome of online teaching & learning process.
3. To understand the difficulties faced by the students during the process of teaching & learning.

Review of Literature

The term online learning is not new. Since 1990s the world has witnessed significant changes in the landscape of education as a result of the ever-expanding influence of technology. One such development is the embracing of online learning across different learning contexts, whether formal or informal, academic and non-academic, and residential or remotely. Many researches have been undertaken on the topic. According to Hiltz (1999) It was first used to upload courses material on the computer network to have a virtual learning community. Online learning is also referred from different names such as e learning, blended learning, virtual learning,

remote education, web-based education (Singh & Thurman, 2019).

QingPu Yu commented that Online learning received lot of attention in the field of education during especially after COVID. He reviewed the factors affecting the online learning satisfaction (PLS) from the perspective of online learners, online instructors, online platforms and online instructional design. Elumalai, Sankar, Kalaichelvi R, Jeena, John, Menon, Alqahtani, Abumelha (2020) studied the relationship of seven independent factors administrative support, course content, course design, instructor characteristics, learner characteristics, social support, and technical support on quality of e-learning in higher education during the COVID-19 pandemic.

Hassan & Nika(2021) commented that there has been a paradigm shift from classroom teaching learning to online educational portals and learning applications due to the advancement of innovation insurgency. He found that students have acknowledged online learning because of that perceived usefulness, ease of use, self-efficacy, social influence, trust and awareness.

Nordmann, Horlin, Hutchison J, Murray, Robson L, MK(2020) in their research identified 10 guiding principles that balance pedagogical best practices of online learning with rationality essential during the crisis of COVID. Dinh & Nguyen (2020) in their study for social work students discussed challenges as well as opportunities faced by them. they found that social work students and teachers are able to adapt the sudden changes in teaching methods. However, students are not satisfied with interaction with the because students are unfamiliar with new technology-based method of discussion, and the transition from live discussion to online learning has not included suitable modifications to stimulate exciting participation of students. Adedoyin & Soykan (2020) analysed that Online learning in its entirety is dependent on technological devices and internet, instructors and students with bad internet connections are liable to be denied access to online learning. Among many factors they found Socio-economic and digital competence factor plays pertinent role in online teaching process. As a result of inequality in

the socio-economic status of students, some rely on the computer and free internet in school (Demirbilek, 2014), and due to the closure of schools, the migration process of these set of students is expected to be slow. Digital competence is the group of skills, knowledge and attitudes needed when using ICT and digital devices to perform responsibilities, such as problem solving, information management, collaboration with respect to effectiveness, efficiency and ethics (Ferrari, 2012). Above stated reviews are present state of knowledge about online learning. Though not restricted.

Research Design Applied

The fulfil the above stated objectives Descriptive Research has been adopted. Research basically conducted during pandemic times. Research is accomplished by using both the primary data and secondary data.

Primary Data

Primary data has been taken through the digital survey of 150 students pursuing management education in Pune. Each student was analysed on individual level basis for the parameters under study. The primary data was collected with the help of self-structured questionnaire It comprised of close ended questions pertaining to demographic profile and teaching learning process impact questions etc. For conduction of survey digital mode was adopted by creating Google Form and Microsoft 365 form. Research also utilises secondary data sources from Google, research article etc.

Data Analysis

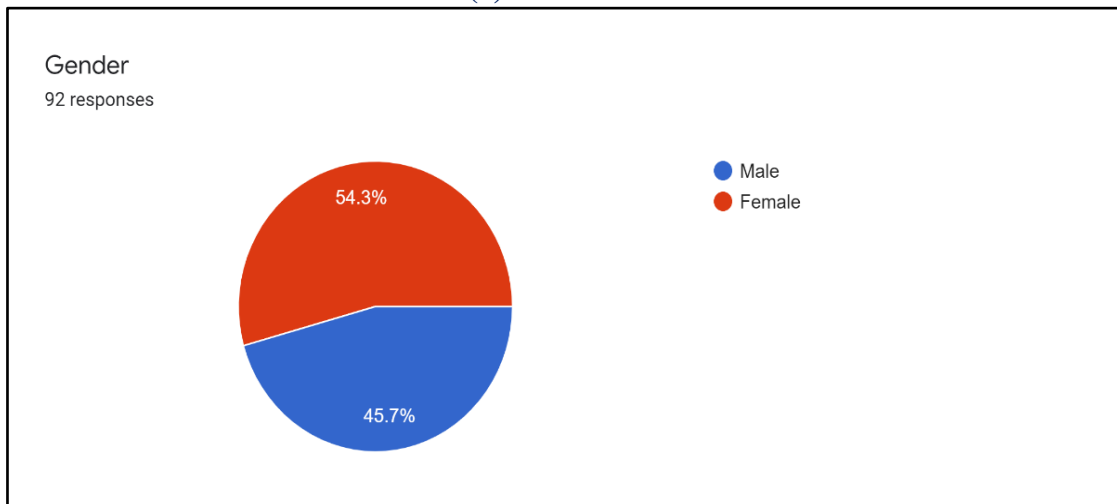
Data Analysis for total of 113 respondents has been taken. Response has been analysed through appropriate graphical representation. Analysis comprised of demographics, perception towards teaching learning process, factors related to teaching and learning process.

(I) Demographic Analysis

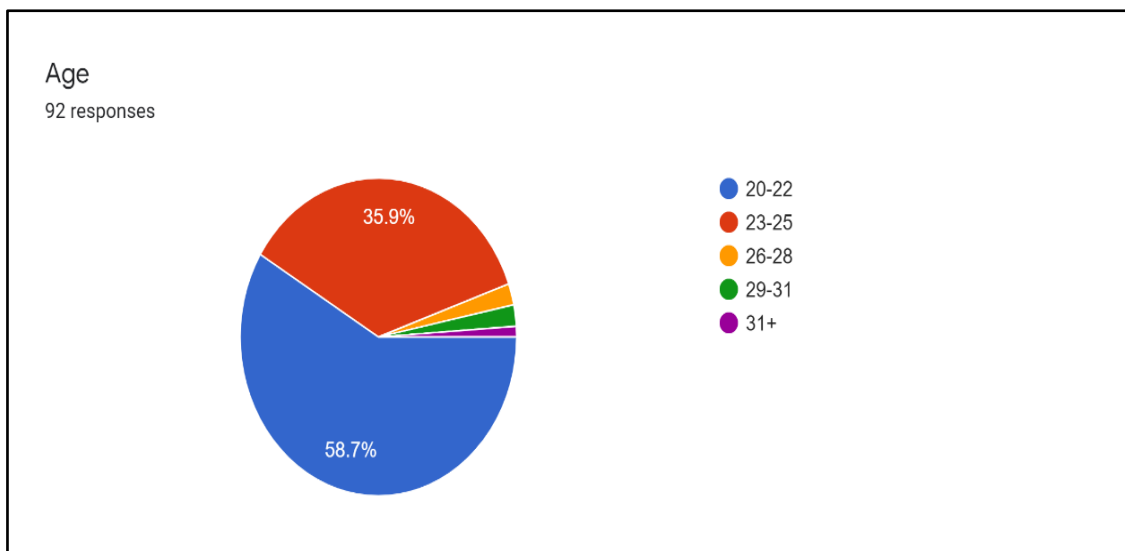
Major Highlights

- Number of females is more in comparison to males.
- Majority of students are in the age group of 20-22 and marginal number in the 30s.
- Maximum students are from urban areas.
- Nuclear family system is prevalent as majority of the student's family comprises of 3-5 persons.

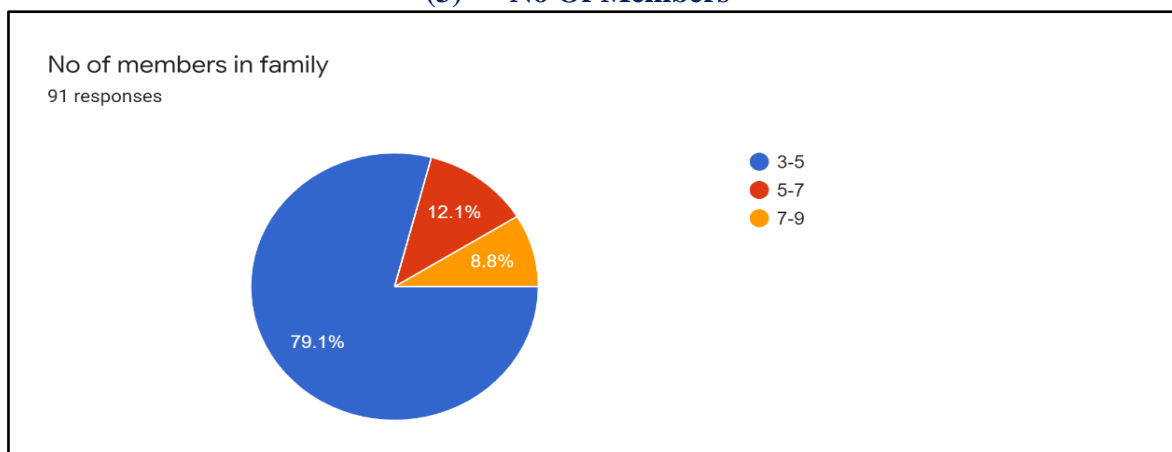
(1) Gender



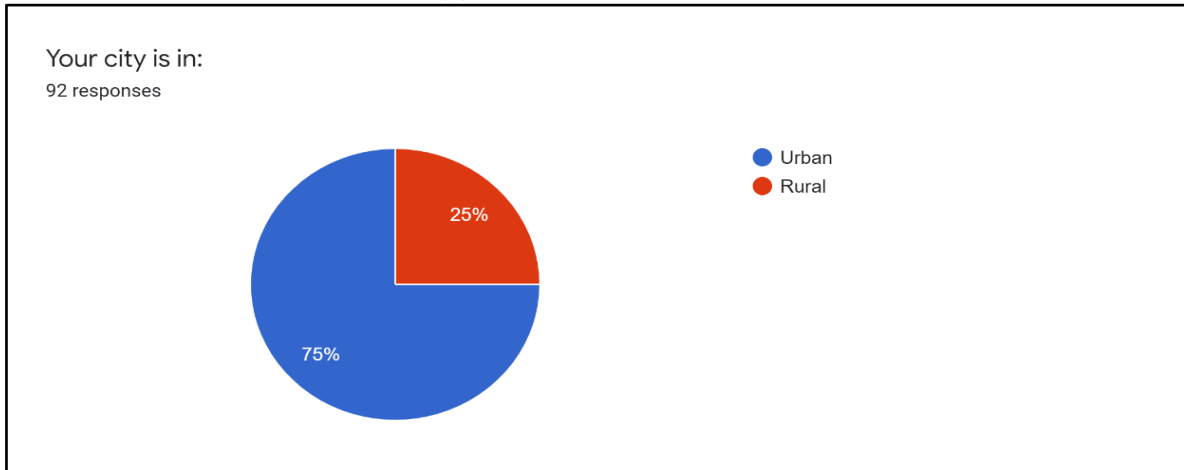
(2) Age



(3) No Of Members



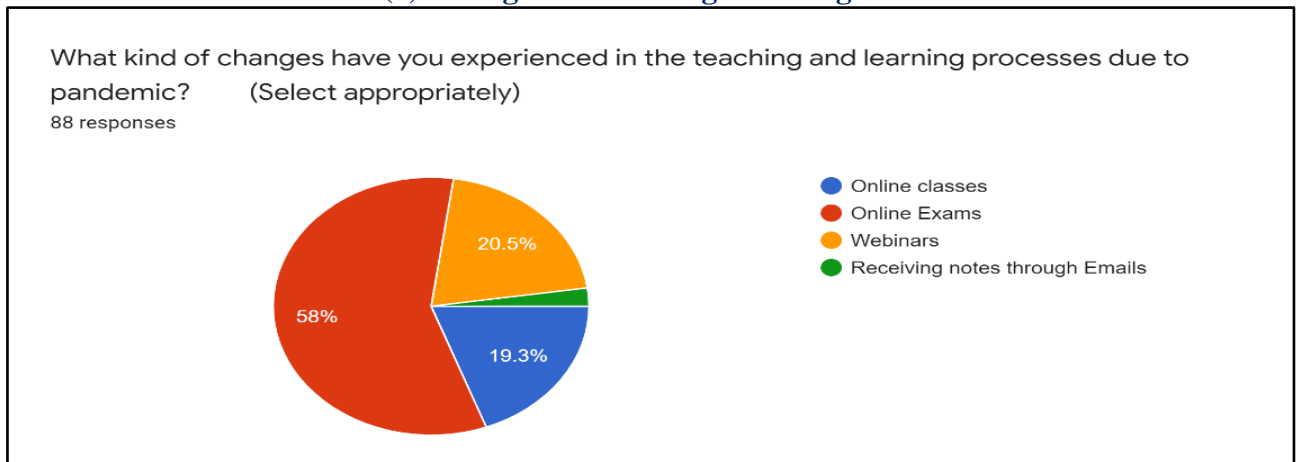
(4) Urban Or Rural



Detailed Analysis

(II) Perception Of Students Towards Online Teaching & Learning

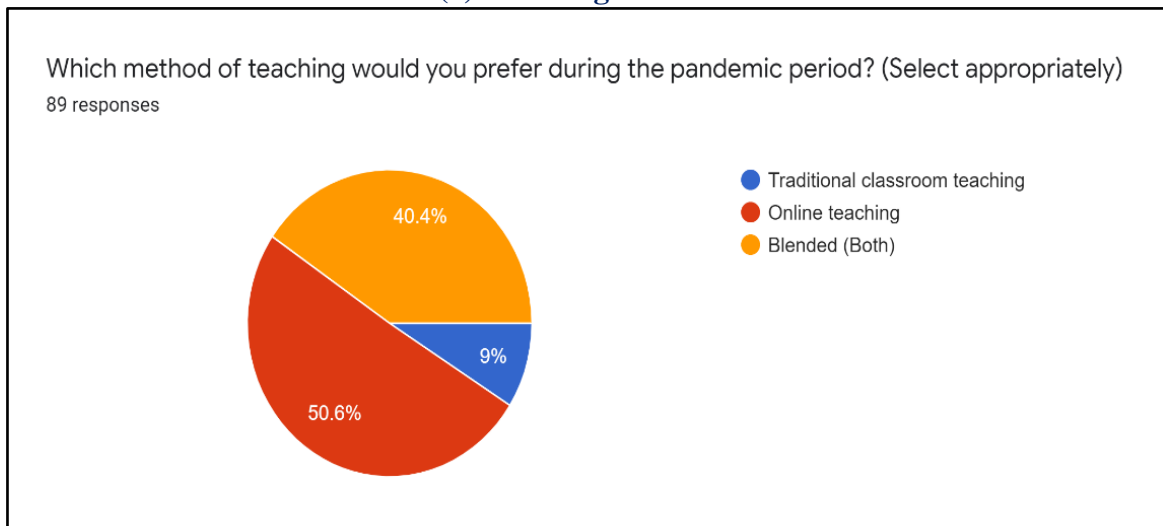
(1) Changes In Teaching Learning



The above graph shows that the students have witnessed online exam (58%) followed by webinars (20.5 %) and online classes as the major change in the teaching- learning. We can

deduce that students have noticed the change and tried to imbibe the unexpectedly occurred phenomenon due to the pandemic.

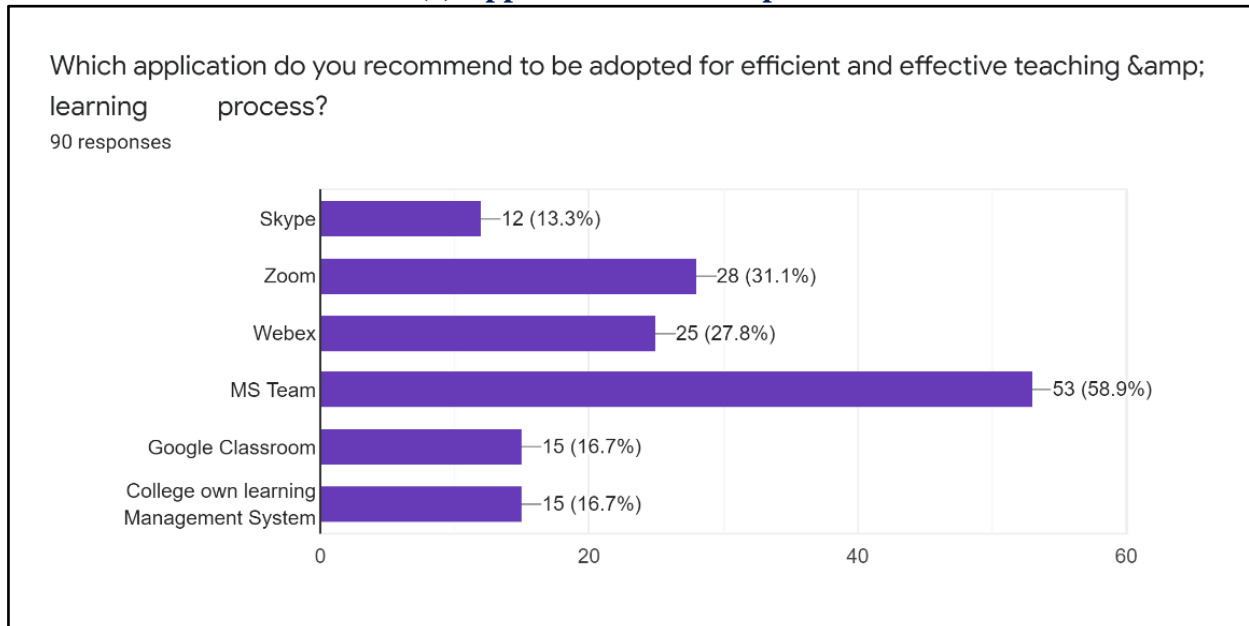
(2) Teaching Method



Teaching methodology preferred by the students during the pandemic is online mode (50.6%) where as next method preferred by them is blended mode (40.4%). So strategically

students have adopted the online mode but then also traditional method of teaching has its own value, as blended one (9%) has its own takers. Future coming is of online and digital mode.

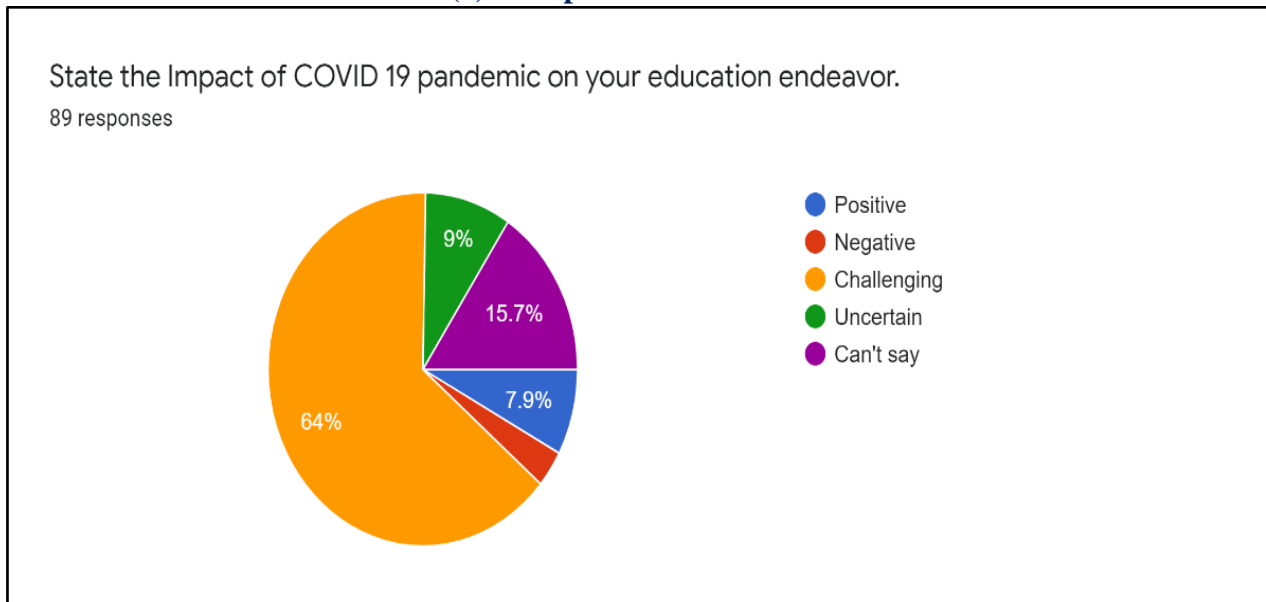
(3) Application to be Adopted



From the graph MS Team (58.9%) has emerged as the most recommended digital platform in online teaching process followed

by Zoom (31.1%) and WebEx (27.8%). Students are aware of the new technology available for the teaching and learning process.

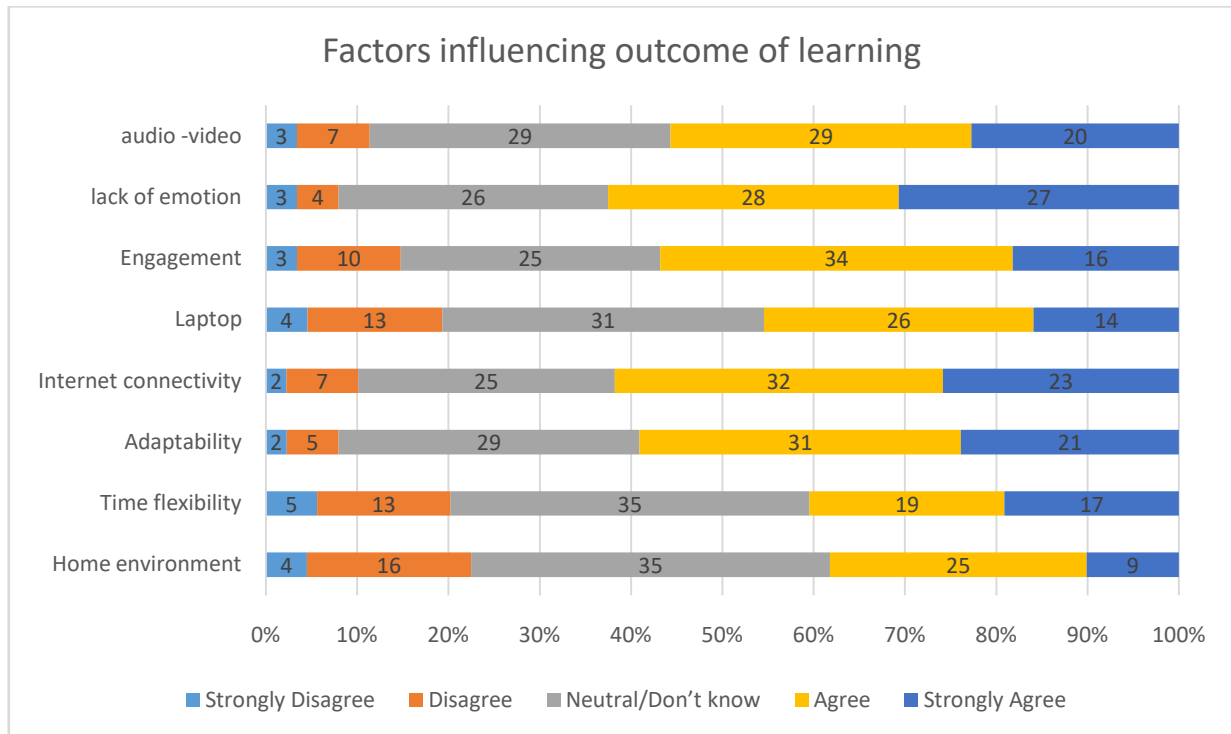
(4) Impact on Education



The journey of students in this pandemic era is challenging (64%) for the majority of students and uncertain (9 %) as well. On other hand

some students remain undecided about their adaptability for the change and comment as can't say (15.7%).

(III) Factors Influencing Outcome Of Learning



Ratings	Strongly Disagree (1)	Disagree (2)	Neutral/Don't know (3)	Agree (4)	Strongly Agree (5)	Weighted Average
Home Environment enhances the assimilation of knowledge better.	4	16	35	25	9	3.2
Time flexibility increase efficiency	5	13	35	19	17	3.3
Adaptability of the technology improves learning	2	5	29	31	21	3.7
Dependence on Internet connectivity, Wi-Fi poses problems in learning	2	7	25	32	23	3.8
Laptop, Smartphone, etc facilitates better learning	4	13	31	26	14	3.4
Engagement with the digital scenario enhances learning	3	10	25	34	16	3.6
On line, learning lacks emotions and feelings like in the traditional classroom environment	3	4	26	28	27	3.8
Uncertainties about audio and video, commotion in online classes create disinterest	3	7	29	29	20	3.6

*Statement in bold and rows in blue represent factors contributing highly towards outcome of learning

On the basis of the table where the weighted average has been calculated we can straightforwardly interpret analyse that the most important factors which influence online learning mode are 1) Dependence on Internet connectivity, 2) Wi-Fi and 3) Lack of emotional and personal touch by the faculties.

These are the most decisive factors in impacting the use of online mode. Engagement of students and adaptability of the students in dealing with the use of technology are the greatest influence which would decide the success of the online mode of teaching.

Table 2: Impact Reason Analysis For The Factors Influencing Outcome Of Online Learning

Parameters	High	Neutral	Low	Comments
Home Environment enhances the assimilation of knowledge better.		✓		Respondents do not believe to learn or to assimilate knowledge they require home or family environment.
Time flexibility increase efficiency		✓		It is heartening to see the students believe in targets & target orientation
Adaptability of the technology improves learning	✓			As we have discussed earlier about sudden change in learning system and acquisition of technology has created challenge and made it realise to them in understanding the importance of familiarity with technology.
Dependence on Internet connectivity, Wi-Fi poses problems in learning	✓			Internet connectivity is major challenge for online learning.
Laptop, Smartphone, etc. facilitates better learning		✓		It is more important to have learning attitude rather than to have more importance to means.
Engagement with the digital scenario enhances learning			✓	So, this learning attitude & adaptability of technical resources enhance learning.
On line, learning lacks emotions and feelings like in the traditional classroom environment	✓			Face to face interaction always brings long term association & understanding.
Uncertainties about audio and video, commotion in online classes create disinterest			✓	Internet connectivity is major challenge for online learning.

(IV) Difficulties Faced

Major difficulties faced by the students in their online teaching learning endeavour can be majorly enumerated as -

1. Lack of proper internet network and connectivity issues.
2. Lack of interest by the students due to dearth of personal connect and touch from the faculty.
3. Lot of noise and disturbance from others during the session.
4. Boring and lengthy sessions due to no direct interaction with the faculty.
5. Adaptability problem in switching from traditional method to online method.

6. Lack of Proper communication.
7. Poor quality of audio and video.

(V) Suggestions By The Students

Students’ hands on experience in this phase of transformation of digital teaching learning process has made them understand the flaws in the process and as the main stakeholder and beneficiary of the process they have given some qualitative and valuable suggestions which can be considered for making the process stronger and fault free. These suggestions are from direct gab of students. For sake of understanding suggestions are divided into following manner-

Table 3: Suggestions From Students

Technology related	Engagement in the online mode	Preparation for online mode
Hi speed Internet connectivity	Keep specific goal post. To understand how much that has been taught where inherited appropriately by the Students. Only talking over a VC won't give an effective result. Only delivery of lecture can't be effective until it is measured about student understanding. So, if every lecture supported by small quiz where student can answer, it will make more effective learning.	Proper communication about webinars through mails
Student want to avoid login as they are facing problems to login with MS Teams	Online classes should not be for long time as it loses the interest of student	Webinar should be more task related for students & only conceptual clarification about the content or topic. It should be more student centric where student will work more than resource person where he will get the information through his own efforts which will induce him to think, to collect information, to gain knowledge on his own efforts. (example – Tutorial) (Project work should be given)
Own development of software	Even the respondents have suggested keeping batch of 50 only for online to make better	As usual the study material (ppt+ notes) should be shared with students.
	Interactions among speakers & attendant., Discussion should occur in the webinar rather than one-way talk	Every recorded lecture should be made available to students during certain intervals.
	Every weekend viva should be held for each subject on the topics covered for that subject. Even in lecture oral test or on what's app test should be given	
	Ask questions in between to make session more interactive & make students to be associated with the speaker.	

Conclusion

Teaching pedagogy is going through a revolution in this pandemic. The process of change which was long awaited or which was going on in the sector very slowly. With the coming of COVID 19 things suddenly took a fast pace. It thrusts us humans to change. Institute imbibed the change and took efforts for conducting classes. Students from the research analysed felt this change as stimulating. They tried to cope with the situation but somewhere adaptability to the

changed pedagogy posed a challenge. Amid network issues and other technological glitch, they managed to move on and somewhere they accepted this change and are future ready to face it also.

Online Learning has emerged as a new normal for education industry. Pandemic has brought in lot in lot of opportunities for the online platform bank on. We will see emergence of online platform as one of the teaching facilitators.

References

1. Nordmann E, Horlin C, Hutchison J, Murray J-A, Robson L, Seery MK, et al. (2020) Ten simple rules for supporting a temporary online pivot in higher education. *PLoS Comput Biol* 16(10): e1008242. <https://doi.org/10.1371/journal.pcbi.1008242>.
2. Kesavan Vadakalu Elumalai, Jayendira P Sankar, Kalaichelvi R, Jeena Ann John, Nidhi Menon, Mufleh Salem M Alqahtani, May Abdulaziz Abumelha (2020) Factors Affecting the Quality of E-Learning During the COVID-19 Pandemic from the Perspective of Higher Education Students *Journal of Information Technology Education: Research • Volume 19*, • pp. 731-753, <https://doi.org/10.28945/4628>
3. <https://www.emerald.com/insight/content/doi/10.1108/AAOUJ-10-2021-0124/full/html> Hassan, J., & Nika, F. A. (2021). Exploring the determinants affecting the students' engagement with online learning. In M. Al-Emran & K. Shaalan (Eds.), *Recent advances in technology acceptance models and theories* (pp. 173– 189). Springer. https://doi.org/10.1007/978-3-030-64987-6_11
4. Linh P. Dinh & Trang T. Nguyen (2020) Pandemic, social distancing, and social work education: students' satisfaction with online education in Vietnam, *Social Work Education*, 39:8, 1074-1083, DOI: 10.1080/02615479.2020.1823365
5. Olasile Babatunde Adedoyin & Emrah Soykan (2020) Covid-19 pandemic and online learning: the challenges and opportunities, *Interactive Learning Environments*, DOI: 10.1080/10494820.2020.1813180
6. Ferrari, A. (2012). Digital competence in practice: An analysis of frameworks. [Google Scholar](cross Reference)
7. Demirbilek, M. (2014). The 'digital natives' Debate: An Investigation of the digital Propensities of University students. *Eurasia Journal of Mathematics, Science & Technology Education*, 10(2), <https://doi.org/10.12973/eurasia.2014.1021a> [Crossref], [Web of Science ®], [Google Scholar]