STUDENTS' AND TEACHERS' PERCEPTIONS ABOUT ONLINE TEACHING DURING COVID-19 PANDEMIC A SURVEY

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ABSTRACT:
The Covid-19 pandemic has led to a dramatic transformation in every aspect of life. The education system has shifted from conventional classroom teaching to virtual mode to encourage the principal of social distancing. The technology played a major role in smooth delivery of educational needs globally during the pandemic. The change to online teaching brought new opportunity for the students to continue teaching but at the same time carried with it many new challenges. Current study is done to evaluate the students' and teachers' perceptions about online teaching in current scenario.

The present study is the questionnaire based survey to know the students' and teachers' perceptions about the online teaching in Northern India. The sample size consisted of 323 students and 146 teachers who responded to the survey questionnaire on google forms.

The IT and infrastructure related issues, the training needs of students and teachers and difficulty is assessing the practical skills have been found to be the main challenges for the smooth delivery of e-learning. There is need to address these concerns to allow the smooth delivery of digital learning in future as it can go a long way to help the global education system.

Virtual learning can play an integral role in the educational system by bridging the gap of distance and travel. Students even at remote areas can benefit from online teaching provided the infrastructure is supportive and the participants have proper training to use the system. Combination of classroom and virtual teaching can be an answer in future for best utilisation of resources and manpower. This is an original research article based on the online survey questionnaire about online teaching.

Keywords: education, teaching, digital, Virtual learning, online teaching, e-learning.

INTRODUCTION:

Outbreak of corona pandemic has affected almost every sphere of life, be it health, social, economic or education. This is an unprecedent emergency and whole world is struggling today under the effect of this pandemic. Though the healthcare is the most affected part directly but no part of our lives is untouched by this. (1)The education system has undergone a notable transformation in the last one year as the classroom teaching has not been possible wholly or partially across almost all the countries. In India, national lockdown was declared in March, 2020 and this led to shutdown of all educational institutes including schools and colleges. For many of the students' formal examinations could not be conducted. As the pandemic continued, there was shift from classroom teaching to virtual mode of teaching. As virtual mode is not the usual mode of teaching in many countries, there were many challenges faced by both the students as well as education providers in the initial months. (2) Few of these challenges are still continuing. Though the digital education has been established since long but that was an optional system and not a common mode of routine teaching till now. Before corona pandemic, digital education was practised in conferences, CMEs and training programmes only. For formal education i.e., schools and colleges, used to rely on classroom teaching only.

We undertook this survey on students and teachers in Northern India to assess their perceptions about online teaching, to know the challenges faced by them and to assess how digital education can play a role in future in the formal education system.

Objective: of the study is to find out perception of teachers and students about online teaching. We tried to analyse the students 'opinion about ease and effectiveness of teaching and teachers views about challenges faced by them and effectiveness of teaching methods.

METHODOLOGY:

This questionnaire based online survey was distributed to the respondents in the form of google forms. Respondents for the purpose of study were the students of class 10th - post-graduate level and teachers of same grades who were randomly picked. The study was based on the descriptive quantitative design to obtain the opinion of respondents. The response was recorded on five- point Likert scale where one denotes strongly disagree and five indicates strongly agree. Both the students and teachers were from varied academic fields like humanities, commerce, science and engineering. Simple random sampling technique was used for the selection of survey. The sample size consisted of 323 students and 146 teachers who responded to the survey questionnaire. Two different surveys were conducted- one for the students and one for teachers. This survey was undertaken in the month of February-March 2021.

The questionnaire was distributed to the participants in the google forms with a consent form stating that the information provided will be used for publication purpose after anonymisation. All participants gave consent to participate in the study. The ethical committee approval was not sought as the study involved a survey based on the voluntary participation to answere a questionnaire and there was no intervention involved.

RESULTS:

A total of 323 students from various streams like humanities, science , computers and engineering and 146 teachers participated in the survey.

The responding students were almost equally from both the genders (55.7% being males and 44% females). Majority of them were in age group of 16-20 years. (Figure1)
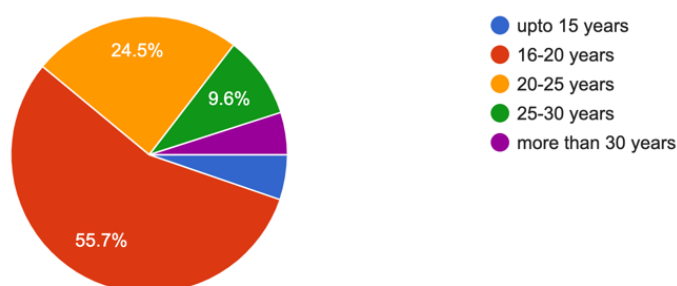

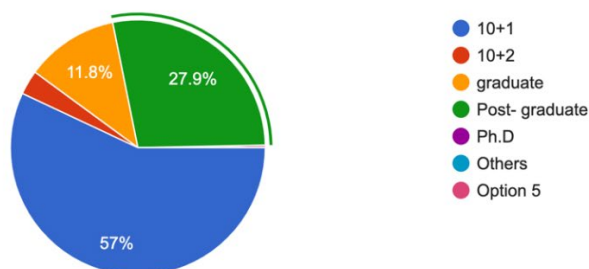Figure 1- Age distribution of students

Figure 2- Education Grade of students
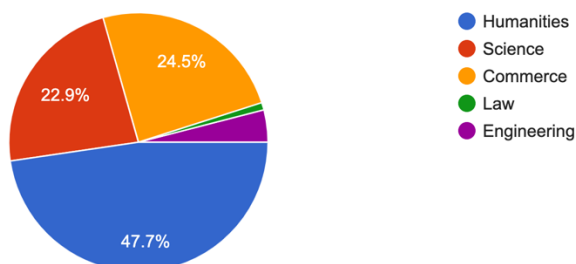
Speciality if any
323 responses

Figure 3- Distribution of students according to speciality of study

 Almost 60% of the respondents were in higher school and the remaining 40% were graduates and post-graduates (Figure 2)and they came from different streams including humanities, law, science and commerce.(Figure 3) Majority i.e., almost 90% of them had over one year of online studies and just 10.7% said they had more than one year of exposure to online studies. Almost half of them had just basic knowledge of computers and only 8% had advanced knowledge of computers. (Figure 4)

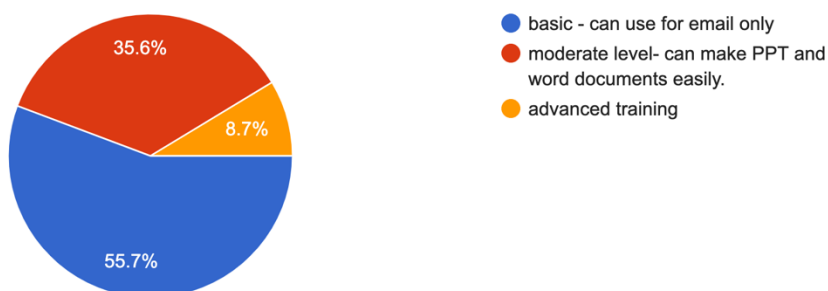## Computer knowledge
323 responses

Figure-4- level of computer knowledge of students**.**

Figures 5,6 and 7 depict the students perception about the online teaching. The three main subjects which were enquired were- the general impact on studies, ease of use and the effectiveness of teaching. When asked about their opinion whether the future online teaching should continue or not even after the schools are open , 15.5% of the students were in favour while 24% strongly disagreed to this proposal. (Figure 7)

Students perception of online classes - general Impact (1-totally disagree, 2-disagree, 3- dont't know, 4- agree, 5- strongly agree)

Figure 5- Students perception of online classes- general impact on studies.

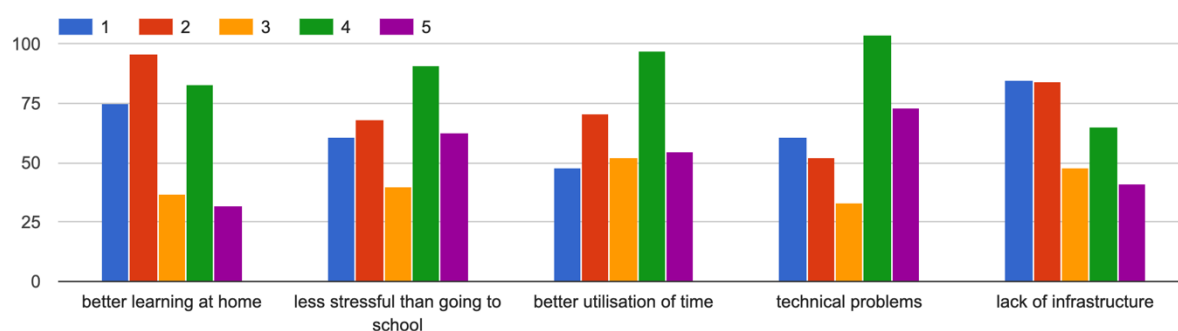Students perception- Ease of Use (1-totally disagree, 2-disagree, 3- dont't know, 4- agree, 5- strongly agree)

Figure 6- Students perception of online classes- ease of use

Students perception- Effectiveness of teaching (1-totally disagree, 2-disagree, 3- dont't know, 4- agree, 5- strongly agree)
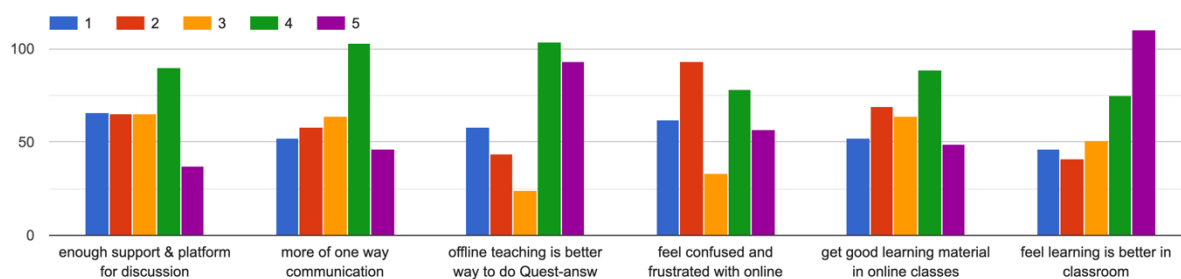

Figure 7- Students perception of online classes- Effectiveness of teaching

Would you want the online teaching should continue to some extent even after schools are open
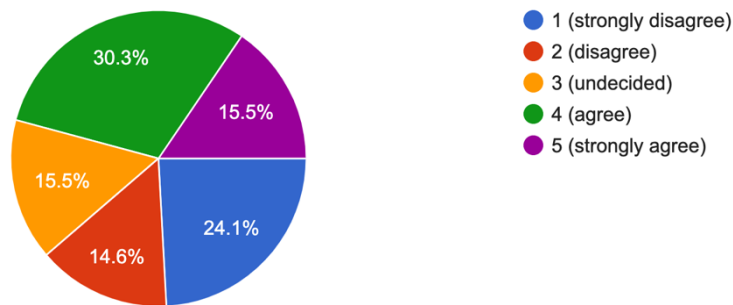323 responses

Figure 8- Students perception of online classes-whether online classes should continue once the schools re-open

The second set of separate questionnaire was distributed to teachers and 146 respondents answered the questions. 50% of the teachers were in age range of 30-40 years (Figure 9) and they taught various students from matric to Post-doctoral programmes. (Figure 10) and varied streams. (Figure 11)
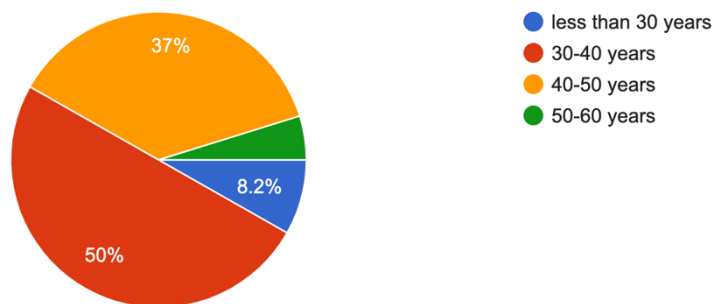
Age in years
146 responses

Figure 9- Age distribution of teachers in the survey
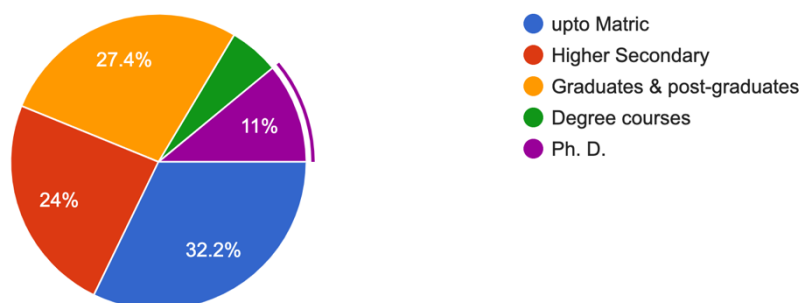
Teaching which level
146 responses

Figure 10 –Teaching grade of the teachers in the survey
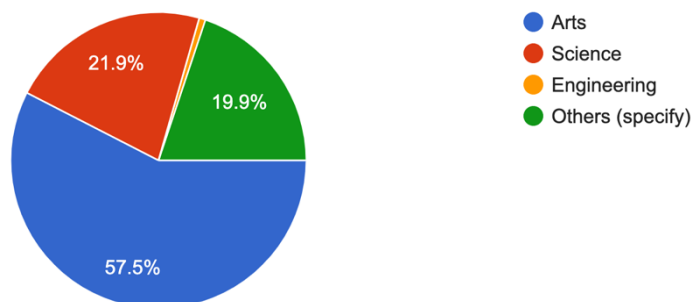
Teaching speciality
146 responses

Figure 11- Teaching speciality of the teachers in the survey

Almost 60% of the teachers had more than ten years of offline teaching experience while the survey was undertaken. (Figure 12). Google meet, Zoom and Whats app were the three most common tools used during online teaching, Microsoft teams and You-tube were the other less commonly used applications.(Figure13)

Teaching Experience for Offline Teaching
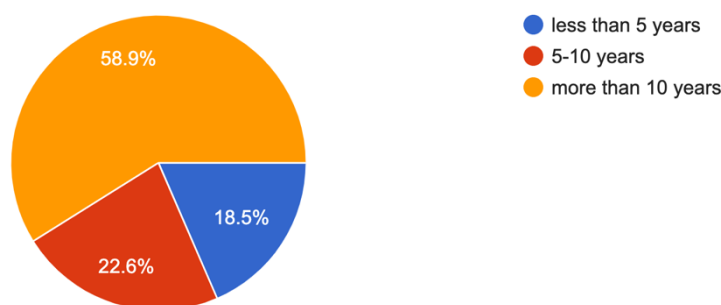146 responses

Figure 12- Offline teaching experience of the teachers in the survey

Tools used for Online teaching
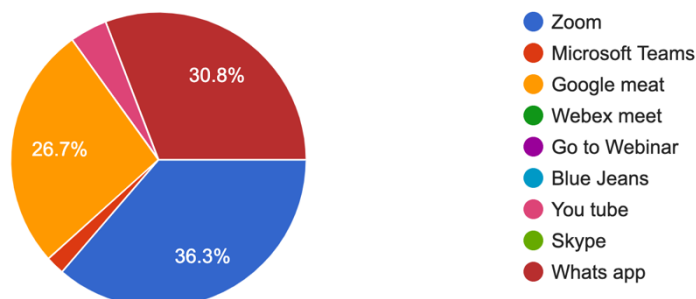146 responses

Figure 13- Tools used for online teaching by teachers

Figures 14 and 15 represent the perceptions of teachers about online teaching, mainly on the technical challenges and the effectiveness of teaching. When asked as to whether they will prefer to continue online teaching when

schools re-open, majority of teachers (82%)disagreed as they felt that online teaching is relatively less efficient way of teaching especially for practical topics and exam assessments are difficult in online mode. (Figure 16)
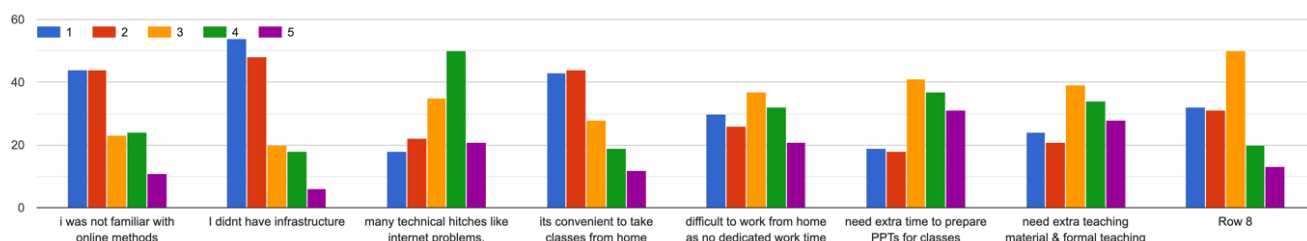
Figure 14- Teachers perception of online classes- Technical challenges faced
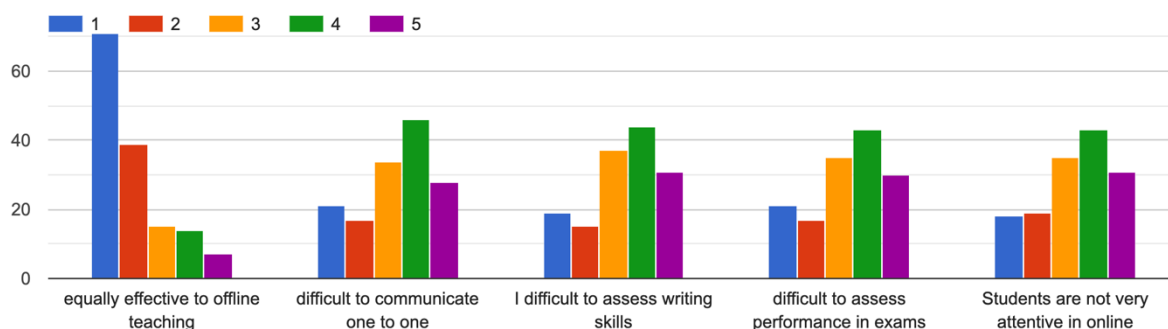
Figure 15-Teachers perception of online classes- Effectiveness of teaching

Figure 16- Teachers reasons for not preferring online teaching when schools re-open

LITERATURE REVIEW AND DISCUSSION

The need for social distancing due to corona pandemic has led to massive changes in education system, mainly shifting from offline to online teaching. India is among the largest users of e-learning programmes. (3)The importance of e-learning has increased further during pandemic, being more of a necessity during this period now. But a survey suggested that the contribution of e-learning will continue to increase in education and corporate set up in coming years. (4) Online courses provide a learning platform to many even at a distance so provides more learning opportunities. In the earlier studies, the positives impressions of students about online classes were quoted as being more 'flexible' and 'convenient' method of learning as compared to classical classroom teaching. (5). In

the current study, majority of students felt classroom teaching as more effective way of learning as there are many technical issues involved in online teaching. Though they felt online teaching to be less stressful and led to learning during pandemic in a homely environment. Though there have been indications from earlier studies to make e-learning more interactive and practical, still many of students in our study felt online teaching as one way tool of teaching and lack of interactive component. (6,) When comparing face to face and online courses , studies found that students when prefer online teaching the main reasons are to avoid travel times and scheduling problems. On the contrary, they felt very less peer communication though the course satisfaction was comparable. (7)

In a similar survey of 800 Polish students , the students felt the comfort of continued teaching while being at home and rated it enjoyable but the technical issues with the IT equipment were the main challenge faced by them and e-learning was rated less effective than face-face learning in terms of technical skills. (8)

There are many institutes where e-learning is practised and they have faculty development programmes as well before implementation of the programme. Teachers have many a times mixed opinions about the effectiveness of online teaching. Many teachers feel that to become a better instructor/ mentor it is important to have faculty development programmes. (9,10, 11)

Many researchers feel that there are limitations of online classes. In current study, majority of teachers were not in favour of continuing online teaching once schools/colleges re-open. Their main limitation they quoted for online teaching was difficulty to assess writing skills/ examinations / practical skills for the students. Besides this the technical issues like internet problems, computer issues and need for additional time required to make power point presentations were some of the other challenges. Similarly in a study by Priyadarshini, majority of teachers were not comfortable with continuing online teaching and they cited lack if training and uncomfortable teaching environment as the main reasons for their statements.(12)In a survey conducted in China after the Covid-19 outbreak, the majority of teachers were willing to take online classes but they faced difficulty due to lack of training. (13)

Feedback is very important part of any learning process which normally takes place informally in classroom teaching. It is equally important to incorporate feedback and interaction in online teaching to make it more effective way of learning. Attitude towards learning is a key factor in satisfaction and enjoyment of course and self-motivation are some important measures to improve the experience of e-learning. Teachers can play a vital role in motivation positive impact of online teaching by improved interaction and feedback.(14)

CONCLUSION & RECOMMENDATIONS

Online teaching has come as a boon during Covid-19 pandemic to fill up the gap of classroom teaching which got suddenly disrupted. It is an exciting new normal way of teaching. With the increasing use of technology, e-learning has brought a positive impact on both students and teachers. It gives an opportunity for distance learning and connecting all across the globe. Though, classroom teaching still remains the gold standard, still there is lot of scope for e-learning in near future. There is need to improve the infrastructure like internet services for optimal utilisation of e-learning.

REFERENCES:

Chaturvedi K, Vishwakarma DK, Singh N. Covid-19 and its impact on education, social life and mental health of students -A survey. Children and youth services reviews 2021;121:105866. https://doi.org/10.1016/j.childyouth.2020.105866.

Todd RW. Teachers' perceptions of shift from classroom to online teaching. Int. J of TESOL studies 2020;2(2):4-16.

Kulal A. A study on perception of teachers and students towards online classes in Dakshina Kannada and Udupi district. Asian Ass of Open Univ J 2020;15(3):285-296.

Meyen, E.L., Aust, R., Gauch, J.M., Hinton, H.S., Isaacson, R.E., Smith, S.J. and Tee, M.Y. "e-Learning: a programmatic research construct for the future", Journal of Special Education Technology2002;17(3): 37-46.

Armstrong, D.A. "Students' perceptions of online learning and instructional tools: a qualitative study of undergraduate students' use of online tools", Turkish Online Journal of Educational Technology 2011; 10(3):222-26.

Johnston, James, et al. "Student Satisfaction in the Virtual Classroom." *The Internet Journal of Allied Health Sciences and Practice*2005; 3(2).

Horspool, A., & Lange, C. Applying the scholarship of teaching and learning: Student perceptions, behaviours and success online and face-to-face. Assessment & Evaluation in Higher Education2012; 17(1):73–88.

Ba̧czek M, Zaganczyk-Ba̧czek M, Szpringer M, Jaroszynski A, Woz_akowska-Kapłon B. Students' perception of online learning during the COVID-19 pandemic: a survey study of Polish medical students. Medicine 2021;100:7(e24821)

Billings, D.M. and Kowalski, K. "Developing your career as a nurse educator: the professional portfolio", The Journal of Continuing Education in Nursing 2008; 39(12):532-33.

Conrad, R. and Donaldson, J. (2004), Engaging the Online Learner, Wiley and Sons, San Francisco.

DiPietro, M., Ferdig, R.E., Black, E.W. and Preston, M. "Best practices in teaching K-12 online: lessons learned from Michigan virtual school teachers", The Journal of Interactive Online Learning 2008;7(1):10-35.

Priyadarshani, HDC, and D. Jesuiya. "Teacher's Perception on Online Teaching Method during Covid-19: With Reference to School Level Teachers at Faculty of Education, The Open University of Sri Lanka." Shanlax International Journal of Education 2021;9(2):132-140.

Yang X. Teachers perceptions of large scale online teaching as an epidemic prevention and control strategy in China. *ECNU Review of Education2020; 3(4):739-744.*

Judith Mckeon. An investigation into students and teachers perception of aspects of online teaching. International Journal of Research in Humanities and Social Studies;2014;1(1):64-76