

COVID-19 and Teaching: Perception of School Teachers on Usage of Online Teaching Tools.

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Abstract

The COVID-19 crisis has created an unprecedented situation in our world right now. Educators, administrators, policymakers, students and, parents all are facing a very difficult time in terms of teaching and learning. This pandemic has forced the teachers to start using technology for distance and remote learning. However, this sudden shift to online learning has brought up an array of challenges. To identify these issues and challenges an opinionnaire has been developed by the investigators to record the opinions of school teachers in using various online teaching tools for teaching during the lockdown. The opinionnaire is distributed in three sections: a) Opinions of school teachers regarding use of online teaching tools, b) Opinions of school teachers regarding their personal and professional aspects and, c) Opinions of school teachers regarding the learners. The findings of the study revealed that some school teachers found significant benefits of teaching through online mode. However, other teachers did not feel confident and were more comfortable teaching through traditional methods. This paper outlines the challenges faced by teachers and suggestions for conducting virtual classes effectively in coming future.

Keywords: COVID-19, Pandemic, Online Teaching Tools, Opinionnaire.

Introduction

The ongoing pandemic due to the outbreak of COVID-19 has brought a new challenge for the education system all around the world. It is a major health crisis that the human race has faced in a long time. This virus is also spreading very quickly as no medication or vaccine is available for the treatment. This outbreak has completely changed the lifestyle of people by restricting their movement. Because of COVID-19, the ruling parties of the whole world have declared a state of lockdown. In India also, the lockdown (Janta Curfew) was introduced on 21st March 2020 and since then all the industries, offices (government and private), businesses and, academic institutions have been temporarily closed as per the guidelines of the government. Now, the citizens of India are facing the 5th phase of lockdown in June 2020. However, teaching is still ongoing during this period as the teachers and students have adapted according to the situation. Teachers teaching in schools, colleges, and universities have started working from home by using online teaching tools to make sure that students do not suffer any academic loss. To achieve this objective, they have started using online teaching tools (YouTube live, Google Classes, Zoom, WebEx, Skype, Moodle).

However, online mode of teaching is still an untested and unfamiliar territory for teachers as traditional teaching (face to face teaching) holds a higher ground in our education system. The issues are much bigger than just the knowledge of teachers and students regarding the use of online tools. Equipment cost, connectivity issue, support of family are some other problems that are expected to occur while conducting online classes. Another major concern is the social interaction among teachers, parents, and students as it determines the social development of the students. At home, students and teachers may face stress from increased pressure of workload, unfamiliar work environment, and domestic abuse. Finding the right tool for teaching is the first step in using online tools. They should also be familiar with the important features of that tool and how to use it. Along with this, the management of students during online classes is also a problem faced by many teachers. Without a proper class schedule from the administrators and time constraint, it is problematic to cover all learning objectives. It is crystal clear that this pandemic has completely disrupted the educational system and the faculty is adjusting according to the demand of recent situation. It will be interesting to see what changes does this lockdown brings to the education system in the near future.

Objectives of the Study:

1. To construct an opinionnaire for recording the perception of school teachers regarding usage of online teaching tools during pandemic (COVID-19).
2. To analyse the opinions of school teachers for using online teaching tools during lockdown.

Design of the Study**Survey Method:**

For the present study, a descriptive survey method has been used by the investigators.

Sample:

Teachers teaching in government and private schools were contacted through electronic mail and requested to join the survey. The opinionnaire was mailed to 100 school teachers teaching in schools of Haryana. 70 female school teachers and 30 male school teachers filled out the opinionnaire and it was recorded that 100% of teachers have been teaching online during the lockdown. Therefore, it can be interpreted that the collected sample (100 School teachers) has been teaching online and can be considered for the study.

Tools Used:

Opinionnaire on Perception of School Teachers Regarding Use of Online Teaching Tools consists of 21 statements and was developed by the investigators themselves to record the opinions of school teachers. The Opinionnaire is further divided into three sections: **a) Opinions of school teachers regarding usage of online teaching tools:** This section consists of 6 statements which are related to what teachers think about using the online tools, **b) Opinions of school teachers regarding their personal and professional aspects:** This section comprises 7 statements and are related to the use of online tools for getting maximum benefit and what impact do these tools have on their professional and personal aspects and, **c) Opinions of school teachers regarding the learners:** 8 statements are present in this section and they are related to what teachers think about the impact of online tools on the learning of students.

Statistical Technique Used:

Interpretation of the data has been done by using percentage. The percentage of opinions (of each statement) has been shown by using pie chart.

Analysis and Interpretation:

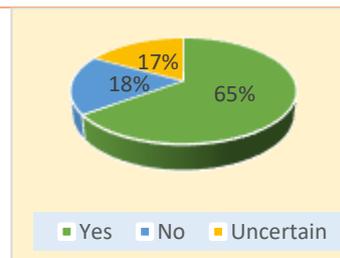
This section deals with the analysis of data to illustrate the opinions of school teachers regarding their use of teaching tools (online). Section-wise deep analysis has been done by the investigators to understand the views of school teachers.

Section 1:

Table.1: Statement-wise Representation of Opinions of School Teachers Regarding the Use of Online Teaching Tools during Pandemic (COVID-19).

Item No.	Statement	Response								
1.	How much time do you spend teaching online?	<table border="1"> <tr><th>Time Range</th><th>Percentage</th></tr> <tr><td>0-2 Hrs</td><td>40%</td></tr> <tr><td>2-4 Hrs</td><td>41%</td></tr> <tr><td>4-6 Hrs</td><td>19%</td></tr> </table>	Time Range	Percentage	0-2 Hrs	40%	2-4 Hrs	41%	4-6 Hrs	19%
Time Range	Percentage									
0-2 Hrs	40%									
2-4 Hrs	41%									
4-6 Hrs	19%									
2.	Do you find online teaching convenient and easy?	<table border="1"> <tr><th>Response</th><th>Percentage</th></tr> <tr><td>Yes</td><td>55%</td></tr> <tr><td>No</td><td>37%</td></tr> <tr><td>Uncertain</td><td>8%</td></tr> </table>	Response	Percentage	Yes	55%	No	37%	Uncertain	8%
Response	Percentage									
Yes	55%									
No	37%									
Uncertain	8%									
3.	Do you find teaching through online methods more time-saving?	<table border="1"> <tr><th>Response</th><th>Percentage</th></tr> <tr><td>Yes</td><td>54%</td></tr> <tr><td>No</td><td>41%</td></tr> <tr><td>Uncertain</td><td>5%</td></tr> </table>	Response	Percentage	Yes	54%	No	41%	Uncertain	5%
Response	Percentage									
Yes	54%									
No	41%									
Uncertain	5%									
4.	Do you think that in future online teaching should replace face to face teaching?	<table border="1"> <tr><th>Response</th><th>Percentage</th></tr> <tr><td>Yes</td><td>17%</td></tr> <tr><td>No</td><td>56%</td></tr> <tr><td>Uncertain</td><td>27%</td></tr> </table>	Response	Percentage	Yes	17%	No	56%	Uncertain	27%
Response	Percentage									
Yes	17%									
No	56%									
Uncertain	27%									
5.	Do you face connectivity issue during teaching?	<table border="1"> <tr><th>Response</th><th>Percentage</th></tr> <tr><td>Yes</td><td>70%</td></tr> <tr><td>No</td><td>30%</td></tr> </table>	Response	Percentage	Yes	70%	No	30%		
Response	Percentage									
Yes	70%									
No	30%									

6. Do you believe that in coming years online teaching will certainly bring new way to connect outside of the classroom?



A look at the table-1 reveals the results of perception of school teachers regarding the use of online teaching tools such as YouTube live, WebEx, Zoom, Google Classrooms, etc. The statements of opinionnaire for this section reveals the knowledge of teachers about using these online tools. This section also reveals their views on using these tools during lockdown (COVID-19 Pandemic). The analysis of the first statement reveals that out of 100 school teachers, 40% spent 0-2 hours, 41% spent 2-4 hours and, 19% spent 4-6 hours daily in making videos for teaching online. From the second statement, it can be seen that 55% of teachers found online teaching more convenient and easier. This may be due to the fact that there was almost none interruption from outside factors and students while teaching online. However, 37% of teachers disagreed with the statement. While the remaining 8% could not decide whether they preferred online teaching or traditional teaching. Regarding the third statement, it was found that 54% teachers found online teaching more time-saving. Teaching online certainly saves the travelling time which frees them to use that time according to their need and relaxes them for their class. On the other hand, 41% of teachers did not agree with this statement. The rest of 5% teachers remained undecided about their time-utilization and management.

Further analysis of the fourth statement revealed that 56% of school teachers were strictly against using online teaching as a replacement for face to face teaching. They believed that face to face teaching is more efficient and better than online teaching. However, 17% of teachers believed that online teaching may result in better achievement of students. The other 27% remained undecided about the scope of online teaching instead of traditional teaching. The table also shows that 70% of teachers feel frustrated due to the connectivity issue during teaching. In support of this, Arora and Srinivasan (2020) found that network issue was a major challenge faced by the teachers in a virtual classroom. The other 30% did not face the same problem and were at more ease while teaching. Thus, revealing that connectivity of the internet is a critical factor in determining the effectiveness of teaching as it determines the continuity of the

lecture. 61% of teachers believed that in the near future online teaching will certainly change the interaction among teachers and students outside the classroom. It was recorded that online teaching will make teachers more available through emails and videos. Thus, it will certainly enhance the one on one interaction among teachers and students. However, 18% of teachers did not believe in such possibilities. The other 17% stayed undecided about the future of teaching outside the classroom. Therefore, it may be concluded that the majority of teachers are taking this change positively and are learning new techniques to play their part effectively.

Section 2:

Table.2: Statement-wise Representation of Opinions of School Teachers Regarding their Personal and Professional Aspects

Item No.	Statement	Response
1.	Do you think that you are trained and prepared for conducting online classes?	<p>51% Yes, 37% No, 12% Uncertain</p>
2.	Do you feel under pressure due to increased workload?	<p>61% Yes, 39% No</p>
3.	Do you think that the use of online methods has positively affected your teaching style?	<p>54% Yes, 30% No, 16% Uncertain</p>
4.	Do you believe that your organization should organize in-service training and workshops in the future so that you can be prepared for adverse situation?	<p>82% Yes, 16% No, 2% Uncertain</p>
5.	Do you find any issues in explaining your subject through online methods?	<p>44% Yes, 51% No, 5% Uncertain</p>

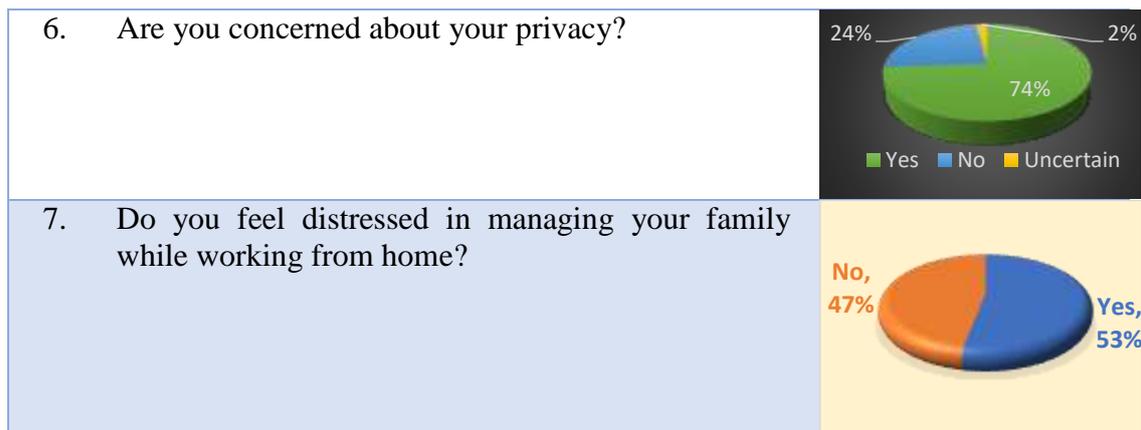


Table 2 reveals the opinions of 100 school teachers regarding their personal and professional skills in using online teaching tools. The interpretation of the first statement indicates that 51% of school teachers felt that they were properly trained to conduct and organize online classes. While 37% of teachers were not prepared for this feat. They felt incompetent regarding the various online tools and how to use them to their full extent. The findings are in line with Arora and Sirinivasan (2020), teachers faced challenges due to a lack of training and awareness. On the other hand, 12% of teachers felt uncertain about their level of skills. For the second statement, 61% teachers reported that they were distressed due to increased workload as they have to work from home and they also don't own proper equipment such as broadband service, laptop and a separate room to teach. But on the contrary, 39% teachers felt comfortable working from home. This may be due to the reason that these teachers may have enough knowledge, time, and equipment to conduct an online classroom. A further analysis of third statement reveals that, 54% teachers observed a significant change in their teaching style. This may be due to the reason that as they had to swap their traditional teaching style with an innovative method; it motivated them to experiment new ways to construct lesson plans, and to make sure that every student understands them. In addition to this, it was also found that 30% of teachers did not feel any change in their teaching style. While 16% of teachers remained uncertain about the changes in their teaching pattern due to the use of online teaching tools.

A close perusal of the table further showed that 82% of teachers believed that their organisation should conduct in-service training programs, workshops, seminars, and lectures to introduce them to various tools of teaching. They also believed that these programs will help them to be prepared for the future if any adverse situation such as COVID-19 arises. However, 16% of teachers believed that no such occurrence will

happen again and these programs do not help in improving their teaching. The fifth statement was related to the competence of the teacher in explaining his/her subject matter through online teaching methods. 51% of teachers reported that they did not feel any issue in explaining their subject matter. However, 44% faced difficulties in explaining their subject such as science; as it requires teaching with models, charts, and live experiments. 74% of teachers also felt that they were concerned about their privacy while teaching online. Especially teachers with little to no knowledge of working on the internet as they feared that their private information may be stolen. The last statement was related to the perception of teachers about how well they are managing their professional and personal life. 53% of teachers voiced their concerns as they felt distressed and not competent in managing work and home life at the same time. Gender role is an important factor as in our society females have a major share of household work. In addition to this, these teachers are also parents and it falls on their shoulders to make sure that their children are also attending their own classes regularly and completing their assignments. While other 47% of teachers reported no issues in managing work from home. Instead, they found it time-saving and convenient.

Table.3: Statement-wise Representation of Opinions of School Teachers Regarding the Learners

Item No.	Statement	Response
1.	Do you think that students are benefitting more through online teaching?	<p>45% Yes, 35% No, 20% Uncertain</p>
2.	Do you feel confident in capturing in each and every student’s attention?	<p>42% Yes, 50% No, 8% Uncertain</p>
3.	Do you believe that teaching through PDFs, PPTs and, videos allows the students to revisit the lecture on their own leisure?	<p>77% Yes, 12% No, 11% Uncertain</p>

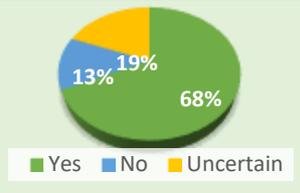
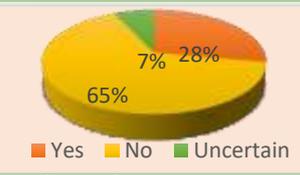
<p>4. Do you think that the visual representation of the content significantly increases the chances of learning among students?</p>	 <p>68% 13% 19%</p> <p>Yes No Uncertain</p>
<p>5. Do you think that assigning and monitoring of homework is easy?</p>	 <p>56% 44%</p> <p>Yes No</p>
<p>6. Do you find it easy to interact with students while teaching online?</p>	 <p>57% 43%</p> <p>Yes No</p>
<p>7. Do you think students attend the classes regularly and attentively?</p>	 <p>65% 7% 28%</p> <p>Yes No Uncertain</p>
<p>8. Do you think that students belonging to different socio-economic strata can afford to learn by using an online platform?</p>	 <p>Uncertain 13% Yes 31% No 56%</p>

Table 3 further illustrates the opinions of school teachers regarding the use of online teaching tools and managing students in a virtual classroom. The results revealed that regarding the first statement 45% of school teachers believed that students were positively benefitting through online methods as compared to the traditional methods. However, 35% of teachers did not agree with this statement. 20% of school teachers were uncertain whether students were benefiting or not through online methods. Therefore, it can be said that the majority of teachers believed in the positive outcomes of online teaching-learning. The second statement was related to the perception of teachers regarding their ability to capture the attention of students. 50% of school teachers felt that they were not able to keep students engaged throughout the whole lecture. It may be because eye contact is a crucial part of building interaction with students which certainly lacks in the virtual classrooms. On the other hand, 42% of teachers were reported to be confident in capturing every students’ attention and 8% of

teachers remained uncertain. In support of this, Arora and Srinivasan (2020) stated that lack of personal touch and interaction was an issue in virtual classroom. Regarding the third statement, 77% of teachers felt that teaching through online media was better as it allows the students to concentrate and revise the lecture in their free time. As the content is available in the form of PDFs, PPTs, and notes; it also allows the students to print out the notes to save their time. But 12% of teachers were not in the agreement of this statement.

A further look at the table showed that 68% of teachers felt that visual representation of the content will help in enhancing the learning of the students. This has been proved by several investigators over the years that visual representation significantly improves the learning of students as they tend to remember the content for a longer time. On the other hand, 13% of teachers were in disagreement and the remaining 19% were uncertain about the role of visual representation of content in enhancing the learning of students. 56% of teachers faced difficulty in assigning and monitoring the home assignments that were given to the students. While 44% of teachers found it more convenient to assign and revise the homework. The analysis of the sixth statement revealed that 57% did not find it easy to interact with each and every student. This may be due to the reason that interaction requires a series of personal contact such as eye contact, calling by name, providing praise; which is not possible to demonstrate in a virtual classroom. However, 43% of teachers were comfortable with the level of interaction. Regarding the attendance of students in the virtual classroom, it was recorded that 65% of teachers believed that the majority of the students did not attend the lecture or were not attentive. In findings were in consonance with Arora and Sirinivasan (2020) who reported that during virtual classroom students were not attentive and did not attend the class. However, 28% of teachers faced no such problem. In support of this, Shenoy et al., (2020) reported that students' attendance was 20 times better than regular class sessions. 7% of teachers were uncertain about the occurrence of such a situation during their lectures. 56% of teachers felt that not every student can afford a smartphone, tablet, or laptop to attend online classes. Also, along with the cost of equipment the expenditure, availability, and connectivity are also an issue for students belonging to different socio-economic strata of our society. On the other hand, 31% of teachers did not consider this an issue.

Suggestions to Overcome Challenges Faced by Teachers:

- ❖ Parents and teachers should find equilibrium and discuss the challenges faced by the children.
- ❖ Administrators should prepare the class schedule and time limit.
- ❖ Supervisors should support teachers and enquire about their mental health regularly.
- ❖ Schools should provide technical support and training for in need teachers.
- ❖ Teachers should provide one on one feedback to students either by call or messages to make sure of their progress.
- ❖ Screen time is also an issue for teachers and students. So, the teacher should assign them with creative projects and assignments.

Conclusion:

This paper explored the views of school teachers regarding teaching online during the lockdown. It was revealed that COVID-19 has certainly created issues in some aspects of teaching-learning process. Findings of the study revealed that the majority of school teachers admitted that teaching online has its positive outcomes such as saving travelling time, easy to teach, positively enhances the teaching style of teachers, allows to develop and present the content in a more interesting way, allows students to revisit the lecture again if needed, allows the teachers to learn new methods of teaching by using PPTs, PDFs, and Graphics. However, a significant percentage of school teachers also pointed out the concern areas such as lack of training among teachers, lack of equipment and broadband, inattentive students, lack of resources, lack of social interaction, difficulty in explaining their subject, pressure due to increased workload, difficulty in managing work from home. Thus, the effect of COVID-19 can be seen in the personal and professional lives of teachers as well as students. However, it is also noted that this shift has certainly presented the positive aspects of using virtual classrooms. As the world has changed drastically before our own eyes, it will be reasonable to conclude that online teaching is the need of the hour. It will be the responsibility of school management to train their teachers for any such occurrence that may or may not occur in the future. This situation has also presented the teachers with an opportunity to enhance their technological knowledge.

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