Original Research Article

A STUDY OF THE EFFECTIVENESS OF TRAINING PROGRAMME TO ENHANCE ONLINE TEACHING SKILLS OF SECONDARY SCHOOL TEACHERS

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Abstract:

The related study was conducted for studying the Effectiveness of Training Programme to Enhance Online Teaching Skills of Secondary School Teachers. 26 teachers at St. Mary's High School, Kalina, Santacruz West were selected by using purposive sampling technique.

1. Self-made questionnaire was used by the researcher for data collection. Training programme was conducted by the school. In the training programme following training programme was conducted.

    i)   Word wall activities

    ii) H5P activities, Creating Online Story Books

    iii) Use of Thing link &

    iv) Exploration of websites to enhance interactivity.

Findings of the study are

1. Teachers of St Mary's High School do face difficulty in online teaching.

2. There is a positive response of the teachers to the effectiveness of the training programme customized to address issues faced during online teaching.

All the training sessions were well received by the participants. After every session the participants would practice the skills and share their resources with peers. Teachers also sent the resources to students and sought their feedback regarding usability and interest generated by the resources.

Keywords: Online teaching, Secondary School teachers, training programme etc.

Introduction

The Covid 19 pandemic has indeed changed the face of education. With educational institutions closed due to the lockdown, there was no option but to go into online education. It was a paradigm shift for most educators. Teachers were used to smart boards in the pre-Covid situation. But this was more in the form of blended learning where face to face learning was complemented with use of technology.

Online Teaching: Online Teaching refers to instruction delivered using the Internet, without requiring face-to-face meetings of students and faculty. For this medium of instruction, we need devices such as computers-desktop, laptop, smart /android mobile phone, tablets with an internet connection.

A few definitions are quoted below to bring clarity: Online teaching and learning is faculty-delivered instruction via the Internet. Online instruction includes real-time (synchronous) and anytime, anywhere

(asynchronous) interactions. (Mya Poe and others) Online teaching is the process of educating others on virtual platforms. This type of teaching involves live classes, video conferencing, webinars, and other online tools. The online applications are developed and designed to facilitate easy learning and better understanding.

Review of related literature

A literature review identifies, evaluates, and synthesizes the relevant literature within a particular field of research.

1.Shivangi Dhawan (2020) 'Online Learning: A Panacea in the Time of COVID-19 Crisis' The researcher states that we need a high level of preparedness so that we can quickly adapt to the changes in the environment and can adjust ourselves to different delivery modes, for instance, remote learning or online learning in situations of pandemics such as Covid-19.

2.Mohammad Mahyoob (2020) 'Challenges of e-Learning during the COVID-19 Pandemic Experienced by English as a Foreign Language (EFL) Learners'

A study conducted in Saudi Arabia. He found that most EFL learners are not satisfied with continuing online learning, as they could not fulfill the expected progress in language learning performance.

Some learners faced internet connectivity problems, accessing classes, and downloading courses' materials problems. Online exams could not be opened on learners' mobile phones. EFL learners' satisfaction with online learning is low; less than 50% are satisfied with online learning, whereas 14% of learners are not satisfied with online learning, and 43 % of learners are not fully supporting continuing online education if there is no crisis. It is recommended that further research should be undertaken to understand the teachers' views and experiences towards online English language teaching during the pandemic.

3. Mugyeni Kintu and others (2016) 'Blended learning effectiveness: the relationship between student characteristics and design features.

A survey was administered to 238 respondents to gather data on student characteristics/background, design features and learning outcomes. The final semester evaluation results were used as a measure for performance as an outcome. The results indicate that some of the student characteristics/backgrounds and design features are significant predictors for student learning outcomes in blended learning.

Along with the above-mentioned research, the researcher also looked at some news reports especially from the Indian context.

1. A report published by the Times of India dated 13 April 2021 States children faced a combination of issues in accessing education. The dominant mode of delivering education is WhatsApp used by 75% teachers and students. Over 75% children reported a host of challenges to access education digitally and this included inability to access the internet, cost of data and non-conducive networks. Students reported internet speed and signal as major hurdles. Almost 75% students faced challenges in accessing online classes.

2. The Annual status of Education Report (ASER) published in October 2020 states only one third of India's school children are pursuing online education and a smaller cohort of this 32.5% are doing live online classes. While just 11% of all the students enrolled in both private and government schools were using online classes, another 21.5% were using videos or recorded classes. And if you take the government

school children alone, then only 8.1% enrolled children were using online classes across the country. Thus, the above research helped the researcher to get a clear idea of how teachers face issues in online teaching. This was useful to draw up a suitable tool and gave insights to the various inputs that could help to enhance the effectiveness of online lessons. The next chapter delves into the methodology of the research.

Need for the study

As the researcher is a professor in B.Ed. college. Student -teacher internship programme is the part of B.Ed course. The researcher observes that school teachers also having problems while taking online classes. Researcher observes these problems of teaching online of B.Ed. student as well as school teachers also. After discussing the issues with vice principal of the school, the researcher had to monitor the online teaching and address various issues faced by students and teachers. Teachers were encouraged to support one another and resolve problems. Some of these problems were technological in nature and were resolved by seeking help from the IT department of the school. However, the major issues were pedagogical in nature. Interaction with the teachers, the researcher found that teachers raised concerns like (i) How do we address student diversity? (ii) How can we sustain student attention during online class? (iii) How can maximum interactivity be ensured during online class? (iv) How can we give simulated experiences in subjects like science especially where demonstrations or experiments are concerned? (v) How can meaningful and interesting evaluation activities be carried out so that testing is non-threatening to students?

As the researcher discuss these issues with Vice principal, she took it as her responsibility to address these issues. With the second wave of the epidemic and the chance of there being a third wave, it was necessary that teachers should be assisted to overcome the hurdles faced in the academic year 2020-21 so that they are better equipped for the coming academic year. With this aim in view, the study was undertaken to help-teachers enhance their technological skills and face the coming academic year with more confidence.

Significance of the Study

The efforts to do research must be purposeful and hence we need to foresee how the findings and action taken will benefit the Teachers and the students, the two main stakeholders in this transaction.

Since this is a new pedagogy, teachers who have spent more than 10 years in this profession, may not be aware of the new developments. Some may be nervous or unwilling to try out something new. But these barriers need to be broken down so that they can avail of the wonders of modern technology.

Relevance to teachers: Firstly, when teachers will be well equipped with the different online techniques, their confidence will be boosted, and they will feel a sense of achievement.

The students' attitude towards them will change and they will command respect from students and parents.

Teachers will be self-reliant and have command over the class that will help to improve the classroom transaction.

When teachers have updated knowledge and are tech savvy, they can add creativity and innovation in their teaching to facilitate joyful learning.

Knowledge of different online tools will help the teachers to cater to the diverse needs of students as well as give them a multisensory learning experience.

Teachers can devise interesting homework and other assignments to gauge students understanding of the subject.

Indiscipline issues will be resolved as students will be thoroughly engaged in the classroom activities.

Objectives of the Study

The objectives of this research are

1. To ascertain the difficulties faced by secondary school teachers of St Mary's High School during online teaching

2. To ascertain the response of teachers to the effectiveness of the training programme customized to address issues faced during online teaching.

Hypothesis of the Study

In this study the research hypotheses are as follows:

(i) There are no difficulties faced by secondary school teachers of St Mary's High School during online teaching

(ii) There is no definite response of the teachers to the effectiveness of the training programme customized to address issues faced during online teaching

Proper analysis of the data will help to accept or reject the above hypotheses.

Scope and   Limitations of the study

This study only considers the teachers at St Mary's High School, Kalina, Santacruz West. It is limited to the 26 participant teachers teaching Classes 9 & 10. It only considers the effectiveness of the training programme conducted for teachers. Any other programmes that the teachers might have attended are not taken into consideration.

In this case, the limitations are

(1) The training programme was of four days and selected issues were addressed.

(2) The teachers have different levels of technological skills, and these have not been considered.

(3) This study only looks at the effectiveness of the training programme as perceived by the teacher. Data is collected from the teachers. Special class was held for students and the teachers implemented the techniques learnt during the training.

Research Method

Present study was adopted by using experimental method.

Design of the Study

The present Research is a One Group Pre-Test, Post –Test Type of Design and is schematically depicted below.

$$O_1 \ X \ O_2$$

Where,

- O_1 is the administration of pretest tool designed to ascertain the difficulties faced by teachers in online teaching. This was ascertained prior to the action

- X stands for the programme designed to enhance online teaching skills of the teachers

- O_2 is the administration of a post test tool to ascertain the effectiveness of the training programme

Variables of the Study

In the present study, variables are as follows:

i. **Independent Variable**: In this research the independent variable is the training programme organized to enhance the online teaching skills of the participant teachers.

ii. **Dependent variable**: In this case the dependent variable is the skills achieved by the teachers after the training programme.

Sampling Techniques

In the present study, since purposive sampling is applied, the school chosen was the researcher's practice teaching school and good relationship maintained with Vice principal madam of St Mary's High School, Kalina, Santacruz.

Male teachers	Female teachers	Total
2	24	26

Tools used for the Research

In this research the researcher has used following tools which seeks information from participants regarding how they use online resources.

i. A checklist to find which online tools the teachers use.

ii. A five-point rating scale of 13 statements to find the experiences of teachers regarding online teaching

Research Methodology:

Implementation of the programme:

The programme was implemented in three stages:

A Google form questionnaire was filled by teachers, which gave some insight into how tech- savvy the teachers are.

Second, a pretest was administered to gauge the online skills of teachers. After pretest training was organized and then posttest was taken through google forms.

A posttest was administered to verify the efficacy of the training sessions. To see how the training sessions helped teachers to enhance their online teaching skills.

Finally, teachers gave feedback of the training as well as received feedback from students after using the resource material created by them. Both were unstructured interviews.

Analysis of pre and post test data is discussed below.

Statistical Tools

Percentage is being used to analyze the data.

Data Analysis

Data was collected via Google Forms and analysis was done statement wise.

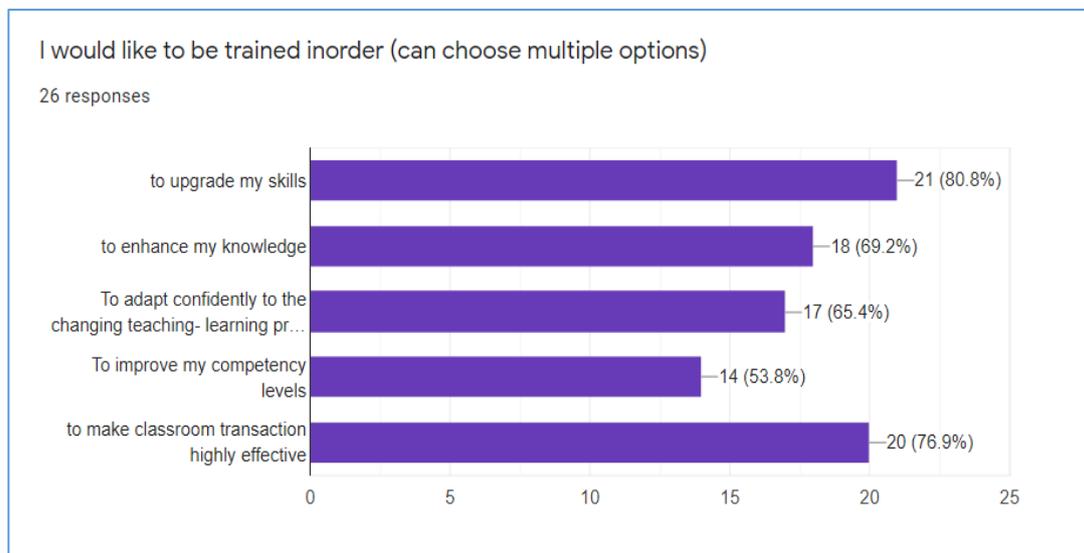## Challenges faced by teachers during online teaching

Prior to the training programme, teacher participants were asked regarding the challenges they faced in online teaching
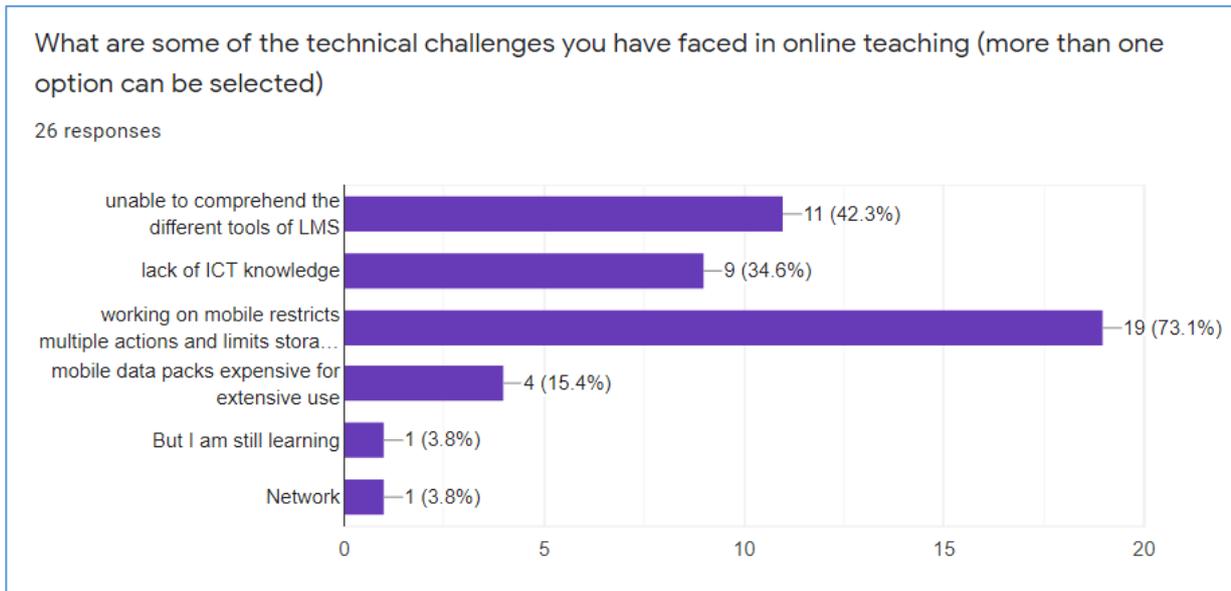
Graph 1: Technical challenges faced by teachers in online teaching

As depicted in the graph, inability to comprehend the features of the LMS and lack of ICT knowledge were major challenges. Another major challenge was working on mobiles. Network issues and limitations of mobile data packs were cited as challenges by few teachers. 80% teachers opined that they would like to be trained in interactive online learning. When further asked what specific learning needs could be addressed, some suggestions regarding training were cited as depicted in the graph below.

Teachers have also furnished reasons why they need training in online teaching. This is shown in the graph below.

Graph 2: Reasons cited for training

Testing of Hypothesis

Hypothesis 1

There are no difficulties faced by secondary school teachers at St Mary's High School during online teaching

From the graph 2 and the preceding discussion on challenges faced by teachers in online learning, it is evident that teachers are aware of LMS and some of its features but are not confident regarding use of interactive features. 76.9% teachers have opined that they need training to enhance the effectiveness of their online classes. 80.8% teachers want to upgrade their skills in online teaching. Other reasons cited for need for training are enhancing knowledge and increasing one's confidence regarding online teaching. Since majority i.e., over 50% teachers strongly feel the need to enhance their online teaching skills, the hypothesis is rejected.

Conclusion: Teachers of St Mary's High School do face difficulty in online teaching.

After the completion of the training programme to enhance teachers' online teaching skills, the participant teachers were asked to fill the post test data. This data was analyzed, and the findings are shown below (SD-Strongly Disagree, D-Disagree, N-Neutral, A-Agree SA-Strongly Agree)

No	Statement	SD	D	N	A	SA	Total
1	The inputs received during the training sessions will help to have meaningful teacher - student interaction during online classes			0	17 (65.38%)	9 (34.62%)	26
2	I can now use different techniques to help students think critically during online teaching			1 (3.8)	19 (73.07%)	6 (26.93%)	26
3	I can now use multi-sensory experiences like audio, video, activity-based method during online teaching			2 (7.6)	17 (65.38%)	7 (26.9)	26
4	I can now cater to all levels of students through different techniques during online teaching			4 (15.4)	18 (61.5)	4 (15.4)	26
5	I can use various activities and games to engage students during online teaching.			0	20 (76.9)	6 (23.1)	26
6	I am now aware of various tools used in LMS			2 (7.6)	19 (73.1)	5 (19.2)	26
7	I have become aware of various websites which can be useful to have an interactive online class			3 (11.5)	15 (57.7)	8 (15.4)	26
8	I have learned to create my own interactive material (other than ppts and videos) for online teaching			3 (11.5)	18 (69.2)	5 (19.2)	26

9	I can now create online quizzes to test student Learning			1 (3.8)	19 (73.1)	6 (23.1)	26
10	I can now create online resources which will help students to do self-learning if required			7 (26.9)	15 (57.7)	4 (15.4)	26
11	I am confident about my online teaching skills			4 (15.4)	22 (84.6)	0	26
12	I believe students enjoy activity-based method more than lecture method			2 (7.6)	19 (73.1)	5 (19.2)	26
13	Students' attendance will improve if my pedagogy is interactive and interesting			8 (30.7)	13 (50.0)	5 (19.2)	26

Table 1: Table showing analysis of responses of teachers after the training programme

The above data shows that most teachers have a definite response towards the training programme. In most of the statements, we can see that teachers strongly agree or agree regarding their ability to engage in interactive experiences during online teaching. This change in ability and building of confidence is due to the training programme.

Hypothesis Two

There is no definite response of the teachers to the effectiveness of the training programme customized to address issues faced during online teaching.

The data from Table 1 and from the interviews of teachers shows that there is a very positive response of teachers towards the training programme.

1. 17 teachers (65.38%) agree, and 9 teachers (34.62 %) strongly agree that the inputs received during the training sessions will help to have meaningful teacher - student interaction during online classes.
2. 19 teachers (73.07%) agree, and 7 teachers (26.93%) strongly agree that they can now use different techniques to help students think critically during online teaching.
3. 17 teachers (65.38 %) agree, and 7 teachers (26.92 %) strongly agree that they can now use multi-sensory experiences like audio, video, activity-based method during online teaching.
4. 18 teachers (69.2 %) agree and 4 teachers (15.38   %) strongly agree that can now cater to all levels of students through different techniques during online teaching.
5. 20 teachers (76.92%) agree and 6 (23.08%) strongly agree that after the training they can use various activities and games to engage students during online teaching.
6. 19 teachers (73.07 %) agree, and 5 teachers (19.23 %) strongly agree that they are now aware of various tools used in an LMS.
7. 15 teachers (57.69 %) agree, and 8 teachers (30.76 %) strongly agree that they have become aware of various websites which can be useful to have interactive online class.

8. 18 teachers (69.2%) agree, and 5 teachers (19.23%) strongly agree that they have learned to create my own interactive material (other than ppts and videos) for online teaching.

9. 19 teachers (73.07 %) agree, and 6 teachers (23.08 %) strongly agree that they can now create online quizzes to test student learning.

10. 15 teachers (57.69 %) agree, and 4 teachers (15.38%) strongly agree can now create online resources which will help students to do self-learning if required.

11. 22(84.61%) teachers agree that after the training programme they are confident about their online teaching skills.

12. 19 teachers (73.07 %) agree, and 5 teachers (19.23 %) strongly agree that they believe students enjoy activity-based method more than lecture method.

13. 13 teachers (50%) agree, and 5 teachers (19.23 %) strongly agree that student's attendance will improve if their pedagogy is interactive and interesting. From the above analysis, teachers have developed a positive attitude regarding their own abilities to handle their online teaching. They have expressed confidence regarding areas such as creation of resources, catering to student diversity, use of various interactive websites, awareness of tools available and use of variety of techniques. Not a single teacher has any negative response regarding the effectiveness programme.

From all above discussion the hypothesis stands rejected and is now reframed as

There is a positive response of the teachers to the effectiveness of the training programme customized to address issues faced during online teaching.

Findings of the Study

1. Teachers of St Mary's High School do face difficulty in online teaching.

2. There is a positive response of the teachers to the effectiveness of the training programme customized to address issues faced during online teaching.

Suggestions:

Based on the results of the research the researcher wishes to make some suggestions:

1. Schools must identify challenges and difficulties faced by teachers as this system of online learning is new to teachers. Students can also be asked to share their perspective and thus the school head can get a comprehensive picture of the online teaching-learning scenario.

2. A customized programme can be developed to train teachers to create resources suitable to their own students.

3. A blog or the school website can host the resources so that they are accessible to students 24 x7. Thus, a virtual repository of resources can be kept ready for use.

4. Some teachers may be more active in use of technology. They can mentor other teachers and help them to create resources.

Conclusion

The online learning scenario that emerged due to the lockdown put several challenges before the teachers. All teachers were not well-versed with creating digital content and conveying it effectively online. Body language and eye contact, which are important cues for the teacher, were difficult to perceive in an online

class. Activity was quite hampered in online classes and Science teachers faced difficulties giving hands-on experience for experiments. Student diversity could not be catered to effectively. Sometimes it was difficult to gauge if the student was actively involved in the lesson. Many teachers expressed views that interaction was limited, and main element of the interaction was lecturing by the teacher.

However online teaching was the only option open and hence it was necessary for teachers to explore various platforms which would help teachers enhance the effectiveness of their online classes.

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