Prospects and Challenges of Online Teaching – A Study with Special Reference to Arts and Science College Teachers in Kannur District

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Abstract

Online teaching refers to the conducting of classes through online platforms such as Learning Management Systems (LMS), video conferencing platforms, and other digital applications. Due to the intensive growth of digital technology, traditional classroom teaching is slowly changed to online methods. This shift created many new opportunities to teachers and students, such as flexibility in teaching and learning, self-paced learning, and ease of using online teaching and learning tools. But, also brought several challenges such as technical problems, insufficient infrastructure, and difficulties in maintaining student participation. Hence in this study an attempt is made to understand the prospects and challenges in online teaching among the teachers in Arts and Science colleges. The study adopted a descriptive and analytical research design. A sample of 30 teachers was selected - 10 each from Government colleges, Aided colleges, and Self-financing colleges - by using convenience sampling technique. Both primary and secondary data were used for the study. Primary data were collected from the sample respondents through a structured questionnaire, and secondary data from books, journals, and magazines. The collected data were analysed by using percentage analysis, weighted average method and ranking method. The results shows that online teaching provides flexibility and the recorded classes help students to revise and understand lessons easily. However, the teaches face increased workload, tiredness due to continuous usage of electronic gadgets, lower student participation, and difficulties in assessing the students' performance.

Keywords: *Online teaching, Online education, Challenges of teaches, Higher education.*

Introduction

Online teaching means conducting classes using internet-based tools such as Learning Management Systems (LMS), video conferencing platforms, and other digital applications. They provide the facilities of imparting interactive audio and video sessions, sharing learning materials, and online assessment of students' performance. Due to the intensive growth of digital technology, traditional classroom teaching is slowly changed to online methods. This change became much faster during the COVID-19 pandemic, as colleges were forced to close to avoid the wide spreading of the disease. It forced almost all teachers to use online platforms for the teaching process. This shift created many new opportunities to teachers such as flexibility in teaching, possibility of providing interactive audio-video session, and the use of various online teaching tools.

Problem Statement

Online teaching has created several opportunities to the teaching community, such as flexibility in teaching, wider reach, possibility of providing interactive audio-video session, and the use of various online teaching tools. At the same time, it also created various challenges such as technical problems, poor internet connection, insufficient infrastructure, and difficulties in maintaining student participation. As such, this study tries to examine the problems and prospects of online teaching among college teachers in Kannur district, Kerala. The understanding of the prospects and challenges of online teaching helps to know the teachers' attitude towards online teaching and the various problems faced by them which help to understand the effectiveness of online teaching and to design various measures to improve its effectiveness. It is also important to ensure the quality of teaching.

Objectives

1.   To identify the major prospects and potential benefits of online teaching as perceived by Arts and Science college teachers in Kannur district.

2.   To measure the level of satisfaction among Arts and Science college teachers in Kannur district with regard to online teaching.

3.   To examine the key challenges and practical difficulties face by Arts and Science college teachers in online teaching.

Methodology

The study adopted a descriptive and analytical research design. The population consists of teachers from Arts and Science Colleges in Kannur district, Kerala, who are using online platforms for teaching their students. From the population a sample of 30 teachers were selected by using convenience sampling technique (10 each from Government colleges, Aided colleges, and Self-financing colleges) Both primary and secondary data were used for the study. Primary data were collected through a structured questionnaire, and secondary data from books, journals, and magazines. The collected data were analysed using percentage analysis, weighted average method and ranking method.

Discussion

The collected data are presented in tables, analysed using appropriate statistical tools and interpreted accordingly. For easy understanding of the data, relevant charts and diagrams are also provided.

Table 1

Basic details

Variables	Group	Frequency	Percentage
Age	Below 30	6	20
	31 - 40	13	43.33
	41 - 50	7	23.33
	Above 50	4	13.33
Gender	Male	11	36.67
	Female	19	63.33
Type of Institution	Government	10	33.33
	Aided	10	33.33
	Self-financing	10	33.33
Teaching Experience	Below 5 years	5	16.67
	6 - 10 years	12	40
	11 - 20 years	7	23.33
	Above 20 years	6	20
Discipline	Arts	9	30
	Science	12	40
	Commerce and Management	9	30
Total		30	100

Source : Field survey

Majority of the respondents (43.33 %) are 31 - 40 age group, 23.33 percent are in 41 - 50 age group, and 20 percent are below 30 years. Only 13.33 percent respondents are above 50 years. It indicates that online teaching is mainly used by younger and middle-aged teachers.

Out of 30 respondents, 63.33 percent are females and 36.67 percent are males, which means female teachers are more in the sample respondents.

Most of the respondents (40%) have 6 - 10 years of teaching experience, 23.33 percent have 11 - 20 years, 20 percent have more than 20 years, and 16.67 percent have less than 5 years of experience.

Among the 30 teachers, 40 percent are from Science stream, 30 percent each from Arts and Commerce & Management stream.

Table 2

Online Teaching Platforms

Platforms	Frequency	Percentage
Google Classroom	23	76.67
Google meet	17	56.67
Webex meet	4	13.33
Zoom	9	30
Moodle	9	30
WhatsApp	30	100

Source : Field survey

Techers in Arts and Science colleges use more than one platform for conducting online classes. All 30 teachers (100%) use WhatsApp and 76.67 percent use Google Classroom. 56.67 percent use Google meet, 30 percent use Zoom platform and only 13.33 percent teachers use Webex meet for live classes. 30 percent teachers use Moodle LMS platform for online teaching. The details are presented in Figure 1.

Figure 1

Online Teaching Platforms

Source : Developed using NotebookLM based on the data presented in Table 2.

All the teachers use WhatsApp for online teaching. Most of them also use Google Classroom and Google Meet. The usage of Zoom, Moodle, and Webex is limited.

Table 3

College Assistance for Online Teaching

Assistances	Frequency	Percentage
Internet facility	17	56.67

Laptops/ desktops	0	0
Training on online teaching tools	27	86.67
Financial Assistances	0	0
Infrastructure support	11	36.67
No Assistance	3	10

Source : Field survey

Majority of the teachers (86.67%) received training on online teaching tools, 56.67 percent are using internet facilities, and 36.67 percent receive infrastructure support from their colleges. Only 10 percent teachers did not receive any assistance from their institution for online teaching.

Table 4

Prospects of online teaching

Statements	Highly Agree	Agree	Neutral	Disagree	Highly Disagree	Weighted score	Weighted average
Online teaching helps to reach large number of students	13	11	3	3	0	118	3.93
Online teaching provides flexibility and convenience in teaching	9	14	4	2	1	114	3.8
Tools like videos, PDFs, live sessions, and quizzes make teaching interesting and effective	23	7	0	0	0	143	4.77
Students from remote areas can easily attend classes	12	8	1	2	7	102	3.4
Students can learn at their own time and pace	15	5	4	6	0	107	3.57
Recorded classes help the students to revise and easily understand lessons.	19	10	1	0	0	138	4.6

Source : Field survey

Weighted average method was used to analyse the attitude of teachers towards online teaching and the results show that, they highly agree that online teaching tools improve teaching effectiveness (WA = 4.77) and recorded classes help the students to revise and easily understand lessons (WA = 4.60). They also agree that online teaching helps to reach a large number of students (WA = 3.93) and provides flexibility and convenience (WA = 3.80) in teaching. Further, they agree that students can learn at their own time and pace (WA = 3.57) and students from remote areas can easily attend classes (WA = 3.40).

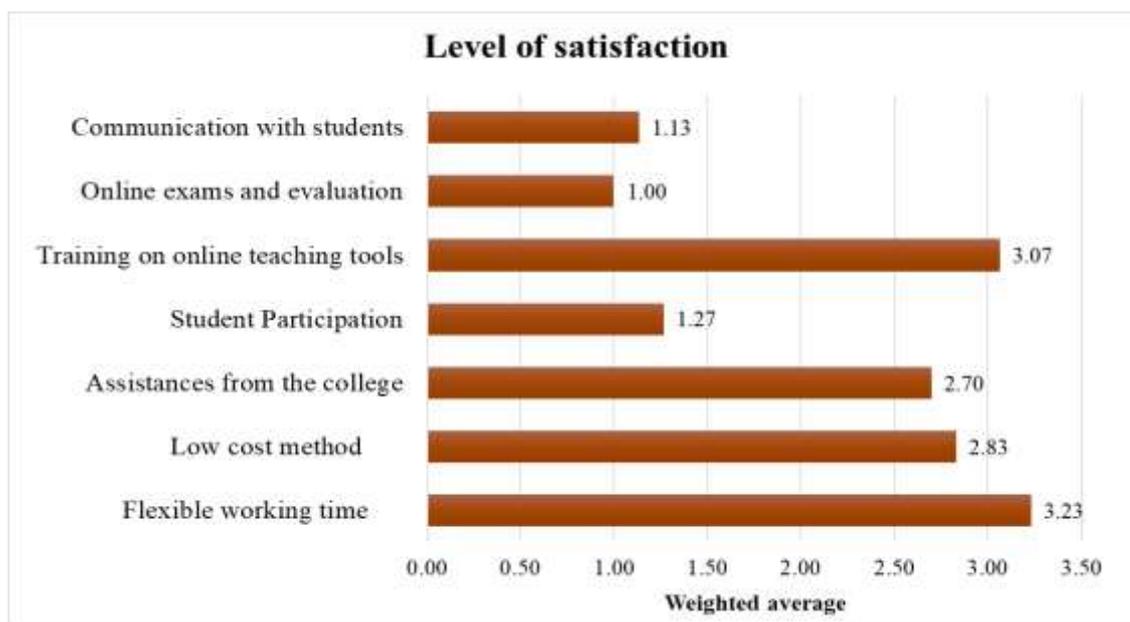**Table 5**

Level of Satisfaction with Online Teaching

Aspects	Highly satisfied	Satisfied	Neutral	Dissatisfied	Highly dissatisfied	Weighted score	Weighted average
Flexible working time	0	19	7	4	0	97	3.23
Low cost method	0	12	11	3	4	85	2.83
Assistances from the college	0	7	16	2	5	81	2.7
Student Participation	0	3	6	13	8	38	1.267
Training on online teaching tools	1	15	8	3	3	92	3.07
Online exams and evaluation	0	3	3	15	9	30	1
Communication with students	0	4	0	8	18	34	1.13

Source : Field survey

Weighted average scores indicate that, the teachers in Arts and Science Colleges are relatively satisfied with the flexible working time (WA = 3.23) and training on online teaching tools (WA = 3.07). They have moderate satisfaction with the cost involved in online teaching (WA = 2.83) and the assistances provided by the college (WA = 2.70). They have dissatisfaction with the student participation (WA = 1.27), examination and evaluation methods (WA = 1.00), and communication with students (WA = 1.13). For easy understanding, the details are presented in Figure 2.

Figure 2

Level of Satisfaction with Online Teaching

Source : Based on the data presented in Table 5.

The teachers in Arts and Science colleges in Kannur district are somewhat satisfied with the flexible working time and training on online teaching tools. They have dissatisfaction with online exams and evaluation, student participation in online classes, and in the limited communication with their students.

Table 6

Preferred Mode of Teaching

Mode of teaching	Frequency	Percentage
Online mode	4	13.33
Class room teaching	3	10
Hybrid (Mix of Online and Class room teaching)	23	76.67
Total	**30**	**100**

Source : Field survey

Majority teachers in Arts and Science colleges prefer the hybrid mode (76.67 %) of teaching. Only 4 teachers (13.33%) prefer fully online teaching and 3 teachers (10%) prefer classroom teaching.
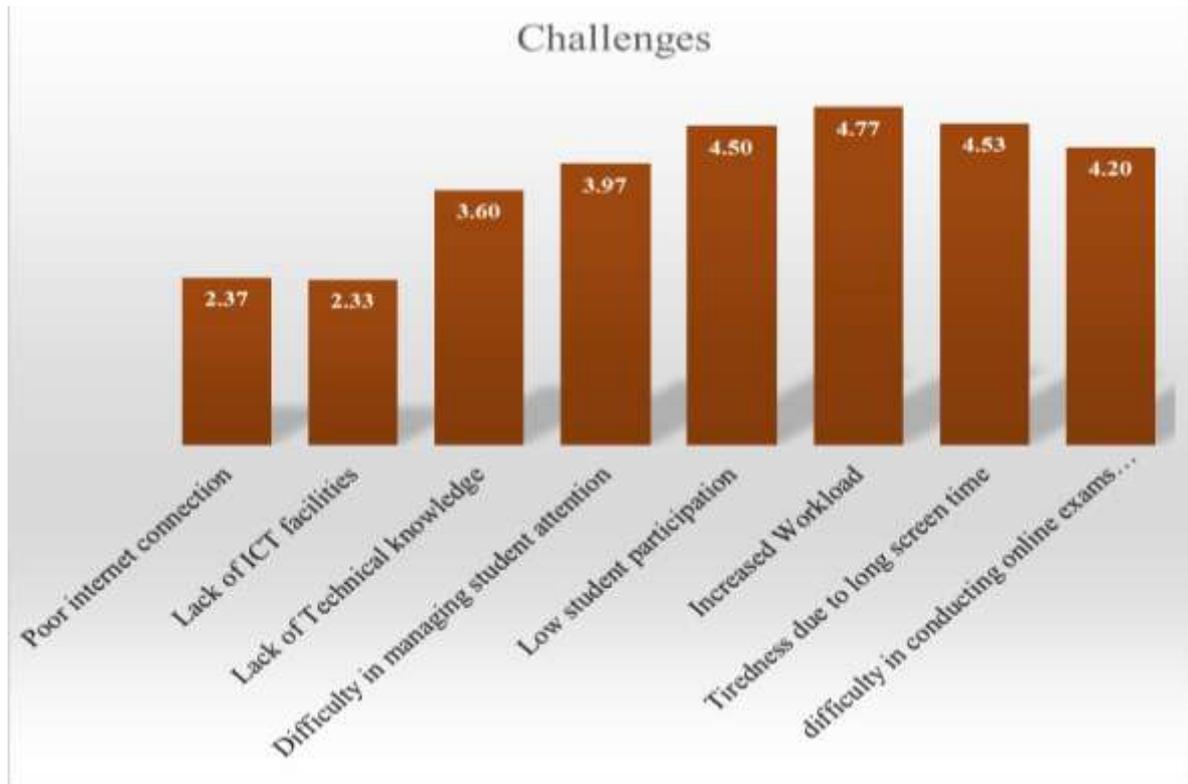
Table 7

Challenges Faced in Online Teaching

Challenges	Very Serious	Serious	Moderate	Minor	Not a Challenge	Weighted score	Weighted average
Poor internet connection	2	6	11	7	4	71	2.37
Lack of ICT facilities	0	4	17	6	3	70	2.33
Lack of Technical knowledge	8	8	12	2	0	108	3.6
Difficulty in managing student attention	7	15	8	0	0	119	3.97
Low student participation	18	9	3	0	0	135	4.5
Increased Workload	23	7	0	0	0	143	4.77
Tiredness due to long screen time	17	12	1	0	0	136	4.53
Difficulty in conducting online exams and assessments	9	18	3	0	0	126	4.2

Source : Field survey

The weighted average scores indicate that increased workload (WA = 4.77) is the most serious challenge faced by teachers in Arts and Science colleges, followed by tiredness due to long screen time (WA = 4.53) and low student participation (WA = 4.50). They also face the problem of difficulty in conducting online exams (WA = 4.20) and difficulty in managing student attention (WA = 3.97). Lack of technical knowledge (WA = 3.60) is only a moderate problem. Poor internet connection (WA = 2.37) and lack of adequate ICT facilities (WA = 2.33) are not much affecting the online teaching. The mean score relating to challenges in online teaching are presented in Figure 3.

Figure 3

Challenges In Online Teaching

Source : Based on the data presented in Table 7.

From the Figure 3, it can be clearly understood that increased work load, fatigue due to prolonged screen time, lower student participation, and difficulty in online assessment are the major challenges faced by teachers in Arts and Science Colleges in Kannur district.

Findings

➢ Majority of the respondents (43.33 %) are in the 31 - 40 age group.

➢ Female teachers (63.33%) are more than the male teachers in the sample respondents.

➢ Majority of the teachers (40%) have 6 - 10 years of teaching experience.

➢ All the teachers use WhatsApp for online teaching. Most of them also use Google Classroom and Google Meet. The usage of Zoom, Moodle, and Webex is limited.

➢ Majority of the teachers (86.67%) received training on online teaching tools, 56.67 percent are using internet facilities, and 36.67 percent receive infrastructure support from their colleges.

➢ Teachers strongly believe that online teaching tools improve teaching effectiveness (WA = 4.77) and recorded classes help the students to revise and easily understand lessons (WA = 4.60). They also agree that online teaching helps to reach a large number of students (WA = 3.93) and provides flexibility and convenience (WA = 3.80) in teaching. Further, they agree that students can learn at their own time and pace (WA = 3.57) and students from remote areas can easily attend classes (WA = 3.40).

➢ The teachers in Arts and Science Colleges are relatively satisfied with the flexible working time (WA = 3.23) and training on online teaching tools (WA = 3.07). They have moderate satisfaction with the cost involved in online teaching (WA = 2.83) and the assistances provided by the college (WA = 2.70). They have

dissatisfaction with the student participation (WA = 1.27), examination and evaluation methods (WA = 1.00), and communication with students (WA = 1.13).

➢ Majority teachers in Arts and Science colleges prefer the hybrid mode (76.67 %) of teaching.

➢ Increased workload (WA = 4.77) is the most serious challenge faced by teachers in Arts and Science colleges, followed by tiredness due to long screen time (WA = 4.53) and low student participation (WA = 4.50). They also face the problem of difficulty in conducting online exams (WA = 4.20) and difficulty in managing student attention (WA = 3.97). Lack of technical knowledge (WA = 3.60) is only a moderate problem. Poor internet connection (WA = 2.37) and lack of adequate ICT facilities (WA = 2.33) are not much affecting the online teaching.

Suggestions

➢ Teachers should use more interactive methods like polls, quizzes, and discussion activities to increase student participation.

➢ Teachers should be given proper training to use digital tools.

➢ Online classes should focus more on students and should include activity-based learning.

➢ Hybrid teaching can be used as a regular method of teaching in colleges.

Conclusion

Online teaching is an important part of higher education. It is flexible, convenient, and can reach a larger number of students. However, challenges such as increased workload, tiredness due to long screen time, low student participation, and difficulties in conducting examinations are present. The teachers are also not satisfied with the evaluation methods and feel that communication with students is limited. All these suggested the need for improved digital infrastructure, better assessment methods, and stronger ways to improve student engagement in order to make online teaching more effective and maintain the quality of education.

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