

**AN INSIGHT OF TEACHERS ON USE OF ONLINE TEACHING LEARNING APPROACH
DURING COVID 19 AND POST COVID-19 – A STUDY IN KRISHNA AND GUNTUR DT.**

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Introduction:

Since almost 17th March 2020, all colleges, and universities all over India and Krishna District has closed due to lockdown due to Covid-19 by the Government of India and respective State Government. All stakeholders from education industry such students, teachers management and parents are in dilemma about completion of syllabus, conducting internal evaluation exams as well as semester End college and university examinations. Students and parents are worried about their exams, declaration of results and even about new academic year. Teachers are concerned about completion of syllabus, conducting of exams and even about evaluation and declaration of results. Management is concerned about conducting exams, evaluation and admission and starting of courses in new academic year.

In period of Lockdown colleges and universities have instructed their teachers to conduct classes and assignments, research guidance, class test online. Even guidance and counselling cells are established and sent it to the students and parents. Committees are established to provide guidance on examination related matters. Various circulars are issued by the colleges and universities providing time to time information to the education stakeholders online during this pandemic.

In this context, the researcher has made an attempt to study Perception of teachers on online teaching- Learning Approach during Covid 19 and Post Covid-19 in Krishna District.

Objectives of the Study:

The researcher has framed the following hypotheses:

1. To study and analyse the various video conferencing apps to conduct online classes and Webinars.
2. To study and analyse the various tools available to complete internal evaluation assignments and test.
3. To study the awareness of and use of Learning Managing System (LMS) and e-content development tools by the teachers.
4. To study the perception of the teachers towards online teaching learning approach during and post covid-19.
5. To give suggestions for effective use on online teaching learning with offline teaching.

Hypotheses of the study:

On the basis of the objectives framed, the following hypothesis are framed,

1. UG faculty make the wide use of online teaching learning tools as compared to PG teaching faculty during the lock down of covid-19.
2. Zoom is widely used app to conduct classes and webinars online.
3. Teachers make the extensive use of Google Forms to make quizzes during Covid-19.
4. Teachers perceived that they prefer offline teaching learning over online teaching.

Research Methodology:

Both primary and secondary sources of data have been utilized for the research study. Data analysis has been by using statistical tools to draw suitable conclusion and suggestion.

a) Sources of Data

- **Primary Data**

Survey method is used to collect primary data for the study. Survey is conducted through a structured questionnaire.

- **Secondary Data**

The study is also based on the secondary data. The secondary data is collected from websites of the various online teaching learning apps such Talentmanagement.com

b) Sample Size

The researcher has used convenience sampling technique for the selection of the respondents for the study questionnaire. The Sample size is fixed to 150 teachers from 50 higher education institutions from various parts of Krishna and Guntur Districts.

Tools for Online Teaching-Learning:

The various online apps and tools available for online teaching learning are studied in three categories which are as:

A) Video Conferencing Apps used for online meeting of Teachers and Students:

Conferencing apps give the benefits to chat with video with anyone in the world for free of cost to students to deliver lectures for language teachers. During the lockdown period these apps are widely used by the educators, some of which are discussed herewith are:

1. Skype:

It is an effective and easy app to use as virtual class room all over the world. Teacher can conduct classes from any part of the world and students can learn from any part of the world. Capture” feature of Skype allows you to easily add images, attach funny GIPHY comments and add videos within a message thread. This can give online conversation a whole new dimension of realism.

2. Zoom:

Like a Skype, another free video conferencing tool is Zoom has recently come on the scene. It functions similarly to Skype, but offers a number of extra features that lend themselves exceptionally well to collaboration. Its unique “Zoom rooms” make group calls a breeze, facilitating collaborative work as well as conversations with other classrooms around the world. Another advantage that Zoom has over Skype: you can record conversations to use for later assessment and feedback, an invaluable tool for helping your students improve even Videos PPTs other material can be presented while conducting lectures using zoom app. It is available in free version and paid version also. Free versions have limited services. But during lock down period almost all educators use Zoom app to conduct online classes or webinars.

3. Cisco Webex:

It is also mostly used video conferencing app to conduct meeting and online classes and webinars with use of videos, audios and screen sharing. It is also have free version with limited features and paid version with special features.

4. Microsoft Team

Like Zoom this app is also widely used by the educator to conduct meetings, workshops seminars and online lectures. This app provide the feature of screen sharing, Interaction with chat, audio videos and recordings of the session. It is a paid app.

B) Learning Management System Tools: The following widely used LMS are

1. Talent LMS:

Talent LMS is a good tool for Blended teaching learning. It is used for discussion forum. Courses can be build by re-using Presentations or Videos. It support for multiple types of questions and a variety of test types. Extensive reporting on test results. Collect and analyze survey responses. It is available for free for month with limited use with 5 users and 10 courses.

2. Socrative

It is tool which can be used in blended teaching learning. The teacher can create quiz while delivering the lecture in the classroom to interact and engage the student in the lecture. In this tool room numbers are allowed by teachers to the students to enter into the room and complete the quiz test. After completing quiz teacher receives result spreadsheet. Teachers can see the results of the activities and, depending on these, modify the subsequent lessons in order to make them more personalized. It can be use with smart phones, laptops, or tablets.

3. Edmodo

Edmodo is free educational tool that connects teachers and students, and is assimilated into a social network. In this one, teachers can create online collaborative groups, administer and provide educational materials, measure student performance, and communicate with parents, among other functions. Edmodo has more than 34 million users who connect to create a learning process that is more enriching, personalized, and aligned with the opportunities brought by technology and the digital environment.

4. Kahoot.com:

It is an educational platform that is based on games and questions. Through this tool, teachers can create questionnaires, discussions, or surveys that complement academic lessons. The material is projected in the classroom and questions are answered by students while playing and learning at the same time. Kahoot promotes game-based learning, which increases student engagement and creates a dynamic, social, and fun educational environment. Free and Paid plans are available. Paid plans start with minimum charges from \$5 per month per teachers for higher education

5. Google Classroom

It is a free web service developed by Google for schools and higher education that aims to simplify creating, distributing, and grading assignments. The primary purpose of Google Classroom is to streamline the process of sharing files between teachers and students.

Google Classroom integrates docs, sheets, slides, gmail, and calendar into a cohesive platform to manage student and teacher communication. Students can be invited to join a class through a private code, or automatically imported from a school domain. Teachers can create, distribute and mark assignments all within the Google ecosystem. Each class creates a separate folder in the respective user's drive, where the student can submit work to be graded by a teacher. Assignments and due dates are added to Google calendar, each assignment can belong to a category (or topic). Teachers can monitor the progress for each student by reviewing revision history of a document, and after being graded, teachers can return work along with comments

6. Google Drive:

This tool is used to share and edit Google documents and worksheets with students who has Google account for interactive classroom activities and projects. It is used with Google classroom.

7. Google Hangouts:

Google Hangouts can be an alternative to Skype for bringing remote groups of people to together to communicate and collaborate. Online classes with Hangout can be recorded

C) Tools to conduct online Tests and Quizzes: The following tools are studied

1. Classmarker.com:

Class Marker is secure, professional web-based Quiz maker is an easy-to-use, customizable online testing solution for business, training & educational assessment with Tests & Quizzes which can be graded instantly saving paperwork.

It is available with free plan as well as paid plan. Free plan is available with 100 Credits per month That's 1,200 Tests graded per year with limited features.

Paid plan 1 is available 400 Credits per month That's 4,800 Tests graded per year with all features included. Paid Plan 2 is available with 1,000 Credits per month That's 12,000 Tests graded per year with all features included.

2. Kahoot.com:

It is also very good tool for online teaching learning with offline teaching. It is used to conduct online lecture with presentation, creating tests, quizzes polls during the lecture. Kahoot is used with Microsoft Teams, Google Hangouts Zoom. Kahoot can be used in classroom to create Quiz and open-ended questions for engagement, Polls and word clouds for audience interaction can be created.

3. Testmoz:

Testmoz is an excellent web tool that allows you to create auto graded tests and quizzes. Each test you create has a unique URL which you can use to edit your test later on or to share with others. Testmoz also provides detailed reports so teachers can analyze student's scores and responses.

4. Google Forms:

Google Forms is a web-based app used to create forms for data collection purposes. Students and teachers can use Google Forms to make surveys, quizzes, or event registration sheets. The form is web-based and can be shared with respondents by sending a link, emailing a message, or embedding it into a web page or blog post. Data gathered using the form is typically stored in a spreadsheet. Although there are other online survey apps, Google Forms is an excellent free option which can be used for various academic purposes free of cost with feature of availability of result in spreadsheet which can be used for conducting research survey, students survey, customers survey to conduct online tests, even to take feedback of the students on courses, programme, teachers and workshops and seminars with varied options.

DATA Analysis and Findings of the Study:

The responses on Perception of teachers on online teaching learning have been collected from 150 teachers from 50 colleges and university departments from UG and PG faculty.

The result of the responses has been presented as under:

The findings of the Study:

72 percent female teachers and 28 percent male teachers participated in survey out of which 69% teachers were from UG and 18% were from PG and 13% teachers were teaching at UG and PG level also.

As during lockdown period, all teachers were doing work from home such taking online classes for the students, creating tests online for the students attending webinars online on various topics. Some teachers were conducting webinars, workshops online. Some were engaged in developing contents teaching material for the students, creating video lectures to deliver at various seminars and workshops, attending meetings of various academic bodies, giving research guidance to the research students online, checking the work done by the researchers online.. Principals head of the department were engaged in establishing career and guidance cell and even guiding and counselling the students and their staff during this Covid-19 period, making technical arrangements for conducting classes, tests, quizzes and even webinars and workshop. They were also engaged in disbursement of salary to the teaching and non teaching staff online, issuing online circulars from time to time during this covid-19 period. In taking into consideration this some questions were asked to the respondents on their engagement online to perform various activities. The findings of this are under:

1. 76% teachers conducted online classes and provided research guidance to the students out of which 56% are from UG and 20% are from PG and 24% did not conducted classes online out which 39% are from PG.
2. 100% teachers attended or conducted workshops and webinars online organised on varied topics.

3. 100% teachers each either attended or conducted webinars and workshops on Research Methodology and online teaching learning tools. 56% teachers even attended webinar on e-content development, 68% attended webinar on Impact of Covid-19 and 34% attended webinars on the topics other than these.
4. Those teachers who have conducted online classes for the students or used online tools to attend or deliver lecture at webinar, 89% used Zoom app, 54% used WebEx app, 26% used you tube channel, 40% used Google classroom and 60% used Google meet.
5. 54% teachers conducted online test for the students as part of internal evaluation and 46% did not conduct any online test.
6. 66% teachers are aware about various online tools to conduct online exams and 34% not aware about online tools to conduct the exams.
7. Those who are aware on online tools to be used to conduct online exams out of which 78% aware about Google classroom, 64% aware on Google sheets, 12% aware about Kahoot.com, 8% aware about class marker.com, 4 % aware on vetvox.com and 2.56% about Testmoz.
8. The teachers who have conducted online tests or assignments for the students have used various tools to create and conduct tests online. 56% teachers use google forms to conduct online test, 24% used Google classroom, 20% used Google sheets.
9. E-content development is an integral part of the education system. UGC is very keen on implementation of SWAYAM online Mooc courses in the curriculam of the UG and PG courses of the colleges and Universities. As per the guidelines of the UGC universities has introduced transfer of 20% credit through SWAYAM MOOC courses. In this context, it is essential for the teachers to develop their online SWAYAM MOOC courses and E-content development is necessary step towards it.

So questions were asked to the respondent teachers on their awareness on E-content development tools. It is come to know that 76% teachers from various colleges are aware on various tools of E-content development and 24% did not aware.

10. 40% of the teachers did not used any E-content development tool and 60% teachers used tools for E-content development and many of them have used more than one tool. Those who have used tools 82% used Screen Recorder, 18% used Open Camera to create videos for online classes.
11. 58% teachers has used various online apps to give guidance and counselling to the students during Covid-19.
12. The question was asked to the teachers about benefits of Online Teaching Learning approach used during Covid-19 and to be used post Covid-19. 54 % teachers say that Time Saving and Time Management is the benefit off online teaching learning approach, 38 % said that Reach to Large masses the benefit, according to 30% teachers it is Effective way of teaching and learning, 28% opinion that there is Scope for Online Interaction, 58% says that Students can access it at any time and at any place, 44% told that it is Permanent Record of Lecture and 52% teachers recorded all the above benefits of online teaching Learning approach.

The question was asked to the teachers to record limitations of Online Teaching Learning approach used during Covid-19 and to be used post Covid-19. As per the responses given by the teachers, 62% says that there are Technology issue to conduct online classes. 56% teachers recorded that there is issue Lack of Control over the students while conducting online classes, 44% opinion that there is lack of Engagement from the students side, 34% said that there is lack of personal touch while conducting online lectures. 43% teachers' opinion that online teaching is not useful for Practical courses, 12% teacher old that they have no knowledge of ICT, 14

% told that there will be resistance from teachers' side for online teaching learning and 32 % recoded all the above limitations of online teaching learning approach.

The respondent teachers were asked their perception on impact of online teaching learning approach during Covid-19 and Post Covid-19, the finding of the responses are:

1. 64% of the teachers post covid-19 online teaching learning will get more importance over offline teaching, however 36% teachers says that offline teaching is more important.
2. 62% teachers says that online teaching learning will affect classroom teaching and 38% says that it won't affect classroom learning.
3. 36% teachers opinion that online teaching will reduce the burden of teachers, however 64% teacher think that it will not reduce any burden of teachers.
4. 22% teachers believed that online teaching will create unemployment to the temporary teachers, 78% teachers says that it will not create any unemployment to the temporary teachers.
5. 68% teachers still prefer offline teaching post covid-19 and 32% prefer online teaching post covid-19.

Testing of Hypotheses:

The hypotheses are tested on the basis of the results of the responses of the respondents which is converted percentage to analyse the result.

1. UG faculty make the wide use of online teaching learning tools as compared to PG faculty during the lock down of covid-19.

76% teachers conducted online classes and provided research guidance to the students out of which 56% are from UG and 20% are from PG and 24% did not

conducted classes online out of which 39% are from PG. Therefore the hypothesis “UG faculty make the wide use of online teaching learning tools as compared to PG faculty during the lock down of covid-19” is accepted.

2. Zoom is widely used app to conduct classes and webinars online.

Those teachers who have conducted online classes for the students or used online tools to attend or deliver lecture at webinar, 89% used Zoom app, 54% used WebEx app, 26% used you tube channel, 40% used Google classroom and 60% used Google meet. Therefore the hypothesis “Zoom is widely used app to conduct classes and webinars online” is accepted.

3. Google Forms is widely used tool to make quizzes by teachers during Covid-19.

The teachers who have conducted online tests or assignments for the students have used various tools to create and conduct tests online. 56% teachers use google forms to conduct online test, 24% used Google classroom, 20% used Google sheets.

Therefore the hypothesis “Google Forms is widely used tool to make quizzes during Covid-19 by teachers” is accepted.

4. Teachers perceived that post Covid-19 they prefer offline teaching over online teaching.

5. 68% teachers still prefer offline teaching and 32% prefer online teaching post covid-19. Therefore the hypothesis “Teachers perceived that post Covid-19 they prefer offline teaching over online teaching” is accepted.

Conclusions:

On the basis of the findings of the research study, the researcher has put forth the following conclusions.

1. The maximum number of teachers who engage in online teaching learning process during Covid-19 are female from UG level.

2. Very few teachers did not conducted online classes however they communicated students using whatsapp and telephonic talk.
3. All teachers participated in survey were engaged online during Covid-19 to attend various workshops and webinars.
4. Almost all teachers attended online workshops and webinars on Research Methodology and online teaching learning tools followed by Impact of Covid 19 on various sectors and then webinars on E-content development. This shows that teachers are engaged in doing work from home either to conduct webinars or to participate in webinars.
5. Zoom app is widely used by the teachers either to conduct online classes or to conduct and attend the webinars followed by you tube, Google Classroom, WebEx and Google Meet. There is no harm using Zoom app, it is available free to use for limited time, paid service is also available with varied features. Zoom app is very easy to handle with screen sharing option to use PPTs and videos, chat option to ask queries and questions and even to see live to each other. Even recordings are available post session.
6. Majority teachers were used online tools to guide and provide counselling to the students to resolve queries of the students and their parents.
7. Those who have conducted online tests, quizzes and assignments and projects used Google forms and Google classrooms for it.
8. The majority of the teachers surveyed are aware about various tools available for e-content development and used various tools for content development. The highly used tool is Screen Recorder. The other tools like Kine Master, open Camera are rarely used. These tools are effective to edit and manage the videos but to some extent need training to use it.

9. The benefits of Online Teaching Learning approach used during Covid-19 and to be used post Covid-19 which listed by the teachers are: Time Saving and Time Management, Reach to Large masses the benefit, Effective way of teaching and learning,
Scope for Online Interaction, 58% says that Students can access it at any time and at any place, Permanent Record of Lecture.
10. The limitations of Online Teaching Learning approach used during Covid-19 and to be used post Covid-19 recorded by the teachers are Technology issue to conduct online classes, Lack of Control over the students, lack of Engagement from the students side, lack of personal touch online teaching is not useful for Practical courses, Lack of knowledge of use of ICT to teachers, resistance from teachers' side for online teaching learning.

Suggestions on the basis of the Study:

The researcher has put forth the following suggestions:

1. As on teaching learning is good approach for higher education institutions to cater the needs of various stakeholders, all colleges and universities now have to make compulsory use of online teaching learning tools in their curriculum.
2. The teachers from PG have negative approach towards online teaching learning. The approach of these teachers is needed to be changed from traditional teaching to online teaching learning. For this purpose college and universities should assign API score for use of online teaching learning tools with classroom teaching. Even for promotions there should be a condition to attend minimum one workshop and training program for virtual class teaching and E-content development is to make compulsory.

3. To use online teaching and online class test tools training to the teachers is must so colleges and universities should organise workshops and training programs in their own places free of cost so that teachers are not to make arrangements to attend the such workshops and training programs at other colleges or universities in the working hours of the teachers apart from their regular teaching workload.
4. Training to teachers is to be continues process. Instead of organising one workshop or one training program. Training is to be given to the teachers on regular basis in their computer Lab.
5. If the teachers are willing to attend such programs outside the institutions then need to be taken care of that these teachers can easily get duty leave and financial grant to attend such programs.
6. The colleges should keep some budget provision for amount to spend on acquisition of various online teaching learning tools so that teachers can teach and students can learn online. Institutions should give permission to the departments to keep some budget provision for acquiring such tools and instruments.
7. It is fact that in classrooms of the basic provision to use such tools is lacking. LCD projectors are not installed and where they are installed not working. No maintenance of such projectors. There is no wifi facility available in the classrooms. In some colleges, wifi facility is available only for staff and not to the students. To use online teaching tools in the class availability of basic requirements to use such tools need to be provided.
8. In remote areas network is the measure issue so to use such tools in the colleges of remote areas, such issues need to be taken care of by the college management.

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