



# PERCEPTION OF STUDENTS AND TEACHERS ABOUT EFFECTIVENESS OF ONLINE TEACHING AND ASSESSMENT IN HIGHER EDUCATION DURING COVID-19 PANDEMIC

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## ABSTRACT

The paper is intended to study the perception of teachers and students towards effectiveness of online teaching and assessment during COVID-19 pandemic. Descriptive survey design has been used. The teachers and students of undergraduate and postgraduate level participated in the online survey. Total 200 teachers and students from three Colleges were selected as sample of the study. Self developed perception scales were administered. The collected data were analyzed through using t-test, ANOVA. The research findings revealed that there is no significant difference in perception towards effectiveness of online teaching and assessment in relation to gender and academic streams among students and teachers. Teachers and students have a favorable perception towards effectiveness of online teaching and assessment.

**Key Words:** *perception, online teaching, online assessment, COVID-19 pandemic.*

## INTRODUCTION

The worldwide spread of COVID-19 has led to a significant disruption in the normal teaching-learning activities of all higher education institutions. All the educational institutions were closed. Billions of students and teachers were safe at home but losing their learning times for themselves and for the nation as well. The COVID-19 pandemic has significantly affected educational activities and disrupted the traditional norms of education at colleges and universities in the world, and, as a result, teaching and learning have shifted to online. COVID-19 enforced the academic higher education universities across the globe to cancel the face-to-face education, Methodology and change to the online teaching/learning (Bao, Dilucca, Wang , 2020). Many universities started claiming that they have started the online classes and admitted that the successfully reached 90% students and created the facilities online. Some universities have openly agreed that the changeover of teaching method is difficult to communicate and access to internet. Online teaching

methodology poses many challenges due to inexperience in conducting/attending live classes by faculty and students and lack of early preparation or support from educational technological teams (Wang, 2020). By the 21st century, blended mode of assessment had already made its foot in the door for many educational institutions. However, it was the pandemic which tilted the scale globally towards the online methods of evaluation and assessment. In this pandemic situation students faced many problems for online assessment-adaptability struggle, technical issues, computer literacy, time management and self-motivation were cited as the five basic challenges a learner faces while being assessed online. (Negi, Mehta, 2021). Online teaching methodology poses many challenges due to inexperience in conducting/attending live classes by faculty and students and lack of early preparation or support from educational technological teams (Wang, 2020).

## **THE RATIONALE OF THE STUDY**

Integration of technology in teaching has made learning easier and more accessible. The corona virus disease (COVID-19) outbreak has been affecting a large number of people and affected their lives. It also majorly affected Higher education system. All Higher education institution is closed and not delivering their teaching face to face mode. It was major challenge in crises time. Digital learning has influenced educational institutions to a great extent, forcing a shift from traditional modes of learning. UGC,2021 has recommended blended learning under which up to 40 percent of a course can be taught online and the rest 60percent through offline mode, at all higher education institution. (Sharma,2021). Many studies reveal that teachers showed both positive and negative responses about online teaching. There are many problems faced by teachers and students during online classes. Problems are serious network issues, non- availability of android or laptop or desktop to all students, heavy data consumption, concentration problem and no financial support to meet data consumption expenses for both students and teachers physical discomfort, poor students' attendance, poor students' participation, teaching not lively, no pedagogical orientation to teachers. (Mishar, Mohanty 2021).The investigator found that most of the studies have been conducted related to problems faced by teachers' and students' during online teaching and learning in COVID-19 pandemic. (Strength and weakness of online teaching and learning). The investigator identified the many studies about perception of teachers and students towards online assessment during COVID-19 pandemic particularly, in Odisha. Some studies explained the perception of teachers and students about online teaching and assessment in urban colleges of Odisha. The investigator has found a smaller number of studies related to perception of teachers and students about effectiveness of online teaching during COVID-19 pandemic particularly, in Odisha. Therefore, Investigator is interested to examine the knowledge, practice and utilization of online teaching and assessment the quality of understanding amongst the students and teachers during lockdown period of the COVID-19 pandemic situation in Odisha. He also interested to conduct a study the Perception of Students and Teachers about Effectiveness of Online Teaching and Assessment in Higher Education during COVID-19 Pandemic in Odisha.

## OBJECTIVES OF THE STUDY

- I. To study the Perception of Teachers on Effectiveness of Online Teaching during COVID-19 Pandemic.
- II. To study the Perception of Students on Effectiveness of Online Teaching during COVID-19 Pandemic.
- III. To study the Perception of Teachers on Online Assessment during COVID-19 Pandemic.
- IV. To study the Perception of Students on Online Assessment during COVID-19 Pandemic.

## HYPOTHESE OF THE STUDY

Ho.1. There is no significant difference in Perception of teachers towards Effectiveness of Online Teaching during COVID-19 Pandemic with regard to their gender and stream.

Ho.2. There is no significant difference in Perception of students towards Effectiveness of Online Teaching during COVID-19 Pandemic with regard to their gender and stream.

Ho.3. There is no significant difference in Perception of teachers towards Effectiveness of Online Assessment during COVID-19 Pandemic with regard to their gender and stream.

Ho.4. There is no significant difference in Perception of students towards Effectiveness of Online Assessment during COVID-19 Pandemic with regard to their gender and stream.

## METHODOLOGY

The present study mainly comes under descriptive study. The purpose of present study aimed to assess the relationship among perception of teachers and students in higher education institutions during COVID-19 pandemic. Descriptive method concerned with the condition or relationship that exists, opinions that holds, processes that are going on, and effects that are evident to trends that are developing.

## POPULATION & SAMPLE

All the higher education students and teachers of Ravenshaw University and Sailabla Womens College and Utkal University affiliated rural college in Jajpur is population of the study. The investigator used purposive sampling. The sample size is 200 out of which 50 teachers and 150 students from different institutions.

## TOOLS

In this purpose study, the investigator used self-developed perception scale to know the perception of teacher and students towards online teaching and assessment during covid-19 pandemic. 5 point perception scale for teachers and students (Likert scale).

## RESULT OF THE STUDY

### Perception of Teachers about effectiveness of online teaching and assessment with reference to Gender

In order to study the overall perception of teachers about online teaching and assessment with reference to gender, the data were analyzed in the following table.

**Table-4.1: Significance of difference in mean scores of overall perception of male and female teachers about online teaching and assessment**

Gender	N	Mean	SD	SEM	Df	t-value	P value
Male	27	155.48	17.32	3.33	48	.047	0.963
Female	23	155.26	15.51	3.23			

From the above table-4.1, it is found that the mean perception score of male teachers is 155.48 & that of female teachers is 155.26 with df 48. P-value of 0.963 is higher than 0.05. Hence, the null hypothesis, “There exists no significant difference in mean perception score of male & female teachers towards online teaching and assessment.” is retained. Studies conducted by Kumar and Tiwari (2021) and Bhowmik and Bhattacharya (2021) also found no difference in perception regarding online education between male and female students. Also found the same result.

### **Perception of Teachers about effectiveness online teaching and assessment of teachers with reference to Stream**

In order to compare experience of teacher’s perception of online teaching and assessment belonging to Arts, Science and Commerce data has been analyzed in the following table-4.4.

**Table-4.2: Summary of ANOVA depicting overall perception scores of teachers experience about online teaching and assessment with reference to Stream**

Sources	Df	Sum of squares	Mean square	F-ratio	p-value
Between groups	2	454.019	277.010	.844	.436
Within groups	47	12635.761	268.846		
Error	49	13089.780			

From the above table-4.2, F-ratio of overall perception among Arts, Science, Commerce teachers is .844 and p-value .436 which is not significant at 0.05 level of significance. Hence, the null hypothesis, “There exists no significant difference in perception among teachers with Arts, Science, Commerce teachers about online teaching and assessment.” is retained. It means there is no significant difference in the mean perception scores among Arts, Science, Commerce of teachers experience about online teaching and assessment.

### **Perception of Students about effectiveness of online teaching and assessment with reference to Gender**

In order to study the overall perception of students about online teaching and assessment with reference to gender, the data were analyzed in the following table.

Gender	N	Mean	SD	SEM	Df	t-value	p-value
Male	52	158.48	17.17	2.38	148	-1.382	.169
female	98	163.21	19.04	1.92			

\*Not significant at 0.05 level of significance

From the above table it is found that the mean perception score of male students is 158.48 & that of female students is 163.21 with df 148. P-value of 0.169 is higher than 0.05. Hence, the null hypothesis, “There exists no significant difference in mean perception score of male & female students towards online teaching and assessment.” is retained.

**Perception of Students about effectiveness online teaching and assessment with reference to Stream**

In order to compare experience of student's perception of online teaching and assessment belonging to Arts, Science and Commerce data has been analyzed in the following table.

Sources	Df	Sum of square	Mean square	F-ratio	p-value
Between groups	2	301.058	150.529	.437	.647
Within groups	147	50594.442	344.180		
Error	149	50895.500			

From the above table F-ratio of overall perception among Arts, Science and Commerce teachers teaching experience is 0.437. P-value of 0.647 is not significant at 0.05 level of significance. Hence, the null hypothesis, "There exists no significant difference in perception among teachers with Arts, Science and Commerce students of experience about online teaching and assessment" is retained. It means that there is no significant difference in the mean perception scores among teachers with Arts, Science and Commerce students of experience about online teaching and assessment.

**Overall Perception of teachers about online teaching and assessment**

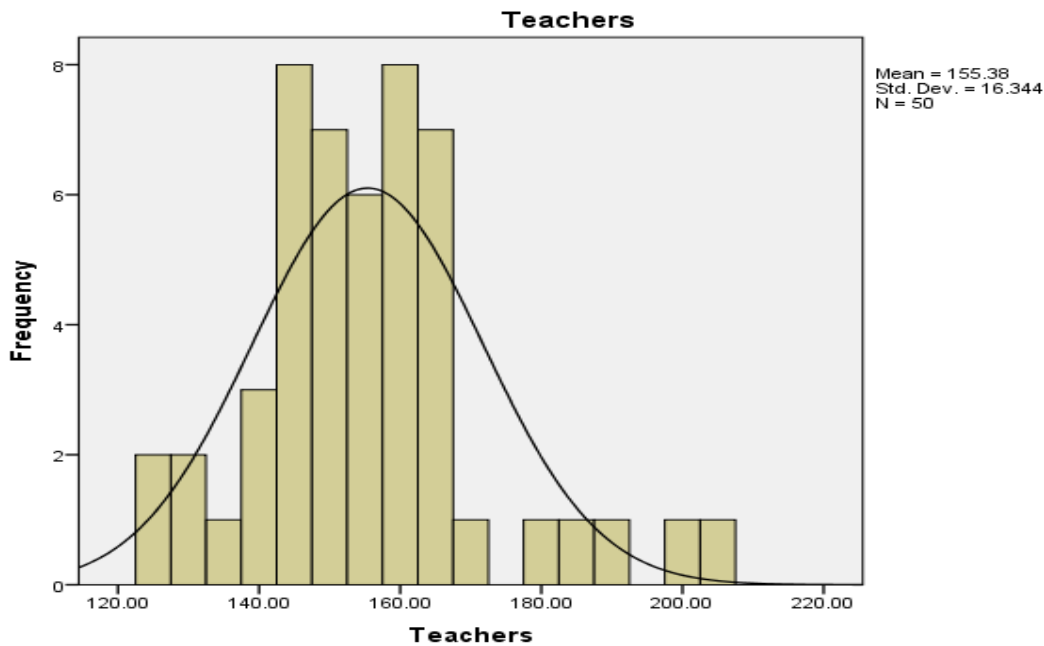
Overall perception of teachers about online teaching and assessment are analyzed using descriptive statistics as given in the following table-4.3 and fig-4.3.

**Table-4.3: Overall Perception of teachers about online teaching and assessment**

	N	Mean	Median	Mode	Std. Error of Mean	Std. Deviation	Variance	Skewness	Kurtosis
<b>Perceptions</b>	50	155.38	154.00	152.00	2.31144	16.34437	267.136	.920	1.765

From the above table-4.3, it is observed that there were 50 teacher respondents whose mean perception score is 155.38. Median score is 154.00 and mode is 152.00. This is slightly less than the mean. The maximum score is 220 and the mean is 155.38 (70.62%). Hence, it can be concluded that the overall perception of teachers about online teaching and assessment is highly positive. Higher education teachers in Odisha have highly positive perception about online teaching and assessment. The Fig-4.3: shows a normal distribution of perception score which further indicates that inferential statistics could be used.

**Figure-4.3: Histogram of overall perception of teachers about online teaching and assessment**



**Overall Perception of Students about Online teaching and assessment**

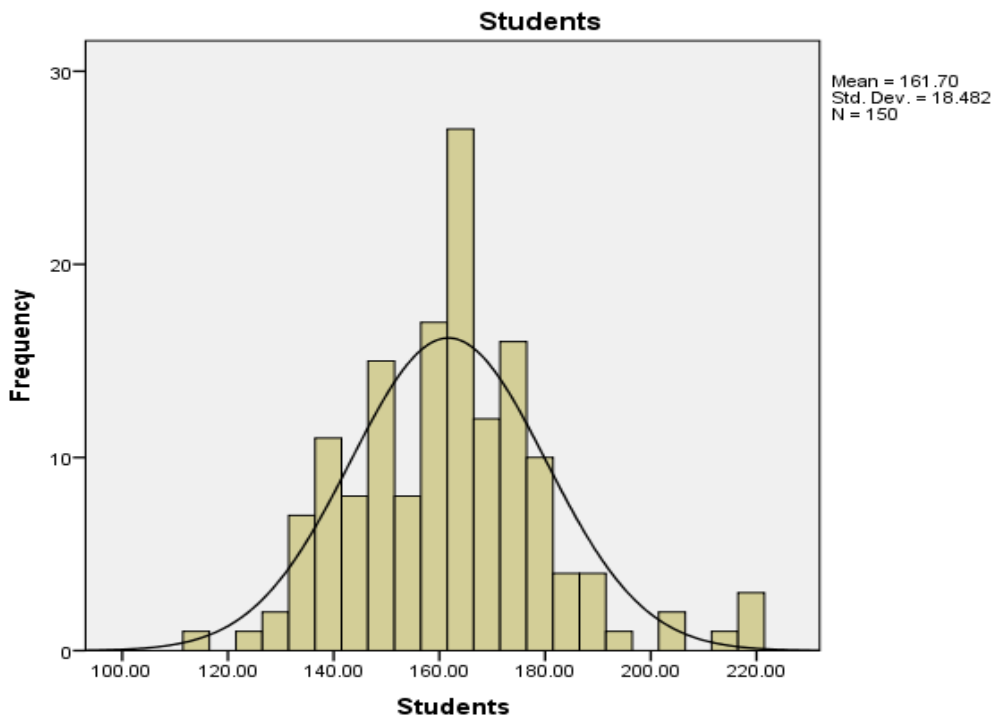
Overall perception of students about online teaching and assessment are analyzed using descriptive statistics as given in the following table-4.4 and fig-4.4.

**Table-4.4: Overall perception of students about online teaching and assessment.**

	N	Mean	Median	Mode	Std. Error of Mean	Std. Deviation	Variance	Skewness	Kurtosis
<b>Perception</b>	150	161.700	162.000	162.00	1.50904	18.48190	341.581	.520	1.136

From the above table-4.4, it is observed that there were 150 respondents whose mean awareness score is 161.700. Median and mode is same 162.00 which is slightly more than the mean. The maximum score is 225 and the mean is 161.700 (71.86%). Hence, it can be concluded that the overall perception of students about online teaching and assessment is highly positive. Fig-4.2 shows a normal distribution of perception score which further indicates that inferential statistics could be used.



**Figure-4.4: Histogram of overall perception of students about online teaching and assessment**

## CONCLUSION

An analysis of the study reveals that there is no significant difference in perception of teachers and students about online teaching and assessment regarding gender. It means most (78%) of the teachers and students agreed that online teaching permits students to learn at their own pace and share feedback in the Google platform/email/what's app with students. Online teaching is new technique to impart learning in this pandemic. Students show that this platform is very flexible and supportive for students during pandemic period. Also found that there is no significant difference in perception of teachers and students about online teaching and assessment among Arts, Science, and Commerce Teachers and students. Most of the teacher and students said that teachers motivate students to attend online classes. They also said that online class saves time for course coverage. It is flexible. However, most of the teachers and students prefer physical exam over online exam. Students feel that they learn anything due to online exam. Most of the teachers and students agreed that number of online tools could be used during online assessment and it gives exposure for variety of study materials than face to face mode. But students feel that all the answers of questions in online exam are not available in books or internet sources. Students feel that online exam not promote malpractice. Hence, both students and teachers said that students secure extremely high score in online evaluation. However, disadvantaged groups suffer a lot due to online assessment. Most of the teachers and students said that teachers give adequate time to students during online examination and both participate in online assessment actively. But teachers said that students are not serious about online examination.

## RECOMMENDATION

The findings of the research revealed that teachers from higher education have positive perception about online teaching and assessment during COVID-19 Pandemic. From the analysis of above data, it was found that teachers are facing problems in online teaching and assessment with regard to network issues, interruption in supply of electricity, shortage of time and no proper evaluation process etc. In online evaluation process students have also secured extremely high score. This will help the teachers to make adequate plan and different strategies to eliminate the problems and maximise the teaching learning. Due to constraint of time, students are not able to complete their studies and it is burden for the students for online evaluation process and syllabus was not completed due to lack of sufficient time. Hence, the teachers should adapt collaborative and cooperative teaching learning strategies for teaching and evaluation of the students. Teachers should be adopted different strategies such as: create questions that require higher order thinking, use varied question types, use Proctor exams mobile phone monitoring option for greater security, offer different version of the same test. Because the quality of higher education depends upon quality teachers. Findings of the study reported that online teaching permits students to learn at their own pace and teachers are share feedback in the Google platform/email/WhatsApp with students. Thus, Students can emphasize on self-study and develop his/her holistic personality and required skills. Teachers should equip themselves to handle all requirements of the students. Some guiding principles may be prepared according to students need and interest of all institutions. So, for the policy makers should keep an eye on the skill enhancement programmes. Most of the teacher and students agreed that disadvantaged group students suffer lot of problems in online teaching and assessment. For conducting online classes, the teachers and students should be provided an uninterrupted Wi-Fi network especially taking consideration into the remote areas., and during online class teacher should utilize a variety of technology tools, a good rapport with the students provide collaboration opportunities and regular monitoring programme should be conducted for accessibility of all students.



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