

IMPACT AND EFFECTIVENESS OF ONLINE TEACHING METHODS AND PEDAGOGY

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ABSTRACT

Covid has brought a paradigm shift in the mindset and in the approaches used especially in the area of Teaching Learning. Traditionally only classroom teaching was considered the most effective mode of teaching but the virtual mode of delivery has become the need of the hour. The present study focuses on the evaluation of various e-Learning methods and finding their impact & effectiveness on the type of subjects like Practical subjects which involve hands on expertise. Virtual learning paves the way for delivering sessions to many students at a time so the benefits of online teaching are more than its drawbacks as per the responses of the research conducted. Online teaching has helped both students & teachers to connect at long distances, have Flexibility, Reduction in infrastructure-associated tasks, and increased collaboration. However, the disadvantage of online teaching is the lack of Personal connection with the student. So the concept of blended learning is the best suitable option for the optimum utilization of all resources and justification for the subject content delivery.

Keywords: Education, Teaching, E-learning, Online Learning, Virtual Learning

Introduction

Post Pandemic the new word added to the dictionary is the “New Normal” and yes the new Normal in the education sector is the blend of Online & offline learning as both have their own Pros & Cons and the academicians should take the optimum advantage of both modes. Before Covid, no one would have ever thought that teaching could be done so efficiently using various online tools. The education sector adapted it so quickly using various tools like Zoom, Google Meet, Teams, in-house developed software etc. The benefits of online teaching in colleges are that multiple trainers can collaborate, Breakout rooms for discussions, Polls, Chat and Q&A, Live quizzes etc. Nowadays taking feedback through Google forms has become so easy and faster than the printed feedback forms that were taken earlier.

Even though it has been a big shift from classroom teaching to online teaching during pandemic, it has been adopted smoothly by all academicians, institutions and colleges for various student training programmes and Faculty Development Programmes (FDP) etc. But as time progressed the institutes concluded that the attention of students in the classroom was much more than in virtual classes as in online teaching attendance was there but attention was not there. The academic results during online exams also went high despite various measures used by universities to prevent unfair means. The knowledge gained by students in online teaching is dependent on the student so we can say that the effect of online teaching is more dependent on the learner than the teacher.

Research objectives:

1. To find out the impact of Online Teaching on students & teachers
2. To evaluate various Online Teaching Pedagogy
3. To compare &contrast the impact of Online teaching Learning

Research Methodology

This research study follows the quantitative method for analysis of, impact and effectiveness while learning online mode of pedagogy. A questionnaire is formed and circulated in the form of Google Forms amongst postgraduate MBA and MCA students. The response was recorded on a scale where strongly agree is maximum on the scale and disagree is minimum on scale. The sample size is consisting of 200 students' responses. This survey was undertaken in the month of January 2023. The questionnaire was distributed to the participants in the Google form with a consent form stating that the information provided will be used for publication purposes.

Literature Review

Galang, Encarnacion (2020) collected teacher and student responses and checked for the effectiveness of E-Learning in their institute and they tried to find how e-learning affects teaching styles and learning styles and the significant difference between teachers- students in their perceptions of E-Learning. The E-learning portal which started in 2017 is a big hit in the institute. From admissions to tutors, plans are managed through an online portal. These courses offer blended and centred learning. Basim (2022) carried out the study to find an inclusive approach for finding the impact of a pandemic on education, reviewing it and what changes occur in the shift from online to offline. The offerings from virtual pedagogy and online pedagogy are also studied. Because of the sudden change due to the pandemic, the main focus was to check digitization's positive and negative aspects from a student's perspective. With qualitative research, the usefulness and the things needed in the process of e-learning are further discussed and studied. Due to the Covid outbreak, Wang (2021) carried out the survey in the form of a network questionnaire. The target students were from one of the medical universities. To get authentic data this university was chosen as this university has a whole semester of online teaching experience. This questionnaire was distributed among 500+ students and collected data were processed using SPSS25.0. For the structural equation model and to analyze the data, AMOS24.0 was used. Influence of learner's previous e-learning experience and their current behavior checked by this structural model.

In a recent study, Rahim (2021) highlighted the effectiveness of online learning in the paper titled "The Effectiveness of online teaching and learning tools". For this study chosen participants were upper-level accounting students from US. The methodology used was quantitative and qualitative. During the midterm, students were contacted and provided with a survey to know their thoughts on different online components of the course. The design of the survey was designed in such a way, that it would capture students' perceptions regarding the discussion boards, virtual teams, virtual office hours and non-interactive tools textbook reading, and practice quizzes. To find the answer to the question "What is exactly the experience of students during lockdown", that is to assess how university students experienced offline to online teaching after the closure of campus due to the COVID-19 pandemic, Almendingen (2021) followed mixed methods of explorative study. For 2- and 12 weeks researcher collected the data from students in Public Health Nutrition through questionnaires. The conclusion of this study was, even though the sudden shift from offline was challenging but students adapted to the new changes. This study provides the exact perspective of students after a sudden lockdown.

Zheng , Bender (2021) with a quasi-experimental design carried out a survey. 482 pre-doctoral students from a U.S dental school were participants. Students were assessed for the topic "effectiveness of online courses during a pandemic" post and pre-pandemic. With the survey they carried out, they stated that 80% students have adapted it so well that they would like to continue with online learning. This study was the first one in dental education for checking the online performance of students. With descriptive qualitative analysis, Nartiningrum & Nugroho(2020) focused on challenges, suggestions, and needed materials during online learning. They collected data using a survey with 92EFL learners from two classes of English course. Few participants were interviewed further for their opinions about teaching learning beyond the classrooms.

Darius , Gundabattini (2021) conducted an online survey to find the effectiveness of online teaching-learning as it helped a lot during the pandemic. This survey helped to find out the effectiveness of online teaching-learning for university and college students. a survey conducted for 450 students among university and college students from different universities and colleges helped to conclude that, pedagogies like PPTs, quizzes, student version software, video lectures by faculty, a conducive environment at home, interactions by the faculty during lectures and online materials provided by the faculty promote effective online learning. A different light on pedagogy was flashed by Sona ,Mathur (2022) on students' perceptions. They feel that it's high time for teachers as well to update themselves to be able to cope with the change in the teaching pedagogies. Under exploratory research, they gathered data from 365 participants and analyzed it. A structured questionnaire is used to find out the perception of students who are new to online teaching pedagogies by teachers. Jin , Lin (2021) studied the paradigm shift from traditional learning to online learning during a pandemic for Chinese students. Those participants who have the experience of switching from offline to online learning were considered here. The formal survey was carried out for these participants after the pilot test. Due to cost-effectiveness, and rapid response time, online data was collected. A total of 800+ responses were collected from different universities and colleges. After the results of the studies, online learning was like a turning point for university management. Students also choose online options for learning because of convenience, safety and service quality.

In a recent study, Zakaryia , Khaled (2021) conducted two Google surveys of fifty faculties and 280 students to find out their perception of online learning. These students were from undergraduate and postgraduate levels. As a result, participants felt online learning was useful as the easy-to-use online platform was provided and they

were trained enough to attend it online. Thus, both participants were satisfied with using the online platform. Zhonggen (2021) has undertaken a study to identify the influence of demographic variables and personalities on online learning outcomes during the COVID-19 pandemic. The mixed-design research method was carried out to analyze both quantitative and qualitative data. This data is obtained from the semi-structured interview and two scales. Two variables used for the study were the dependent variable and independent variables. To set the relationship between variables, linear regression analysis is used. Results show that extroverts and women prefer physical classrooms to online learning. Learners with strong personality traits and males felt online were the best learning method.

Analysis and Results

A total of 204 students from the Management stream (MBA and MCA) participated in the survey. There were 50.8% male students and 49.2% were female. Maximum participants in the survey were from age group 25-30 as shown in Figure 1 and Figure 2.

Please select Age group

204 responses

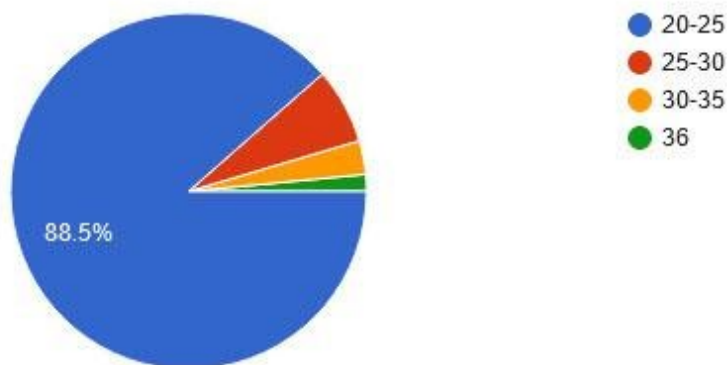


Figure 1: Age group

Please specify gender

204 responses

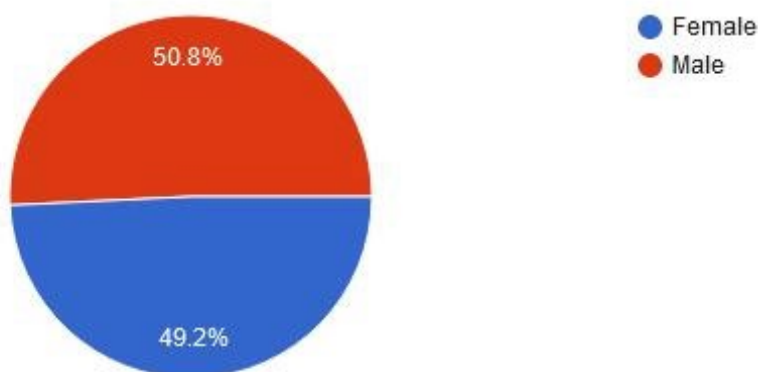


Figure 2: Gender of student

Following Figure 3 shows that (47.8%) of students responded that they felt E-learning provides comfort and convenience in their studies.

E-learning is convenient and comfortable.

204 responses

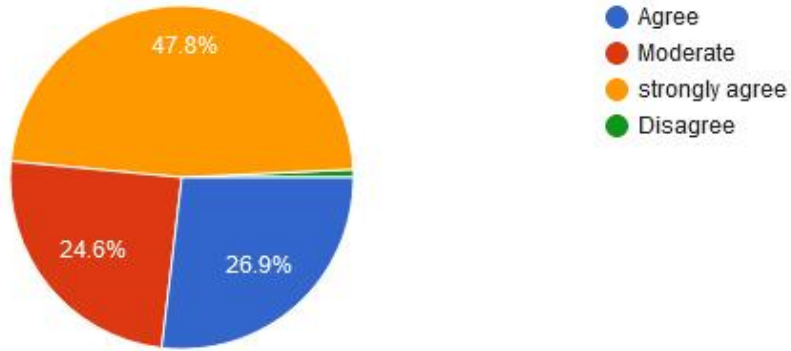


Figure 3: students' view on the Comfort & convenience of e-learning

Following figure 4 shows that (44.8%) of students responded that E-learning assessment increases their knowledge.

Online forum, Drill and Practice activity , MCQ's increase the knowledge.

204 responses

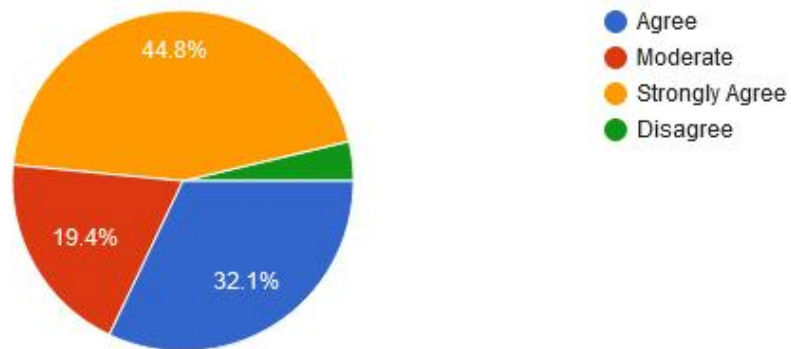


Figure 4: Different online options to gain knowledge

As shown in Figure 5, the (47%) of students are agree that E-learning tools help them in enhancing their academic performance.

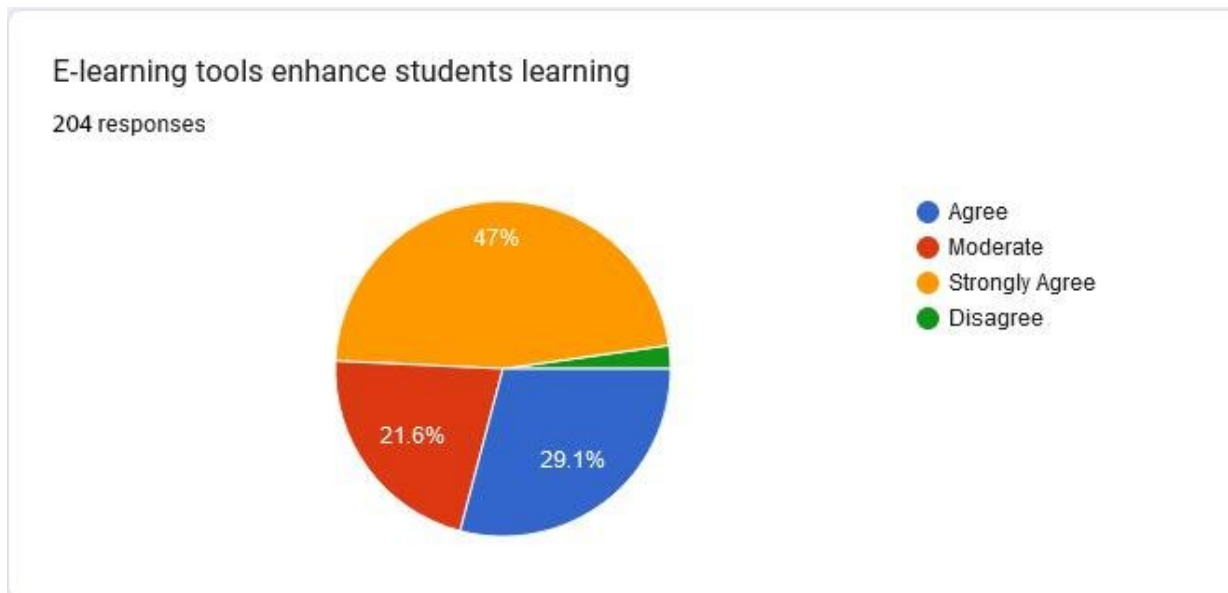


Figure 5: Contribution of e-learning Tools in enhancing students learning

Figure 6 shows (51.5%) of the students responded that E-learning provides time flexibility for their studies.

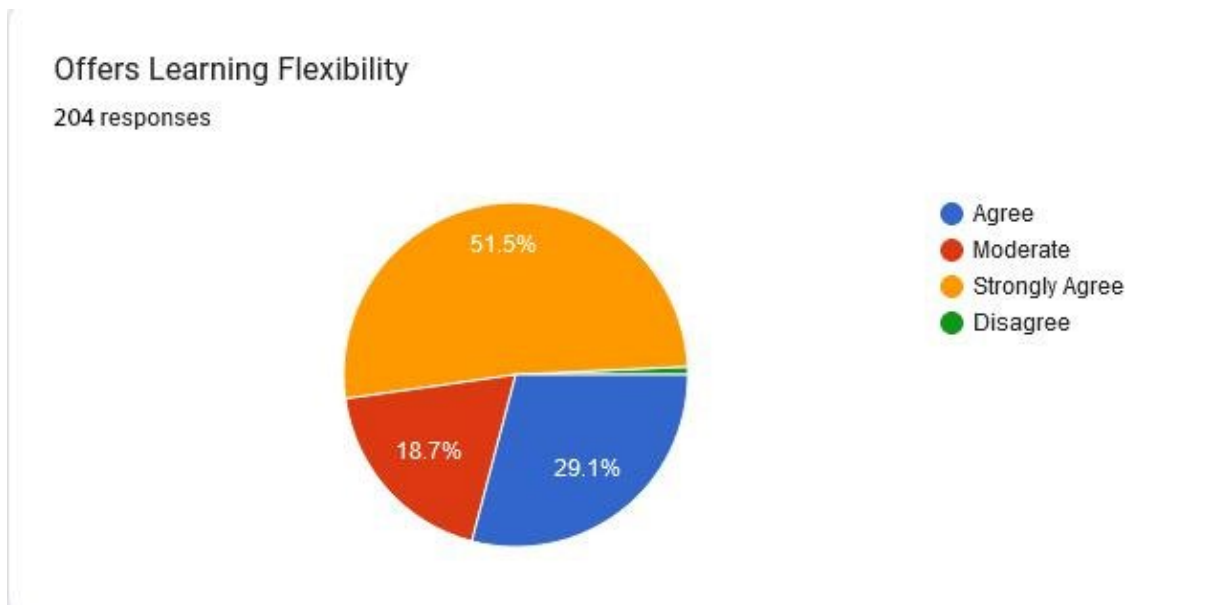


Figure 6: Flexibility offered while online learning

Following Figure 7 depicts that (51.5%) of students responded that the E-learning motivates students' in gaining knowledge.

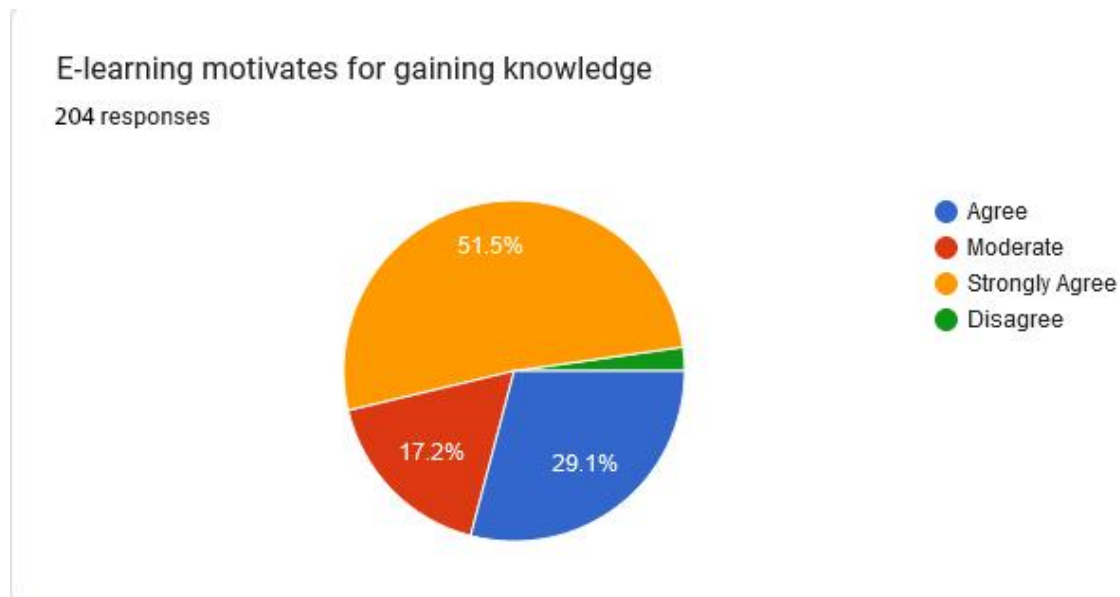


Figure 7: Contribution of e-learning to Motivation

Figure 8 shows that (47.8%) of students responded that there was the quick response for queries.

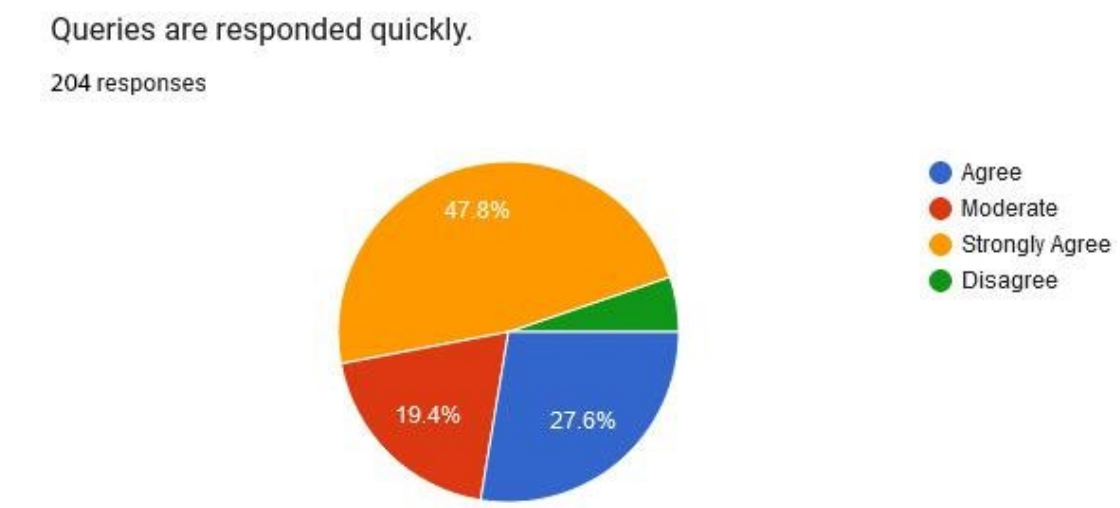


Figure 8: Quick responses for queries

Figure 9 shows that (60.4%) of students responded that because of online learning their travel time was reduced.

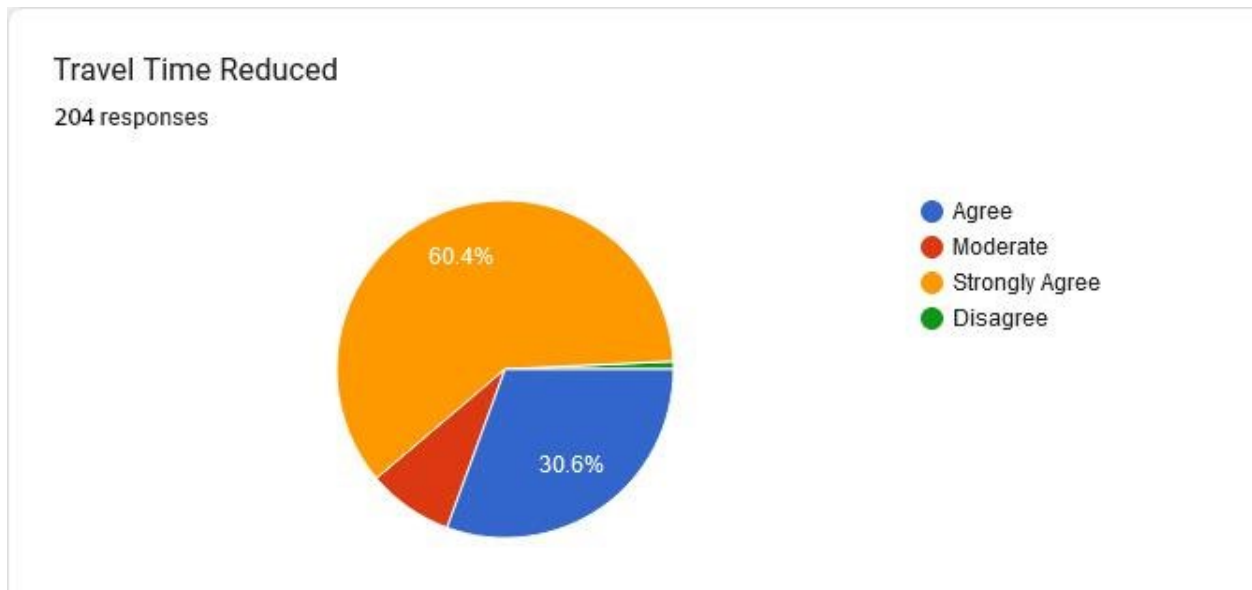


Figure 9: Travel time

Figure 10 shows that (53%) of students responded that there was ease of use while using different pedagogy

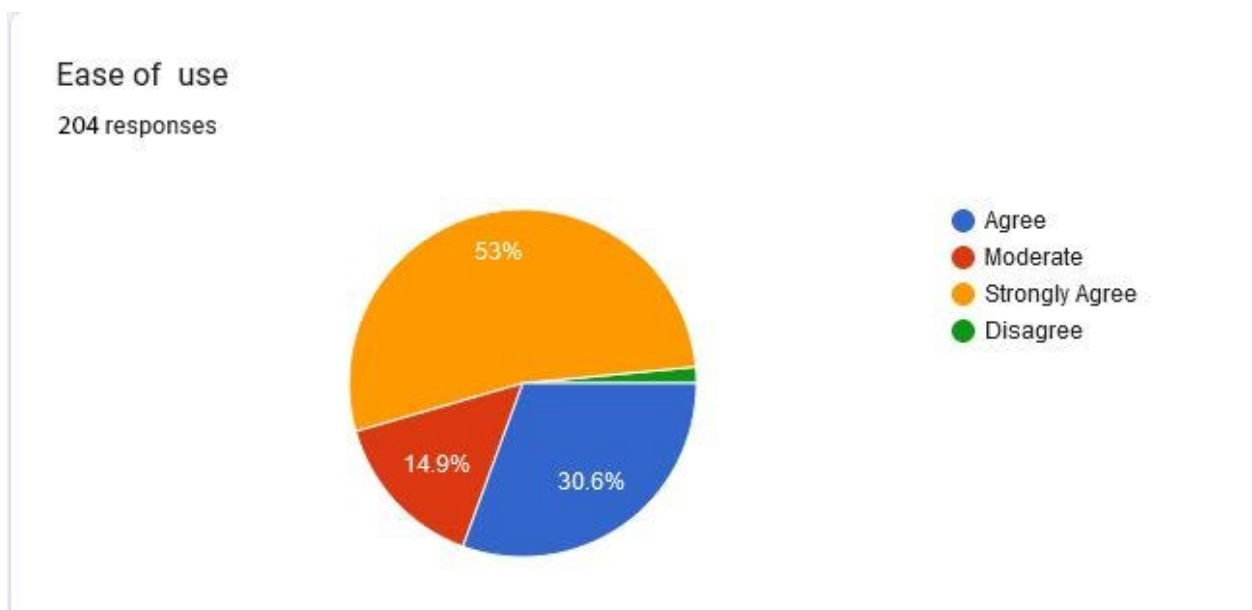


Figure 10: Easiness while e-learning

Conclusion

Online teaching with effective pedagogies has been proven as the best method of learning during the Covid-19 pandemic. With the analysis of 200+ responses, this study concludes that there is a positive and effective impact of online E-learning pedagogy. About 50% of respondents strongly agree that E-learning provides comfort and convenience in their studies. About 44.8%of students responded that E-learning assessment has increased their knowledge. E-learning tools helped in enhancing academic performance according to the opinion of 47% of students. 51.5% of the students felt that E-learning provides time flexibility for their studies. 51.5% of students responded that the Contribution of e-learning increases students’ Motivation in gaining more knowledge. 47.8% of students responded that there was a quick response to their queries from the instructor. Online learning helped to reduce their travel time 60.4% of students felt and 53% of respondents felt that there was the ease of use while learning online. As about 50% of respondents strongly agree with all the questions, the benefits of online teaching are more than its drawbacks. Online teaching has brought a positive impact and helped academicians and learners to connect at long distances, have Flexibility, Reduction in infrastructure-associated tasks, and Increased Collaboration.

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