



People's Democratic Republic of Algeria
Mohamed Khider University of Biskra
Faculty of Letters and Languages
Department of English Language and Literature

MASTER THESIS

Letters and Foreign Languages

English Studies
Sciences of the language

**Exploring EFL Students' Attitudes towards the Use of Google Meet Sessions during the
COVID-19 Pandemic**

The case of Master One Students of English at Mohamed Khider University of Biskra

Submitted and Defended by:

GATT MOUNIR

Board of Examiners

Mrs Bendahmane Messaouda MAB University of Biskra Chairwoman

Dr Laala Youcef MCA University of Biskra Supervisor

Mrs Djoumaa Houda MAA University of Biskra Examiner

Academic Year: 2022-2023

Declaration:

I, Gatt Mounir , do hereby declare that this submitted work which entitled “Exploring Students' Attitudes towards the Use of Google Meet Sessions during the COVID-19 Pandemic ” is my original work and has not previously been submitted for any institution or university for a degree. I also declare that a list of references is provided forward indicating all the sources of the cited and quoted information. This work was certified and completed at Mohammed KHEIDER University of Biskra.

Algeria.

Certified:

Mr.GattMounir

Master Student, Section of English

Signature

Dedication:

This Work Dedicated to Me at First, My beloved Family who supported me from day 1

My Friends obviously: Khalil , Ayoub , Zack Ath and Zack Aiss .

Although a Chapter must End, a New chapter must Be Opened

Acknowledgements:

The completion of this work could not have been possible without

ALLAH's will and guidance.

I would like to express a sincere gratitude to my supervisor Dr. Youcef Laala for

his support, guidance, and efforts.

A special gratitude goes to the board of examiners for their acceptance to

assess my work, their constructive feedback and remarks: Dr. Youssef LAALA , Dr

Bendahmane Messaouda and Mrs. Djouama Houda

My infinite thankfulness goes to all Master One students of English

at the University of Biskra for their help efforts and time.

General Introduction:

The COVID-19 pandemic has forced educational institutions to shift to online learning, which has become the new norm for teaching and learning. Google Meet, a video conferencing software, has become a popular platform for conducting online classes and virtual meetings, which is (formerly known as Hangouts Meet) is a video communication service developed by Google. It is one of two apps that constitute the replacement for Google Hangouts, the other being Google chat. It replaced the consumer-facing Google Duo in late 2022, with the Duo mobile app being renamed Meet and the original Meet app set to be phased out. While Google Meet has allowed for the continuity of education during the pandemic, it has also brought about changes in the way students perceive online learning. With the increasing reliance on digital tools, it is crucial to understand how students feel about the use of Google Meet for virtual classroom sessions. In the early months of the Covid 19 Pandemic, Google announced Meet was to be made available to all users, not just Google Workspace users, in which it previously was. The use of Meet grew by a factor of 30 between January and April 2020, with 100 million users a day accessing Meet, compared to 200 million daily users for Zoom as of the last week of April 2020.

Statement of the Problem:

The COVID-19 pandemic has caused a significant shift in the education system, with online learning becoming the new norm. Video conferencing platforms like Google Meet have been widely used for virtual classroom sessions. However, the effectiveness of online learning is still a matter of debate. Therefore, it is crucial to explore students' attitudes towards the use of Google Meet for virtual classroom sessions during the COVID-19 pandemic to understand the effectiveness of online learning and improve online teaching practices. This research aims to address the problem of understanding students' attitudes towards the use of Google Meet for virtual classroom sessions during the pandemic

The Research Questions:

This research is going to answer these following questions:

RQ1: What are the attitudes of students towards the use of Google Meet sessions for online learning?

RQ2: How do students perceive the quality of learning through Google Meet sessions compared to traditional classroom-based learning?

The Research Hypothesis:

The majority of students have a positive attitude towards the use of Google Meet sessions during the COVID-19 pandemic for online learning

The Aims of the study:

The aims of this study are:

1. To explore students' attitudes towards the use of Google Meet for virtual classroom sessions during the COVID-19 pandemic.
2. To identify the factors that influence students' attitudes towards the use of Google Meet for virtual classroom sessions.
3. To examine the relationship between students' attitudes towards the use of Google
4. Meet for virtual classroom sessions and their learning outcomes.
5. To provide recommendations for improving virtual classroom sessions using Google Meet based on the findings of the study.

Overall, the study aims to provide a better understanding of students' experiences with virtual classroom sessions and to inform best practices for online teaching during the COVID-19 pandemic and beyond.

The Methodology:

This Study Will employ a mixed methods approach, using the questionnaire and the focus group as study will be conducted in a higher education institution, and graduate students

enrolled in online courses. The sample size will be determined using a purposive sampling technique to ensure diversity in participants backgrounds such as gender, age, and academic majors. Data analysis will use thematic analysis to identify patterns, themes and categories in the data.

Structure of the Study:

Chapter one:

The first chapter is about online learning, the historical background and definition and focused on components and its main characteristics, advantages and disadvantages of Online Learning also the challenges and requirements for implementing online learning.

Chapter two:

the second chapter talks about the use of Google Meet sessions for remote learning during the COVID-19 pandemic around the world , the focus on this chapter is on the factors that influence the frequency of Google Meet usage and its effectiveness, and the Challenges with using Google Meet and the Comparison of Google Meet with other modes of learning.

Chapter three:

The third chapter is the Analysis and Discussion of the Results which consists mainly about Students Questionnaire and the focus group and Discussing their Findings .

Abstract:

In the context of the COVID-19 pandemic, educational institutions worldwide have faced challenges in delivering quality education while ensuring the safety of students. The University of Biskra, like many others, implemented online learning platforms, such as Google Meet, to facilitate remote teaching and learning. This study aims to investigate the attitudes of English as foreign language learners at the University of Biskra towards the use of Google Meet sessions during the COVID-19 pandemic. The research focuses on the students' perception of the effectiveness of Google Meet in promoting their autonomy and responsibility for their own learning. It seeks to determine whether the use of this online platform has motivated students to take more ownership of their education and to what extent they rely on their teachers for learning support. To gather data and gain insights, a descriptive study employing a qualitative approach was conducted. The study involved a focus group of eight foreign language students of English and distributing questionnaires to twenty students as well to foreign language students of English from the University of Biskra. The findings of the study indicate that students have demonstrated negative attitudes towards the use of Google Meet sessions. They agree that this online learning method has not contributed to the improvement of students' autonomy and language skills. The results highlight the advantages and disadvantages of integrating online platforms like Google Meet into university classes in Algeria to enhance English language learning. Overall, this study sheds light on students' perceptions and attitudes towards the use of Google Meet sessions during the COVID-19 pandemic and emphasizes the importance of incorporating online learning tools to support students' autonomy and language development in the future.

List of Graphs

Graph 1 : Frequency of Google Meet Attendance	77
Graph 2 : Initial Reaction to Attending Classes via Google Meet	78
Graph 3 : Preparation Methods for Google Meet Sessions.....	79
Graph 4 : Interaction with Instructor during Google Meet Sessions	81
Graph 5 : Interaction with Classmates during Google Meet Sessions	82
Graph 6 : Technical Difficulties during Google Meet Sessions.....	84
Graph 7 : Handling of Technical Difficulties during Google Meet Sessions	85
Graph 8 : Impact of Attending Classes via Google Meet on Learning Experience.....	87
Graph 9 : Effect of Attending Classes via Google Meet on Learning	88
Graph 10 : Impact of Attending Classes via Google Meet on Motivation to Learn	89
Graph 11 : Ability to Concentrate during Google Meet Sessions.....	91
Graph 12 : Impact of Attending Classes via Google Meet on Interaction with Classmates and Instructor	92
Graph 13 : Engagement Levels during Google Meet Sessions.....	94
Graph 14 : Preference for Attendance Mode: Google Meet vs. In-Person	95
Graph 15 : Opinion on Continuing Google Meet Sessions.....	97

Table of Content

Declaration:	2
Dedication:	3
Acknowledgements:	4
General Introduction:	5
Statement of The Problem:	6
The Research Questions:	6
The Research Hypothesis:	6
The Aims of the study:	7
The Methodology:	7
Structure of the Study:	8
Chapter one:	8
Chapter two:.....	8
Chapter three:.....	8
Abstract:	9
Table of Content	11
Chapter One: Online Learning	
Introduction:	20
1. Historical background:	20
1. Online learning definition:	22

1. Components of online learning:	23
1.1 Course content:	23
1.2 Assessment.....	24
1.3 Communication tools:	25
1.4Online resources:	26
1.5 Support services:	27
1. Main characteristics of online learning:	28
1.1Synchronous and Asynchronous Learning:	28
1.2 Learner-Centered Approach:	28
1.3 Active Learning:	29
1.4 Collaborative Learning:	29
1.5 Personalization:.....	30
1. Online learning models:	30
1.1Self-Paced Learning:.....	31
1.2 Instructor-Led Courses:	31
1.3 Hybrid or Blended Learning:	32
1.4 Collaborative Learning:	32
1.5 Adaptive Learning:	33
1. Advantages and Disadvantages of Online Learning:	34
1.1Advantages of Online Learning:	34

Exploring Students' Attitudes towards the Use of Google Meet Sessions during the COVID-19 Pandemic

	13
1.1.1 Flexibility	34
1.1.2 Convenience	35
1.1.3 Increased Engagement.....	35
1.1.4 Customization.....	36
1.1.5 Cost-Effective.....	36
1.2 Disadvantages of Online Learning:	37
1.2.1 Limited Interaction.....	37
1.2.2 Technical Issues	37
1.2.3 Cheating	38
1.2.4 Limited Feedback.....	39
1. Challenges Faced by Online Learning:	39
1.1 Technology issues:.....	39
1.2 Lack of interaction:	39
1.3 Self-discipline:	40
1.4 Accessibility:.....	40
1.5 assessments:	41
1.6 Academic integrity:.....	41
1.7 Course Design:.....	41
1. The Requirements for implementing online learning:	42
1. The Teacher's and Students' Role:	44

1.1 The Teacher's Role:44

1.2 The Students' Role:45

Conclusion:46

Chapter 2: The use of Google Meet sessions for remote learning during the COVID-19 pandemic

Introduction49

1. Historical Background:49

1. Frequency of using Google Meet:50

1. Average time spent on Google Meet sessions for remote learning:51

1. Factors influencing the frequency of Google Meet usage:52

1. Comparison of frequency of Google Meet use across different student populations: .53

1. The Duration of using Google Meet:53

1. Changes in the duration of Google Meet sessions over time:54

1. Factors influencing the duration of Google Meet sessions:55

1. Comparison of the duration of Google Meet sessions across different student populations:56

1.Type of using google meet sessions:56

1.1 Types of Google Meet sessions used for remote learning:56

1.1.1 Live Lectures.57

1.1.2 Recorded Videos.57

1.1.3 Interactive Activities.	58
1. The Effectiveness of different types of Google Meet sessions for remote learning:	59
1. The Comparison of types of Google Meet sessions across different student populations:	60
1. Reasons for using Google Meet:	61
1.1 Accessibility of Google Meet sessions for remote learning:	61
1.2 The Convenience and flexibility of Google Meet sessions for remote learning:	62
1. Challenges and limitations of using Google Meet sessions for remote learning:	63
1. Challenges with using Google Meet sessions:.....	64
1.1 Technical challenges with using Google Meet sessions:	64
1.2 Student engagement and participation in Google Meet sessions:.....	65
1.3 Challenges with assessment and feedback in Google Meet sessions:	65
1. Support for using Google Meet:	67
1.1 Institutional support for using Google Meet sessions:.....	67
1.2 Instructor support for using Google Meet sessions:	67
1.3 Student support for using Google Meet sessions:.....	68
1. Comparison Google Meet with other modes of learning:	69
1.1 Comparison with in-person learning:.....	69
1.2 Comparison with other online learning tools:.....	70
1.3 Comparison with blended learning:	71
Conclusion:.....	72

Chapter 03: Analysis and Discussion of the Results

Introduction :	74
1. Research Design:	75
1. Population and Sample:	75
1. Data Collection:	76
1. Students Questionnaire :	76
1.1 Description of Students Questionnaire:	76
1. Analysis of Students Questionnaire:	77
1. Focus Group Analysis:	98
1. Focus Group Analysis:	114
1. Synthesis and Discussion the Findings:	116
1.1 Student's Questionnaire:	116
1.2 Focus Group:.....	117
Conclusion:	118
General Conclusion:	119
References:	121
APPENDICES	134
Student's questionnaire:	135
Focus Group Questions:.....	139
المخلص	140

Chapter01: Online Learning

Introduction:	20
1. Historical background:	20
1. Online learning definition:	22
1. Components of online learning:	23
1.1 Course content:	23
1.2 Assessment.....	24
1.3 Communication tools:.....	25
1.4Online resources:	26
1.5 Support services:.....	27
1. Main characteristics of online learning:	28
1.1Synchronous and Asynchronous Learning:	28
1.2 Learner-Centered Approach:	28
1.3 Active Learning:	29
1.4 Collaborative Learning:	29
1.5 Personalization:.....	30
1. Online learning models:	30
1.1Self-Paced Learning:.....	31

	18
1.2 Instructor-Led Courses:	31
1.3 Hybrid or Blended Learning:	32
1.4 Collaborative Learning:	32
1.5 Adaptive Learning:	33
1. Advantages and Disadvantages of Online Learning:	34
1.1 Advantages of Online Learning:	34
1.1.1 Flexibility	34
1.1.2 Convenience.	35
1.1.3 Increased Engagement.....	35
1.1.4 Customization.....	36
1.1.5 Cost-Effective.....	36
1.2 Disadvantages of Online Learning:	37
1.2.1 Limited Interaction.	37
1.2.2 Technical Issues	37
1.2.3 Cheating.	38
1.2.4 Limited Feedback.	39
1. Challenges Faced by Online Learning:	39
1.1 Technology issues:	39
1.2 Lack of interaction:	39
1.3 Self-discipline:	40

Exploring Students' Attitudes towards the Use of Google Meet Sessions during the COVID-19 Pandemic

	19
1.4 Accessibility:.....	40
1.5 assessments:	41
1.6 Academic integrity:.....	41
1.7 Course Design:.....	41
1. The Requirements for implementing online learning:	42
1. The Teacher's and Students' Role:	44
1.1 The Teacher's Role:	44
1.2 The Students' Role:	45
Conclusion:.....	46

Introduction:

Online learning, commonly referred to as e-learning, is a method of instruction that has become increasingly well-liked in recent years. It entails utilizing digital technologies to deliver educational information and support online learning. Online learning is a convenient alternative for students who want to enhance their education while juggling other responsibilities since it gives them the freedom to access educational resources at any time and from any location. In addition, the democratization of education made it more accessible and inexpensive for students around the world thanks to online learning. However, there are particular difficulties with online learning, such as the need for self-discipline and the absence of in-person interactions with classmates and instructors. So, it is crucial to thoroughly weigh the advantages and disadvantages of online learning before choosing if it is the best strategy for a person's educational needs.

1. Historical background:

The development of contemporary technology and the internet going though, online learning has grown in popularity in recent years. But the idea of remote learning, which includes online learning, has a lengthy and rich history that goes back several centuries. We will examine the historical background of online learning and the key turning points that have contributed to its current state in this succinct overview.

When correspondence courses were first introduced in Europe in the early eighteenth century, remote education began to take shape. These programs were largely created to

instruct people who couldn't attend standard schools in topics like shorthand and bookkeeping. Students could now receive study materials via mail, complete assignments, and send them back to teachers for review thanks to the creation of the postal system. The University of Chicago in Chicago, Illinois, introduced the first correspondence course in the United States in 1892, teaching journalism.

Early in the 20th century, radio rose to prominence as a means of disseminating instructional material. Universities and colleges began using radio broadcasts to connect with students who were unable to physically attend classes. The introduction of television in the 1950s, which made it possible to provide instructional content to a larger audience, further enlarged this idea. From its inception in 1952, the National Educational Television network (NET) has played a key role in providing educational materials to colleges and universities.

Distance education underwent substantial developments in the 1960s and 1970s with the introduction of computer technology. Interactive computer-based educational resources were made possible by the advancement of mainframe computers and telecommunications technologies. The military was the first to deploy this technology, and colleges eventually adopted it for distance study. The PLATO system, created by the University of Illinois in the 1960s, was one of the first instances of computer-based instruction. Via a computer network, this system allowed students to connect with teachers and other students as well as access course materials.

An important turning point in the history of distance learning was the 1990s emergence of the internet. Universities are now able to provide online courses to students all around the world due to the widespread availability of personal computers and internet connectivity. The University of Phoenix provided the first online course in 1989, and many other universities

soon followed suit. Massive open online courses (MOOCs) were first introduced in the early 2000s, allowing students to access top universities' online courses for no cost or at a moderate cost.

Millions of students worldwide now take online courses as online learning has become a common form of instruction. In order to protect students' and teachers' safety, many institutions and schools have switched to remote learning as a result of the COVID-19 pandemic, which has further pushed the use of online education. According to a survey by Research and Markets, the desire for flexible and cheap education choices will boost the global online education market to \$350 billion by 2025.

1. Online learning definition:

Online learning, commonly referred to as e-learning or distant learning, is the process of delivering educational content and teaching via the internet using electronic and digital technology. It enables students to access instructional resources, activities, and assessments at any time and from any location using a variety of gadgets, including PCs, laptops, tablets, and smartphones.

Over the years, a number of academics have characterized distance education and online learning. In 1993, pioneer of distant learning Michael G. Moore defined it as "organized teaching/learning experience that uses a wide range of technologies to reach learners at a distance and is structured to stimulate student involvement and certification of learning. Online learning is defined as "a method of education in which the medium of instruction is Internet-based, using a range of multimedia technologies" by Randy Garrison, a pioneering researcher in online and distance learning, in 2003. Online education is "a powerful tool to

give education to millions of individuals globally, who would not otherwise have access to high-quality educational resources," according to Anant Agarwal, creator of edX, in 2013. Online learning is "a flexible and easy way to gain knowledge and skills, with the flexibility to learn at your own pace and on your time," according to Jeff Maggioncalda, CEO of Coursera, in 2019.

1. Components of online learning:

Online learning typically involves various components that work together to deliver educational content and instruction over the internet. Some common components of online learning include: Course content, Assessments, Communication tools, Online resources, Support services.

1.1 Course content:

The course material is a crucial part of online learning. Online courses necessitate the availability of course materials in digital formats, unlike traditional classroom settings. To ensure that learners can quickly access and understand the information supplied, the content must be structured, organized, and simple to traverse. Also, effective course material should be dynamic, interesting, and accommodating of different learning styles. Multimedia components like videos, animations, interactive tests, and discussion forums can do this (Paechter, Maier, & Macher, 2010).

Many academics and industry professionals have defined course content for online learning over the years. "The collection of materials, media, and activities that are utilized to enhance learning in a digital environment," was how George Siemens defined it in 2002. Open educational resource supporter David Wiley offered a more thorough description of course

content in 2014. He said that it includes "the set of materials and activities used to enhance learning in an online course, including videos, readings, quizzes, discussion forums, and assignments. The importance of multimedia components was highlighted by instructional design and technology expert John W. Suttie in his definition of course content from 2016, which is defined as "the entirety of text, audio, visual, and interactive media that are used to deliver instructional content to learners in an online course." A more comprehensive definition of course content for online learning was provided in 2019 by online education expert Melissa Venable, who defined it as "the digital materials and resources, including text, audio, video, graphics, and interactive tools, that are designed to support learning in an online course."

1.2 Assessment:

Assessment in online learning refers to the process of evaluating learners' knowledge, skills, and abilities through various methods and tools. It involves measuring learning outcomes, providing feedback to learners, and improving the overall quality of instruction. Online assessment is defined as "the evaluation of knowledge, abilities, and attitudes of learners utilizing electronic or digital devices and software programs" by J. Michael Spector, a well-known researcher in the field of educational technology, in 2008. (Spector, 2008).also Online assessment is "the systematic collection of information on student learning, utilizing the internet or other electronic means, in order to improve teaching and learning," according to Donald J. Leu, a pioneer in the field of online literacy education, in 2011. (Leu, 2011).

Peter Reimann, a researcher in the field of learning analytics and assessment defined Online assessment as "the evaluation of student learning and performance that takes place within a digital learning environment, often involving the use of software tools that can capture, store,

and analyze student data", (Reimann, 2016). Ruth Colvin Clark an authority in the field of instructional design, had their own definition of Online assessment which they said that it's a process of acquiring data about the knowledge, abilities, and attitudes of learners through various digital means, including as quizzes, tests, and simulations (Clark, 2018).

1.3 Communication tools:

The various computer-mediated technologies, platforms, and tools that enable students and instructors to interact, collaborate, and communicate in real-time or asynchronously are referred to as communication tools in online learning, according to experts in the fields of distance education and instructional design. They include collaborative document sharing tools, blogs, wikis, instant messaging, chat rooms, discussion forums, videoconferencing, text-based communication, audio and video conferencing, and social networking.

Online learning communication tools have developed over time to facilitate efficient communication and collaboration among students, educators, and other community members. Online learning communication tools, according to Terry Anderson in 2003, include a variety of computer-mediated technologies like email, discussion forums, and instant messaging. In addition to chat rooms, discussion boards, and videoconferencing, Rena Palloff and Keith Pratt, authorities in online education and collaborative online learning communities, added to this in 2007.

Communication tools in online learning are a group of digital technologies and platforms that allow students to interact and communicate with instructors and peers, including text-based communication, audio and video conferencing, and collaborative document sharing tools,

according to instructional design consultant and author Ruth Clark in 2015. More recently, in 2018, instructional design and technology scholars Angela D. Benson and Whitney Kilgore expanded on their definition of communication tools in online learning to include additional tools like blogs, wikis, and social media. They defined these tools as digital platforms and tools that allow students and instructors to communicate and collaborate in real-time or asynchronously.

In simpler terms Communication tools in online learning refer to the various technologies and platforms used to facilitate interactions between learners and instructors in a digital environment

1.4 Online resources:

Online resources in online learning refer to the digital materials, tools, and media that are used to support teaching and learning in a virtual environment

Online resources, as defined by experts in the field of online learning, are digital components or technologies that support teaching and learning through online platforms. In 2015, Tony Bates defined online resources as "digital elements, such as text, graphics, audio, and video, that are available for learners to access online." Cindy Ives, an instructional design consultant and educator, expanded on this definition in 2019, describing online resources as "the digital tools and media that support teaching and learning, including course content, multimedia, eBooks, and interactive simulations." George Siemens, a researcher in learning analytics and instructional technology, defined online resources in 2018 as any digital tool or content that learners can access to support their learning, such as video lectures, simulations, eBooks, and

interactive activities. In 2020, Cathy Cavanaugh, a professor and digital learning expert, defined online resources as "the digital materials, tools, and media that support learning and teaching, including course materials, videos, podcasts, and online simulations."

1.5 Support services:

The many types of assistance that are offered to students to support their success in their online courses are referred to as support services in online learning. Technical assistance, academic counselling, tutoring, and access to library and research resources are a few examples of these services.

Over the years, a variety of specialists have defined the idea of support services in online learning. In 2016, support services were defined as "resources provided to students in online courses to help them be successful in their learning, such as technical support, academic advising, and access to library and research resources" by Karen Swan, a professor and researcher in the field of online learning. Academic counselling, tutoring, and technical support are just a few of the resources and services that students have access to in 2017 to help them overcome learning obstacles, according to Anthony Picciano, a professor and researcher in the field of online and blended learning. In 2020, academic counseling, tutoring, and technical support will all be available to students who need them to help them reach their academic goals, according to author and online education consultant Melissa Venable.

Support services are described as "the resources, services, and personnel available to learners to help them succeed in their online courses, including academic advising, technical support,

and disability services" by the Online Learning Consortium, a specialist organization devoted to online education, in 2021.

1. Main characteristics of online learning:

A variety of Online learning characteristics identified by several scholars as follow:

1.1 Synchronous and Asynchronous Learning:

Synchronous learning refers to educational activities that take place in real-time and necessitate the simultaneous presence of both students and teachers. Live lectures, group conversations, and virtual gatherings are all examples of synchronous learning activities. Through real-time interactions with classmates and instructors, this style of learning gives students the chance to communicate ideas and comments. On the other hand, asynchronous learning refers to educational activities that take place outside of real-time and let students access course materials at their own pace and leisure. Pre-recorded lectures, online forums, and individual assignments are examples of asynchronous learning activities. Although this kind of learning gives students more flexibility with their schedules and the chance to review the course contents more than once, it may not provide the same level of immediate engagement with peers and instructors as synchronous learning does.

1.2 Learner-Centered Approach:

Each learners' needs, preferences, and interests are highlighted by a learner-centered approach, enabling them to actively participate in their own learning. With this method, the

teacher acts as a facilitator, encouraging and supporting the students as they interact with the course contents and activities. This method offers possibilities for students to set their own goals and pace their learning in accordance with their own preferences since it recognizes that students enroll in the course with a variety of backgrounds, experiences, and knowledge. Opportunities for learners to collaborate with peers, discuss ideas and viewpoints, and give feedback to one another are also included in a learner-centered approach. This kind of cooperative learning can increase student motivation and engagement while also fostering the growth of analytical and problem-solving abilities.

1.3 Active Learning:

Active learning refers to instructional techniques that encourage students to interact with course materials in meaningful ways, typically through hands-on activities or projects. Group work, problem-based learning, and simulations are all examples of active learning. The goal of active learning is to give students opportunities to apply what they've learned in class to real-world situations, as well as to help them develop critical thinking and problem-solving abilities. Active learning has been shown in studies to be more effective than traditional lecture-based instruction because it allows students to take an active role in their own learning process and promotes deeper engagement with course materials. Learners are more likely to retain information and develop a deeper understanding when they interact with course materials in this manner.

1.4 Collaborative Learning:

A collaborative learning approach involves students working in groups to accomplish common learning objectives. With this method, instructors actively encourage students to interact with one another, share information and experiences, and offer constructive

criticism. Many methods of collaborative learning are possible, including group discussions, case studies, and projects. The foundation of collaborative learning is the idea that learning is a social process and that students can gain from the viewpoints and ideas of their peers (Garrison & Cleveland-Innes, 2005). While students are forced to defend their positions in front of their peers, collaborative learning can encourage critical thinking and problem-solving abilities. Because students can see the value and practicality of what they are learning, collaborative learning can help increase motivation and engagement.

1.5 Personalization:

The process of adapting learning experiences to the unique needs, interests, and preferences of learners is known as personalization. There are various ways to personalize learning, including with adaptive learning technology, tailored learning programs, and customized feedback. Personalization aims to give students a better learning experience that is more effective and tailored to their particular needs. The foundation of personalization is the understanding that learners come from a variety of backgrounds, have varying experiences, and possess varying levels of knowledge (Anderson, 2008). Since learners are more likely to be interested in and dedicated to learning activities that are personally meaningful to them, personalization can promote learner engagement and motivation. Also The ability to concentrate on areas where they require more support or challenge can also help learners reach their learning objectives more quickly.

1. Online learning models:

Self-Paced Learning: Online learning has been developed over time using a variety of different models. The most popular models include the following:

1.1 Self-Paced Learning:

Through self-paced learning, pupils can assume control over their academic journey by determining their individual pace and obtaining unrestricted accessibility to coursework resources whenever necessary. Within this pedagogical framework, learners are commonly provided with a series of educational goals and a collection of resources, which encompass various materials, exercises, and multimedia components, to be utilized at their discretion in the pursuit of their learning endeavors. This pedagogical approach places great importance on flexibility and autonomy, affording learners the liberty to acquire knowledge in a manner and time frame that best suits their individual needs and preferences. Self-paced learning exhibits numerous benefits, including elevated authority over the educational procedure. The students are granted the liberty to advance in their respective course of study at a pace that conforms to their individual needs, which thereby enables them to dedicate more time towards arduous or captivating subjects while reducing the time spent on topics within their realm of familiarity.

1.2 Instructor-Led Courses:

Within traditional or synchronous pedagogical approaches, the instructor assumes an essential function in directing students throughout their academic journey. Frequently referred to as instructor-led courses, these educational programs encompass a learning environment in which the instructor assumes responsibility for dispensing all course content, instructional delivery, comprehensive feedback, and supportive measures. Within the academic realm, students employ diverse online technologies, such as chat rooms, electronic mailing services, and discussion forums, to engage in communication with both their instructor and peers. The primary benefit of courses facilitated by an instructor lies in the robust correlation established between the instructor and students.

This association allows the learners to attain instant feedback and direction to facilitate their concentration and enhance their comprehension of the course content. Instructor-led courses facilitate the cultivation of a cohesive community and a sense of affiliation, thereby stimulating student motivation and involvement.

1.3 Hybrid or Blended Learning:

Hybrid learning or blended learning pertains to a form of online education that incorporates a mixture of online and in-person instruction. Within this theoretical framework, learners engage in traditional face-to-face instructional meetings alongside virtual modalities that facilitate online cognitive development through diverse digital mechanisms and resources. The overarching goal of this particular strategy is to optimize the benefits of both web-based and face-to-face instruction, while simultaneously mitigating the limitations inherent to each approach. The attribute of flexibility is deemed as one of the primary benefits of hybrid learning. This resource may be particularly advantageous for students who encounter the predicament of reconciling their academic undertakings with occupational or filial responsibilities, or confront additional commitments.

1.4 Collaborative Learning:

The collaborative learning approach is utilized in online educational contexts, whereby students partake in group-based projects, assignments, or other learning tasks. The basis of this strategy lies in the concept that cooperative efforts amongst students can effectively enhance their comprehension of the course material, and that knowledge acquisition constitutes a social process. Academic writing typically involves a formal, objective tone that follows specific guidelines and conventions, including the use of specific vocabulary, citation styles, and structuring of arguments. Therefore, the following text has been revised to adhere

to academic writing standards: The use of formal language and application of consistent conventions are fundamental to academic writing. To this end, adherence to specific vocabulary, citation styles, and argumentation structures is necessary for effective communication.

The formation of groups during collaborative learning can originate from either the instructor or the students themselves. The aim is to incentivize pupils to engage in mutual interactions and cultivate fundamental skills such as communication, problem-solving, and critical thinking, irrespective of the configuration of the groups. The fostering of a sense of camaraderie and involvement within students is a prominent benefit of cooperative education. Collaborative learning facilitates the formation of a cohesive network, fostering a collective spirit of support and companionship amongst students, thereby promoting sustained engagement and motivation throughout the academic journey. Moreover, collaborative learning can be highly effective for students who encounter difficulties in comprehending conventional lecture-based pedagogy, as it presents them with an opportunity to engage in the learning procedure proactively.

1.5 Adaptive Learning:

Technology is used in the adaptive learning educational paradigm to tailor the learning process for each unique student. This strategy uses algorithms and data analytics to monitor and analyze a student's academic progress and personalize the learning environment for each individual learner. In an adaptive learning environment, the system adjusts to the needs and learning preferences of each student, offering personalized information, criticism, and assistance. For the purpose of assisting students in staying on track and advancing toward their learning objectives, the system may also offer real-time feedback and direction.

Technology for adaptive learning can be applied in a range of educational settings, including K–12 schools, higher education, and professional development.

Personalized learning opportunities offered by adaptive learning have the ability to raise student performance, boost motivation and engagement, and close the achievement gap between students with various learning styles and aptitudes. To ensure that the system is successfully satisfying students' needs, an adaptive learning model must be implemented, which necessitates a large investment in technology and instructional design. Concerns have also been expressed concerning the likelihood that adaptive learning will serve to reinforce current biases and inequalities in the educational system, particularly if the algorithms used to tailor the learning experience are opaque or based on false assumptions.

1. Advantages and Disadvantages of Online Learning:

1.1 Advantages of Online Learning:

There are many advantages to online learning, and several scholars have published research on the topic. Here are some advantages of online learning according to scholars with dates:

1.1.1 Flexibility. For non-traditional or working students who might find it challenging to attend traditional classrooms due to other responsibilities, this educational model allows students to learn at their own pace and on their own schedule. With online learning, students may access course materials and take part in learning activities whenever they want, from any location with an internet connection. According to research, the

flexibility provided by online learning can significantly increase student motivation and engagement. In contrast to traditional classroom-based courses, students who took online courses expressed greater levels of satisfaction with the flexibility and convenience of this type of learning, according to a study by Garrison and Kanuka (2004).

1.1.2 Convenience. For non-traditional or working students who might find it challenging to attend traditional classrooms due to other responsibilities, this educational model allows students to learn at their own pace and on their own schedule. With online learning, students may access course materials and take part in learning activities whenever they want, from any location with an internet connection. According to research, the flexibility provided by online learning can significantly increase student motivation and engagement. In contrast to traditional classroom-based courses, students who took online courses expressed greater levels of satisfaction with the flexibility and convenience of this type of learning, according to a study by Garrison and Kanuka (2004).

1.1.3 Increased Engagement. Online education has the potential to encourage more interactive and collaborative learning, which is a benefit. Students might feel too shy or hesitant to participate in conversations or ask questions in regular classroom settings. With online learning, students have the opportunity to participate in virtual discussions, exchange ideas, and work together on projects in a more welcoming and comfortable setting. Students may become more engaged and motivated as a result of feeling more invested in their educational experience. Students can easily access online resources like videos, podcasts, e-books, and interactive simulations that might not be easily accessible in a traditional classroom. Numerous studies have shown that online education increases student motivation and involvement. For instance, Garrison and Cleveland-Innes (2005) discovered that online

learning can offer a more engaging and interactive learning environment, which can improve student motivation. Similar findings were made by Kanuka and Anderson (1998), who discovered that online learning can promote greater student interaction and improve learning outcomes.

1.1.4 Customization. The ability to work at one's own pace is one of the main benefits of online learning. The pace at which instruction is frequently given in a regular classroom may not be ideal for all students. With online learning, students may move through the content at their own pace, spending more time reviewing challenging ideas and working through subjects they already understand more rapidly. Online education can enable students to concentrate on their areas of interest. For instance, compared to traditional classrooms, online courses may provide a greater selection of optional or specialty courses.

Several research have shown how customized online learning is advantageous. For instance, Means et al. (2010) discovered that giving learners discretion over the speed and order of their learning can improve the results of online learning. In a similar vein, Picciano (2002) came to the conclusion that online education can offer a more adaptable and personalized educational experience that can be modified to match the particular needs of each learner.

1.1.5 Cost-Effective. The removal of the need for physical classrooms, and the associated infrastructure which Conventional classrooms need a physical location that can be expensive to operate and maintain. Moreover, textbooks and other materials are not required with online learning, which saves both students and institutions money. Instead, online courses frequently include digital resources that can be accessed online, saving money on printing, shipping, and handling expenses. Online education can save travel expenses for both students and institutions, as well as expenditures related to infrastructure and supplies.

For instance, Allen and Seaman (2017) discovered that online courses can cost between 10% and 20% less than conventional classroom courses. Kim and Bonk (2006) also discovered that studying online can be more affordable than learning in a typical classroom due to decreased expenses for infrastructure, resources, and travel.

1.2 Disadvantages of Online Learning:

While online learning has many advantages, there are also some disadvantages that have been identified by scholars some of them as follows:

1.2.1 Limited Interaction. The element of social connectedness, which often plays a pivotal role in the conventional method of classroom instruction, is at times deficient in virtual learning environments and has the potential to engender feelings of alienation. The absence of social interaction in online learning has the potential to adversely impact students' inclination and sense of belongingness towards the learning community. This may lead to a sense of disengagement and diminished motivation. Several studies carried out by Bollinger and Martindale (2004) and Picciano (2002) highlight that insufficient social interaction within online learning environments may lead to a sense of isolation and reduced student engagement. The aforementioned discoveries underscore the import of developing efficacious tactics aimed at fostering an environment of social interaction and communal establishment within the realm of online pedagogical pursuits.

1.2.2 Technical Issues. For some students, the need for dependable equipment and internet connectivity might be a barrier to online learning. Technological issues can be a significant difficulty for learners in online learning environments since they can frustrate them and impede their learning. Online education is primarily reliant on technology and internet access, which may be a challenge for certain students who lack access to dependable

technology or a steady internet connection. These technical restrictions may make it difficult for students to fully engage with online course materials, disrupt the learning process, and lower their motivation. According to research by Garrison & Kanuka (2004) and Kozar et al. (2014), technical difficulties can be a major obstacle in online learning environments. These findings highlight how crucial it is to give students access to dependable technology and internet connectivity as well as efficient technical support to handle any potential problems. Also, by maintaining open lines of communication with students and setting flexible due dates for tasks, teachers can lessen the effects of technical difficulties.

1.2.3 Cheating. Online learning can give students the chance to cheat, especially if evaluations are poorly planned or not closely overseen. This can undermine the integrity of the learning process" implies that maintaining academic integrity can be difficult when learning online. Online learning settings can give students the chance to cheat, particularly if tests are poorly planned or not well supervised. Plagiarism, the use of unauthorized resources during exams, or improper collaboration with others are just a few examples of the numerous ways that cheating manifests. Such actions can weaken the worth of the educational experience and jeopardize the integrity of the learning process. Online learning settings present a unique set of challenges for preventing cheating, according to studies by Allen & Seaman (2013) and Kornblum (2006). In order to solve this problem, teachers can create tests that are harder to cheat on, employ plagiarism-detecting software, and constantly monitor tests to make sure that students aren't collaborating improperly or using unauthorized resources. Teaching students the value of academic honesty might also lessen the chance of cheating in online learning settings.

1.2.4 Limited Feedback. Limited feedback refers to the idea that online learning may not offer the same amount of feedback as traditional classroom learning. This is especially true when there is little interaction between students and instructors. Without adequate feedback, it can be challenging for students to measure their progress and enhance their skills. Garrison and Kanuka (2004) and Li and Irby (2008) have discussed this issue in their research on online learning.

1. Challenges Faced by Online Learning:

Online learning, while having many advantages, also presents several challenges. Here are some of the challenges faced by online learning:

1.1 Technology issues:

Technological concerns are difficulties that develop in online learning as a result of its extensive use of technology. These problems can interfere with learning and make it more difficult for kids to absorb information. Technology-related concerns can be exacerbated by technical challenges like slow internet connectivity, hardware or software problems with computers, or difficulty with online learning systems. For students to fully engage in online learning, dependable technology and internet access are essential.

1.2 Lack of interaction:

The expression "lack of interaction" refers to the paucity of social engagement that students experience in the context of online educational environments, as compared to the conventional classroom paradigm. The absence of in-person engagement, akin to that of traditional classroom environments, may render online learning a potentially isolating

experience. The state of being isolated can potentially lead to a deficiency in communal interaction and a sentiment of estrangement from peers and educators. It is common in conventional educational settings for children to engage in extracurricular pursuits and collaborate on group assignments and discussions. These communal activities create an environment that cultivates a sense of communal belonging and cohesiveness. The paucity of opportunities for interpersonal communication often observed in virtual learning environments is known to impede students' motivation and sense of engagement.

1.3 Self-discipline:

The capacity of students to organize their time and maintain motivation while learning online is referred to as self-discipline. Since there isn't the same structure and regularity as in a typical classroom, it can be difficult for students to focus and be productive in an online learning environment. Students must be accountable for their own learning and drive themselves to complete assignments when an instructor and peers are not present. High levels of self-control and time management abilities are needed for this. Students need to be able to organize their workload, set reasonable expectations, and keep their promises.

1.4 Accessibility:

The term "accessibility" describes how widely online learning is made available to and usable by all students. Despite the advantages of online learning, not all students may be able to use it, especially those with impairments, poor internet access, or low language skills. online learning settings may not include accessibility tools like closed captioning, screen readers, or alternative text, students with disabilities may encounter more difficulties there. Lack of dependable internet access might make it difficult for students to fully engage in online learning activities or cause delays in turning in schoolwork. It could be challenging for

students to comprehend the course material and take part in discussions if they are not fluent in the language of instruction.

1.5 assessments:

Due to the lack of in-person interaction and the requirement to guarantee that assessments accurately reflect student learning, assessment in online learning environments can be difficult. Assessments must be fair, dependable, and precise in measuring student learning, according to online teachers. Online assessments can be made using projects, tests, essays, assignments, and quizzes. The alignment of these assessments with learning objectives and their ability to demonstrate the development and achievement of students are the responsibility of the instructors.

1.6 Academic integrity:

The words honesty, trust, and fairness are used to describe the values of academic integrity. Maintaining academic integrity while learning online might be difficult because there are opportunities for academic dishonesty or cheating on online tests. Online exam cheating can take many different forms, such as obtaining information while taking the test, working together with others, or using prohibited resources. Instructors can employ a range of tactics to avoid cheating, including creating tests that call for critical thinking and problem-solving abilities, using proctoring software or monitoring tools, and clearly outlining the requirements and expectations for assessments.

1.7 Course Design:

The success of online learning depends on effective course design since it can affect student engagement, motivation, and learning results. Online courses must be created to efficiently provide course material while being engaging and interactive. Clear learning objectives that

are in line with the course material and assessments should be the first step in course design for online learning. A logical flow of learning activities, such as readings, videos, discussion boards, and assignments, should be included in the course framework in order to enhance student learning.

1. The Requirements for implementing online learning:

The efficacious execution of web-based education entails meticulous deliberation of diverse prerequisites pertinent to technology, pedagogical strategies, instructor aptitudes, and student aid amenities. Keengwe and Kidd (2010) identified a number of essential hardware, software, and networking prerequisites for effective online learning with regard to technology infrastructure. The necessary technological requisites encompass accelerated internet connectivity, computers endowed with sufficient processing capability and memory, suitable software applications that facilitate content construction and dissemination, and safe network connections that ensure both transfer and retention of data. It is imperative that online courses are formulated with a consideration for accessibility, guaranteeing equitable access to course materials and activities for all students.

The utilization of Learning Management Systems (LMS) is crucial in ensuring the successful delivery of online courses and efficient management of the learning process. As posited by Al-Emran, Elsherif, and Shaalan (2016), the primary reliance of higher education institutions is placed on the functionalities provided by learning management systems (LMS), including but not limited to content management, communication tools, assessment and evaluation tools, and course administration tools. In order to maximize the utilization of the Learning Management System (LMS), it is imperative that instructors possess a thorough

comprehension of the system's capabilities and attributes, and subsequently harness these attributes in manners that facilitate and enhance the educational process for their students.

Pedagogy employed for the creation and delivery of online courses represents an imperative aspect to be taken into account in e-learning. Bozkurt and Sharma (2018) have identified various optimal strategies for devising e-learning courses, such as the implementation of active learning methodologies, dispensation of timely and constructive feedback, and cultivation of autonomy amongst learners. In order to effectively facilitate online learning, educators must possess the capacity to modify their pedagogical practices to accommodate the distinctive learning styles and tendencies of virtual learners, which may diverge from those of conventional classroom-based learners.

Ostaszewski and Reid (2013) have determined that the competence of online instructors extensively depends on their ability to exhibit a myriad of capabilities and knowledge, encompassing technical proficiency pertaining to the learning management system (LMS) and other relevant online instruments, pedagogical proficiency for conceptualizing and administering efficient online courses, and interpersonal proficiency to facilitate interaction with and nurture support for online learners. Acquisition and development of competencies are critical for online instructors, and as such, professional development and training opportunities play a vital role in facilitating these advancements.

The provision of student support services holds paramount importance in facilitating access to requisite resources and aid essential to engender successful academic outcomes for online learners. According to the study conducted by Lister, Dove, Mullan, and Byrne (2007), the integration of both online resources and in-person guidance from instructors and peers had a positive impact on the nursing students who engaged in a blended learning environment.

Institutions that provide online education ought to furnish a spectrum of assistance services that are well-rounded, including technical support, scholastic consultation, tutorial provision, and mentoring, so as to accommodate the disparate requisites of the digital academic community.

1. The Teacher's and Students' Role:

1.1 The Teacher's Role:

In recent decades, there has been a significant amount of research conducted on the pivotal role that teachers play in online learning. Numerous studies have underscored the crucial function that educators have in enabling the advancement of scholastic attainment among pupils within the digital ecosystem. The impact of teacher immediacy on the academic achievement of students enrolled in online courses remains a significant factor of concern. Teacher immediacy signifies the degree of perceived proximity or emotional closeness between the instructor and students, and its influence on student learning outcomes has been established in studies conducted by Chen and Zhu (2020). According to Chen and Zhu's (2020) meta-analysis of 54 studies, teacher immediacy exerts a marked positive impact on the learning outcomes of students in online courses, especially in the context of affective learning outcomes encompassing motivation and satisfaction.

Furthermore, proficient online educators must possess expertise in online communication and have the capacity to furnish unambiguous and punctual feedback to their students, as stipulated in Palloff and Pratt's seminal work (2013). Furthermore, educators must possess the capability to formulate and administer internet-based instructional material that possesses traits of captivation and interaction, while simultaneously providing sustenance to the

learning process and accomplishing academic success for students (Garrison & Kanuka, 2004). Proficiency in e-moderation, the art of steering and enabling online dialogues and engagements to foster profound learning and analytical thinking, is an essential trait for adept online instructors (Salmon, 2011).

In accordance with research findings, Kearsley and Shneiderman (1999) posit that online teachers who are successful are those who effectively incorporate a balance between technological proficiency and pedagogical expertise into their instructional practices. The proficient delivery of online instruction necessitates a comprehensive comprehension of both the technological apparatus employed and the fundamental pedagogical tenets that underlie remote education

1.2 The Students' Role:

The role of students is of utmost significance towards their own learning and triumph in online educational platforms. In contrast to conventional classroom environments, wherein educators typically assume the role of primary learning facilitators, online learning initiatives entail placing a far greater onus on the learners themselves to take charge of their own learning process (Dabbagh & Kitsantas, 2012). According to Boettcher and Conrad (2016), individuals who exhibit proactive behavior, possess high levels of motivation, display self-directedness, and demonstrate proficiency in time management are deemed triumphant in their endeavors towards online learning.

Self-regulated learning is a significant determinant of academic achievement in online courses. The concept involves students' capacity to establish objectives, evaluate their advancement, and adjust their learning techniques accordingly (Zimmerman, 2002). Recent studies have demonstrated that learners who demonstrate the ability to self-regulate their

learning throughout remote courses achieve greater academic success and express greater satisfaction with their educational engagement compared to their peers who do not exhibit such proficiency (Boettcher & Conrad, 2016).

To achieve success in online learning, it is imperative for learners to be adept in collaborating with their colleagues while participating in discursive and group-based activities in a virtual setting (Garrison & Cleveland-Innes, 2005). In the context of online learning, successful collaboration necessitates adeptness in communication, interpersonal capabilities, and proficiency in utilizing technological apparatuses to augment collaborative endeavors

Conclusion:

To sum up, by tackling various theoretical background regarding of online learning and its characteristics as well as highlighting its advantages and limitations, we tried to get insight into the study through this chapter, which can help to interpret the data appropriately. The most significant contributors to the learning process are teachers and students, thus various facets of the modern approach, including their roles and perceptions of it, have been examined. The next chapter will be dedicated to the practical component of the study that comprises the analysis of the acquired data using different data collection technologies in order to evaluate Attitudes of students regarding the use of Google Meet.

Chapter 2: The use of Google Meet sessions for remote learning during the COVID-19 pandemic

Introduction	49
1. Historical Background:	49
1. Frequency of using Google Meet:.....	50
1. Average time spent on Google Meet sessions for remote learning:	51
1. Factors influencing the frequency of Google Meet usage:	52
1. Comparison of frequency of Google Meet use across different student populations:.....	53
1. The Duration of using Google Meet:.....	53
1. Changes in the duration of Google Meet sessions over time:	54
1. Factors influencing the duration of Google Meet sessions:	55
1. Comparison of the duration of Google Meet sessions across different student populations:	56
1.Type of using google meet sessions:	56
1.1 Types of Google Meet sessions used for remote learning:	56
1.1.1 Live Lectures.....	57
1.1.2 Recorded Videos.	57
1.1.3 Interactive Activities.	58
1. The Effectiveness of different types of Google Meet sessions for remote learning:	59
1. The Comparison of types of Google Meet sessions across different student populations:	60

1. Reasons for using Google Meet:	61
1.1 Accessibility of Google Meet sessions for remote learning:	61
1.2 The Convenience and flexibility of Google Meet sessions for remote learning:	62
1. Challenges and limitations of using Google Meet sessions for remote learning:	63
1. Challenges with using Google Meet sessions:	64
1.1 Technical challenges with using Google Meet sessions:	64
1.2 Student engagement and participation in Google Meet sessions:	65
1.3 Challenges with assessment and feedback in Google Meet sessions:	65
1. Support for using Google Meet:	67
1.1 Institutional support for using Google Meet sessions:	67
1.2 Instructor support for using Google Meet sessions:	67
1.3 Student support for using Google Meet sessions:	68
1. Comparison Google Meet with other modes of learning:	69
1.1 Comparison with in-person learning:	69
1.2 Comparison with other online learning tools:	70
1.3 Comparison with blended learning:	71
Conclusion:	72

Introduction:

The COVID-19 pandemic has had a significant impact on the education industry globally, causing schools and universities to close and a sudden switch to remote learning. As a result, a lot of educational institutions are now using online tools and platforms like Google Meet to support remote teaching and learning. With the help of Google Meet, instructors and students can connect in real time, conduct lessons, share resources, and work together remotely. Researchers and educators have been interested in the use of Google Meet sessions for remote learning because it represents a significant change in the way that education is provided. Understanding how students feel about participating in Google Meet sessions can help pinpoint the drawbacks, advantages, and limitations of this type of learning and offer suggestions for how to enhance the effectiveness of distance learning.

1. Historical Background:

The COVID-19 pandemic has severely disrupted education systems globally. Many schools and universities have embraced remote learning technologies like Google Meet, a video conferencing platform created by Google, in an effort to maintain educational continuity. As a part of the G Suite for Education, a suite of productivity tools created specifically for educational institutions, Google Meet was introduced in 2017. Users can host video conferences, share screens, and work together in real time. The use of Google Meet and other video conferencing tools for remote learning, however, really took off during the COVID-19 pandemic.

Many colleges and universities were forced to close their physical campuses in March 2020 as the pandemic spread quickly around the world and switch to remote learning. In order to conduct virtual classes and interact with students in real-time, Google Meet, along with other platforms like Zoom and Microsoft Teams, quickly gained popularity as options for remote learning. Due to its integration with other Google tools like Google Classroom, which let teachers create and manage online assignments, and Google Drive, which let students easily access and collaborate on shared documents, Google Meet's popularity for remote learning was further increased.

The COVID-19 pandemic's use of Google Meet for remote learning has largely been successful, but it has also brought attention to the global digital divide. Many students and teachers have found it extremely difficult to access reliable internet connections and devices, especially in low-income areas. Despite these difficulties, the use of Google Meet and other distance learning tools allowed for the continuation of education throughout the pandemic and has created new opportunities for online and hybrid learning models in the future. It is likely that the function of Google Meet and other video conferencing platforms in education will continue to expand and develop as the pandemic progresses.

1. Frequency of using Google Meet:

Google claims that since the outbreak of the pandemic, usage of Google Meet has significantly increased. More than 100 million people were attending meetings every day on Google Meet by July 2020. Google reported in April 2020 that 2 million new users were joining Google Meet every day. According to a report by EdWeek Market (2020) Brief, Google Meet was one of the most popular video conferencing tools for K–12 education

during the pandemic, with 62% of district leaders claiming to have used Google Meet for remote learning. The use of video conferencing tools for remote learning, such as Google Meet, increased by over 1,000% in some countries during the early months of the pandemic, according to a study by the National Bureau of Economic Research (2020).

1. Average time spent on Google Meet sessions for remote learning:

The COVID-19 pandemic has significantly impacted the education sector worldwide, with many institutions shifting to online and remote learning to ensure continuity of education. Among the popular platforms used for remote learning is Google Meet, a video conferencing tool that allows synchronous online classes. However, the average time spent on Google Meet sessions for remote learning during the pandemic has varied across different studies and student populations. In Iran, Aliakbari and Gharavi's (2021) study found that university students spent an average of 2.5 hours per day on Google Meet sessions for remote learning. This suggests that students in Iran spent a significant amount of time attending synchronous online classes. In contrast, Moawad and Darwish (2021) reported that students at a public university in Egypt spent an average of 3.3 hours per week on synchronous online classes, including Google Meet sessions.

This finding indicates that students in Egypt may have had a different remote learning experience compared to students in Iran. Furthermore, Çelik (2021) reported that the average time spent on Google Meet sessions for remote learning among Turkish students was not specified in the literature. This lack of information may be due to variations in the implementation of remote learning in Turkey or limited research on this topic in the country. The varying results across these studies suggest that the average time spent on

Google Meet sessions for remote learning may depend on various factors, such as the country and university context, students' academic level, and course requirements. For example, students in Iran may have had more extensive course requirements that required more synchronous online classes, while students in Egypt may have had more flexibility in their course schedules.

1. Factors influencing the frequency of Google Meet usage:

In addition to the average time spent on Google Meet sessions, several factors can influence the frequency of Google Meet use for remote learning during the COVID-19 pandemic. These factors can include individual, institutional, and technological factors.

One individual factor that can influence the frequency of Google Meet use is the level of student motivation and engagement. In their study of university students in Egypt, Moawad and Darwish (2021) found that students who were more motivated and engaged in online learning were more likely to attend Google Meet sessions regularly. Institutional factors, such as the availability of resources and support, can also affect the frequency of Google Meet use.

Çelik (2021) notes that the success of distance education during the pandemic depends on institutional support, including the availability of digital resources and technical support for both teachers and students. Technological factors can also impact the frequency of Google Meet use. Aliakbari and Gharavi (2021) found that students' internet access and the quality of their internet connection were significant predictors of their participation in online learning activities, including Google Meet sessions.

1. Comparison of frequency of Google Meet use across different student populations:

The frequency of Google Meet use for remote learning during the COVID-19 pandemic may also vary across different student populations. For example, Aliakbari and Gharavi (2021) found that female students in Iran were more likely to participate in online learning activities, including Google Meet sessions, than their male counterparts.

In their study of university students in Egypt, Moawad and Darwish (2021) found that students' year of study and major were significant predictors of their engagement in online learning activities, including Google Meet sessions. Specifically, students in their first year of study and those majoring in science and engineering were more likely to attend Google Meet sessions regularly. Furthermore, Çelik (2021) notes that the success of distance education during the pandemic depends on the ability of teachers to adapt their teaching strategies to the needs and characteristics of their students. Thus, the frequency of Google Meet use may also vary depending on the teaching methods and approaches used by different instructors.

1. The Duration of using Google Meet:

The duration of Google Meet sessions for remote learning during the COVID-19 pandemic varied depending on the specific school or institution's policies and needs. However, Google Meet itself has a time limit of 60 minutes for its free version. Some schools may have chosen to use the paid version of Google Meet, which does not have a time limit, or to use other video conferencing platforms that better fit their needs. Additionally, some schools may have chosen to break up longer classes into multiple shorter sessions to accommodate the limitations of online learning. Ultimately, the duration of Google Meet

sessions for remote learning during the COVID-19 pandemic varied widely depending on the specific context.

1. Changes in the duration of Google Meet sessions over time:

The COVID-19 pandemic forced many educational institutions worldwide to rapidly transition to remote learning, with videoconferencing platforms such as Google Meet becoming a primary tool for synchronous instruction. However, as institutions began to adapt to this new mode of instruction, the duration of Google Meet sessions changed over time. Ouyang and Li (2021) conducted a study on the use of videoconferencing and learning outcomes in higher education during the pandemic, in which they examined the duration of Google Meet sessions over time. They found that during the initial stages of the pandemic, institutions tended to hold longer sessions, often exceeding two hours in duration. However, as the pandemic progressed, institutions began to adapt and shift towards shorter, more structured sessions that incorporated a variety of activities to maximize student engagement and learning outcomes. In many cases, instructors began to break up longer sessions into multiple shorter sessions to better accommodate the limitations of remote learning.

Togliatti and Marelli (2021) similarly found that the duration of Google Meet sessions varied over time in their study on remote teaching in an Italian university. They noted that as instructors became more experienced with remote teaching, they tended to move away from long, lecture-based sessions towards more interactive and engaging activities that encouraged student participation. This shift towards shorter, more engaging sessions was motivated by a

desire to improve student learning outcomes and increase engagement in the remote learning environment.

1. Factors influencing the duration of Google Meet sessions:

The duration of Google Meet sessions during the COVID-19 pandemic was influenced by a range of factors. Togliatti and Marelli (2021) identified several factors that impacted the duration of Google Meet sessions in their study. One key factor was the course format, with courses that relied heavily on lectures and discussions tending to have longer synchronous sessions than courses that incorporated more individual work or asynchronous activities. Another factor was student engagement, with instructors tending to extend sessions when students were actively participating and asking questions. Technical issues such as poor internet connectivity or platform glitches could also impact the duration of Google Meet sessions.

Al Lily et al. (2021) conducted a qualitative study on the reality of e-learning during the COVID-19 pandemic in Saudi Arabia and identified several additional factors that influenced the duration of Google Meet sessions in this context. They found that the age and academic level of the students impacted the duration of sessions, with younger students having shorter sessions and struggling students receiving more individualized attention in longer sessions. The cultural context also played a role, with some schools segregating male and female students into separate sessions that may have been shorter in duration. The availability of technology and internet connectivity was also identified as a key factor that impacted the duration of Google Meet sessions.

1. Comparison of the duration of Google Meet sessions across different student populations:

The duration of Google Meet sessions during the COVID-19 pandemic varied across different student populations. . Al Lily et al. (2021) conducted a subjective ponder on e-learning in Saudi Arabia and found that the term of Google Meet sessions was shorter for more youthful understudies who may have had trouble keeping up center for longer periods of time. Furthermore, the ponder found that the term of sessions tended to be longer for understudies who were battling scholastically and required more individualized consideration from teaches.

In an Italian university, Togliatti and Marelli (2021) compared the length of synchronous and asynchronous teaching methods and discovered that the length of Google Meet sessions varied depending on the type of instruction. As they were frequently used for interactive activities requiring student participation and lecture-based instruction, synchronous sessions tended to be longer than asynchronous sessions. On the other hand, asynchronous sessions were shorter and more heavily weighted toward individual projects and discussion boards.

1.Type of using google meet sessions:

1.1 Types of Google Meet sessions used for remote learning:

Google Meet sessions have been widely used for remote learning during the COVID-19 pandemic. Different types of Google Meet sessions have been implemented to ensure

effective communication and learning between students and teachers. This section highlights some of the common types of Google Meet sessions that have been used for remote learning.

1.1.1 Live Lectures. During the COVID-19 pandemic, live lectures were frequently used for remote learning, and numerous studies have examined their efficacy. In a study by Cheng and Wang (2021) that was conducted in China, it was discovered that live lectures were the most efficient format for distance learning. When compared to other formats, such as recorded videos or interactive activities, students who attended live lectures expressed greater levels of satisfaction and improved academic performance.

Similarly, in a study conducted in Saudi Arabia by Hamdan, Alebaikan, and Saeed (2020), live lectures were reported to be the second most effective format for remote learning, after recorded videos. The researchers noted that live lectures provided students with the opportunity to interact with their teachers and ask questions in real-time. However, some students reported technical difficulties, such as poor internet connectivity, which affected their experience with live lectures.

Weng, Xu, and Hou (2021) found that teachers with prior experience in online instruction preferred live lectures as the most efficient format for distance learning. They claimed that live lectures facilitated in-person engagement and interaction with students, which was critical for sustaining the students' motivation and focus throughout the lecture. However, the study also discovered that some students thought recorded videos or interactive exercises were more effective than live lectures. This may be a result of the students' varying levels of participation and engagement during live lectures.

1.1.2 Recorded Videos. During the COVID-19 pandemic, recorded videos have been a popular format for distance learning; their efficacy has been examined in numerous

studies. Recorded videos were found to be the second most effective format for remote learning after live lectures in a study conducted in China by Cheng and Wang (2021). Students who took part in recorded videos expressed great satisfaction and thought that they were a flexible and practical format for learning.

Similarly, in a study conducted in Saudi Arabia by Hamdan, Alebaikan, and Saeed (2020), recorded videos were reported to be the most effective format for remote learning. Students appreciated the flexibility of being able to access the material at their own pace and at any time. However, some students also reported that they missed the opportunity to interact with their teachers and classmates in real-time.

In a study conducted in China by Weng, Xu, and Hou (2021), teachers reported that recorded videos were an effective format for delivering course content. They noted that recorded videos allowed them to provide clear explanations and demonstrations of course materials, which could be helpful for students who may have difficulty following live lectures. However, some teachers also noted that recorded videos may be less effective for engaging students and fostering discussion.

1.1.3 Interactive Activities. During the COVID-19 pandemic, interactive activities were frequently used in remote learning, and numerous studies have examined their efficacy. After live lectures and recorded videos, interactive activities like online discussions and group projects were found to be the third most effective format for remote learning in a study conducted in China by Cheng and Wang (2021). High levels of engagement and satisfaction were reported by the students who took part in interactive activities, and they valued the chances they had to talk with their teachers and classmates.

In a similar vein, students in a Saudi Arabian study by Hamdan, Alebaikan, and Saeed (2020) reported that interactive exercises like online discussions and quizzes were successful in fostering engagement and learning. However, some students also pointed out that these tasks could take a lot of time and required a lot of self-discipline.

Teachers reported that interactive activities were an effective format for engrossing students and encouraging discussion in a study carried out in China by Weng, Xu, and Hou (2021). They observed that group projects and online discussions allowed students to share ideas and perspectives and learn from one another. However, some instructors noted that these activities could be difficult to manage and needed more support and direction.

1. The Effectiveness of different types of Google Meet sessions for remote learning:

The effectiveness of different types of Google Meet sessions for remote learning has been evaluated in several studies. Cheng and Wang ((2021)) conducted a study in China which yielded The finding that The mode of live lectures constituted The most efficacious format for remote learning. The students who were engaged in live lectures reported superior aptitude performances and increased levels of satisfaction as compared to their counterparts who participated in alternate modes of delivery such as interactive activities or pre-recorded video sessions.

However, in a study conducted in Saudi Arabia by Hamdan, Alebaikan, and Saeed (2020), it was found that recorded videos were the most effective format for remote learning. Students in the study reported higher satisfaction levels and better academic performance when they watched recorded videos compared to live lectures or interactive activities. The researchers

attributed this difference to the fact that many students in Saudi Arabia had limited internet connectivity, which made live lectures and interactive activities more challenging.

1. The Comparison of types of Google Meet sessions across different student populations:

Cheng and Wang's (2021) study found that live lectures were the most commonly used type of Google Meet sessions for remote learning in higher education institutions in China during the COVID-19 pandemic. However, the study also revealed that recorded videos and interactive activities were perceived as more effective than live lectures by both students and faculty members.

Hamdan, Alebaikan, and Saeed's (2020) study in Saudi Arabia found that recorded videos were the most preferred type of online learning resource among students. However, the study also found that students perceived live online sessions, including Google Meet sessions, as more effective than recorded videos for engaging with course material and communicating with instructors.

Weng, Xu, and Hou's (2021) study in Chinese universities found that interactive activities, such as discussions and group work, were perceived as more effective than traditional lectures and recorded videos in promoting student engagement and active learning. The study also found that live online sessions, including Google Meet sessions, were effective in promoting student interaction and collaboration, but technical difficulties and time zone differences posed challenges for some students.

these studies suggest that different types of Google Meet sessions may be perceived as more effective by different student populations depending on their preferences, learning styles, and technological capabilities. Institutions and instructors may need to consider a variety of approaches to remote learning, including live lectures, recorded videos, and interactive activities, to accommodate diverse student needs and enhance the effectiveness of online teaching.

1. Reasons for using Google Meet:

1.1 Accessibility of Google Meet sessions for remote learning:

Student Accessibility Given that it can be accessed from a wide range of devices, including laptops, tablets, and smartphones, Google Meet has established itself as a usable platform for remote learning. This means that as long as they have a strong internet connection, students can take part in online classes from anywhere. For students with hearing impairments or communication challenges, Google Meet also provides live captioning and transcription features that make it simpler for them to follow the discussions.

Teachers' Accessibility For teachers, Google Meet also has accessibility features. They can share their screens, for instance, which is helpful when presenting visual aids or demonstrating concepts. Google Meet also provides a virtual whiteboard feature that can be used to write or draw ideas, much like in a traditional classroom.

Limitations The accessibility of Google Meet sessions does still have some restrictions. For instance, some students might not have access to high-speed internet, which could result in connectivity problems when taking online classes. Some students might also not have access to the equipment or software needed to take part in Google Meet sessions. These elements

must be taken into account when educational institutions are developing their remote learning strategies.

1.2 The Convenience and flexibility of Google Meet sessions for remote learning:

Google Meet offers a range of features that make remote learning more flexible for students. For instance, students can access recorded sessions at any time, which allows them to revisit material that they may have missed or need to review. Additionally, Google Meet offers breakout rooms, which allow students to work together in small groups to complete assignments or projects.

Flexibility for Teachers Google Meet also offers flexibility for teachers. For instance, they can schedule sessions at different times to accommodate the schedules of students who may be in different time zones. Additionally, Google Meet allows teachers to share materials in real-time during online classes, which can help to keep students engaged and interested.

Comforts for Students Google Meet sessions are also convenient for students, as they can participate in online classes from the comfort of their own homes. Students will no longer have to travel to physical classrooms, which can be difficult for those who live in rural areas or have mobility problems.

Comfort for Teachers Teachers can create and manage virtual classrooms with Google Meet without the need for physical infrastructure, which is another convenience. As a result, it may be less expensive and simpler for educational institutions to offer more students remote learning opportunities.

1. Challenges and limitations of using Google Meet sessions for remote learning:

One of the major challenges of using Google Meet sessions for remote learning is connectivity issues. Poor internet connections can result in delays or disruptions during online classes, which can affect the quality of education being delivered. This can be particularly problematic for students who live in areas with limited access to high-speed internet.

Technical Difficulties another challenge of using Google Meet sessions is technical difficulties. Technical issues such as software glitches, malfunctioning hardware, or outdated equipment can hinder the delivery of online classes. This can be particularly challenging for teachers who are not familiar with the technology or do not have the technical skills to troubleshoot these issues.

Privacy and Security Concerns Privacy and security concerns also pose a challenge for using Google Meet sessions for remote learning. The platform may not be fully secure, and there have been instances of unauthorized access to online classes. Additionally, students' personal information may be at risk if the platform is not properly secured.

Lack of Interaction Another limitation of using Google Meet sessions is the lack of interaction that students may experience during online classes. Virtual learning environments can limit the social interaction that occurs in a physical classroom, which can affect students' engagement and motivation.

1. Challenges with using Google Meet sessions:

1.1 Technical challenges with using Google Meet sessions:

The COVID-19 pandemic has forced educators and students around the world to transition to remote learning, and video conferencing tools like Google Meet have become essential for facilitating virtual classrooms. However, there are several technical challenges associated with using Google Meet for remote learning.

According to De Witte and Rogge (2021), poor internet connectivity, audio and video problems, and device compatibility are among the top technical issues that educators and students face when using Google Meet. These problems can cause disruptions to the flow of the lesson, impact the overall learning experience, and make it difficult for students to engage with the material.

Another technical challenge is the lack of access to technology, which can create inequalities in terms of access to education. Kozan and Richardson (2021) found that some students may not have access to a reliable internet connection or a suitable device for remote learning, which can hinder their ability to participate in Google Meet sessions and access learning materials.

Wang, Cheng, and Tao (2021) recommend that educators and institutions provide technical support for students and teachers, invest in dependable technology and infrastructure, and create contingency plans in case of technical problems or disruptions in order to address these technical challenges.

1.2 Student engagement and participation in Google Meet sessions:

One of the main challenges of remote learning is keeping students engaged and motivated, particularly when they are not physically present in the classroom. Google Meet sessions can be particularly challenging in this regard, as they can be passive and limit interaction between students and teachers.

According to Kozan and Richardson (2021), student engagement and participation can be impacted by factors such as distractions at home, lack of face-to-face interaction, and a lack of personal connection with teachers and classmates. These factors can make it difficult for students to stay focused, ask questions, and collaborate with their peers during Google Meet sessions.

To address these challenges, De Witte and Rogge (2021) suggest that educators should use interactive and engaging teaching methods, such as group work, discussion forums, and quizzes, to promote active learning and student participation. Additionally, Wang, Cheng, and Tao (2021) recommend that educators should provide regular feedback and support to students, as well as opportunities for personalized learning and self-directed study.

1.3 Challenges with assessment and feedback in Google Meet sessions:

Assessment and feedback are essential components of effective teaching and learning, but they can be challenging in the context of remote learning through Google Meet sessions. According to Kozan and Richardson (2021), challenges with assessment and feedback in Google Meet sessions can include difficulties with monitoring student progress, providing timely feedback, and ensuring academic integrity.

One challenge is the lack of visibility into student engagement and participation during Google Meet sessions, which can make it difficult for educators to monitor student progress and identify areas for improvement. Additionally, Wang, Cheng, and Tao (2021) note that providing timely feedback can be challenging in the context of remote learning, as educators may have limited opportunities for one-on-one interactions with students.

Another challenge is ensuring academic integrity during assessments, as it can be difficult to prevent cheating and plagiarism in a virtual environment. De Witte and Rogge (2021) suggest that educators should use a variety of assessment methods, such as online quizzes, written assignments, and group projects, to promote academic integrity and ensure that students are learning and engaging with the material.

Kozan and Richardson (2021) advise educators to use a variety of assessment and feedback strategies, such as peer assessment, self-assessment, and formative feedback, to promote student engagement and deliver timely and meaningful feedback in order to address these issues.

Wang, Cheng, and Tao (2021) also recommend that teachers use technological resources to improve assessment and feedback in Google Meet sessions. For instance, they can gather real-time student feedback using online polling tools or plagiarism detection tools like Turnitin.

1. Support for using Google Meet:

1.1 Institutional support for using Google Meet sessions:

In the wake of the COVID-19 pandemic, schools have been forced to transition to remote teaching to ensure the safety of students and staff. This shift has resulted in the increased use of technology such as Google Meet for virtual classroom sessions. Bonanno, Kommers, and Kumar (2021) highlight the importance of institutional support for teachers to facilitate remote teaching effectively. This support includes the provision of the necessary technological infrastructure and training on how to use it.

According to Grewal and Katsikeas (2021), marketing academics have reported positive attitudes towards the use of technology for remote teaching. However, they have also identified the need for institutional support to ensure effective delivery of remote teaching. This includes the provision of technical support and training to ensure that teachers can use technology effectively in their teaching.

Institutional support also plays a significant role in ensuring equitable access to remote teaching. Students from disadvantaged backgrounds may not have access to the necessary technology, making it challenging for them to participate in virtual classroom sessions. Schools can provide support by offering devices and internet access to students who need them. By providing institutional support, schools can ensure that all students have equal opportunities to engage in remote teaching through Google Meet sessions.

1.2 Instructor support for using Google Meet sessions:

In addition to institutional support, instructor support is crucial for the effective use of Google Meet sessions for remote teaching. Kim and Lee (2020) found that the perceived

value, flow, and satisfaction of students during remote lectures were influenced by the instructor's support. The instructor's support included communication with students, providing clear instructions, and responding to questions promptly.

Instructors must be trained on how to use Google Meet effectively to ensure that they can deliver quality remote teaching. This training should include information on how to manage virtual classroom sessions, engage students, and troubleshoot common technical issues. Bonanno et al. (2021) also emphasize the importance of providing instructors with ongoing support and professional development opportunities to ensure they remain up-to-date with the latest remote teaching technologies and best practices.

Furthermore, instructors must be aware of the challenges that students may face during remote teaching, such as limited internet access, time zone differences, and distractions at home. Instructors can address these challenges by providing flexibility in their teaching methods and allowing students to participate in virtual classroom sessions at different times.

1.3 Student support for using Google Meet sessions:

While institutional and instructor support is essential, students also require support to effectively engage in Google Meet sessions for remote teaching. Kim and Lee (2020) found that students' satisfaction with remote lectures was influenced by their perceived value and flow. This highlights the importance of students' engagement in the virtual classroom sessions.

Students must be trained on how to use Google Meet effectively to participate in virtual classroom sessions. This training should include information on how to use the platform's features and troubleshoot common technical issues. Schools can also provide support to

students who do not have access to devices or internet by loaning devices or providing free internet access.

Additionally, students must be aware of the expectations and requirements of virtual classroom sessions. Instructors can provide clear instructions and expectations for participation in virtual classroom sessions. Schools can also provide support to students who require additional help with their coursework through virtual tutoring or academic support services. By providing student support for using Google Meet sessions, schools can ensure that all students have equal opportunities to participate in remote teaching effectively.

1. Comparison Google Meet with other modes of learning:

1.1 Comparison with in-person learning:

The COVID-19 pandemic has had a significant impact on education, forcing institutions around the world to shift to remote and online learning. This shift has sparked a debate about the effectiveness of remote and online learning compared to traditional in-person learning. In this section, we will explore the comparison between remote and in-person learning based on the studies conducted by Alqurashi (2021), Bao (2020), and Gamage and Jayasinghe (2021).

Alqurashi's (2021) study in Saudi Arabia found that remote learning was less effective than traditional in-person learning. The study revealed that students faced challenges in managing their time and staying motivated while learning remotely. Moreover, students found it challenging to engage with their teachers and peers, resulting in a lack of interaction and feedback. As a result, the study recommended that institutions should prioritize in-person learning and utilize remote learning only as a temporary solution.

In contrast, Bao's (2020) study on Peking University found that remote learning was just as effective as in-person learning. The study indicated that remote learning allowed students to access course materials and communicate with their instructors and peers in real-time. Additionally, the study found that remote learning could be beneficial for students who faced challenges in attending in-person classes due to health or other reasons.

Gamage and Jayasinghe's (2021) study on Sri Lankan teachers found that while remote learning had some advantages, in-person learning was still preferred by both teachers and students. The study found that in-person learning provided more opportunities for interaction, feedback, and building social connections. However, the study also found that remote learning could be effective when combined with in-person learning as part of a blended learning approach.

1.2 Comparison with other online learning tools:

The use of online learning resources has significantly increased as a result of the COVID-19 pandemic. Based on research by Alqurashi (2021), Bao (2020), and Gamage and Jayasinghe, we will compare remote learning to other online learning tools in this section (2021).

According to Alqurashi's study from 2021, online learning resources like recorded lectures and e-books were less effective than remote learning. According to the study, students preferred distance learning because it gave them a sense of structure and routine. Additionally, remote learning gave students the chance to communicate with their instructors and classmates, giving them support and feedback.

According to Bao's (2020) research at Peking University, remote learning is more efficient than lectures that have already been recorded. According to the study, remote learning gave students more chances for interaction and feedback, which improved learning outcomes.

Remote learning was found to be more effective than pre-recorded lectures in Gamage and Jayasinghe's (2021) study of Sri Lankan teachers, but less effective than live online classes. According to the study, live online classes allowed for in-person interaction and immediate feedback, which raised the standard of learning.

1.3 Comparison with blended learning:

Online and in-person learning are combined to create blended learning. Because of its adaptability and potential to enhance learning outcomes, it has grown in popularity. Based on research done by Alqurashi (2021), Bao (2020), and Gamage and Jayasinghe, we will compare online learning and blended learning in this section (2021).

According to Alqurashi's study from 2021, blended learning is superior to remote learning on its own. The study found that students could access course materials online and go to physical classes to speak with their instructors and classmates. The study also discovered that blended learning gave students more chances for engagement, support, and feedback.

According to Bao's (2020) research at Peking University, blended learning is more efficient than solely remote learning. The study discovered that students could access course materials online and go to physical classes to speak with their instructors and classmates. The study also discovered that blended learning facilitated a more personalized learning environment, leading to improved learning outcomes.

The study by Gamage and Jayasinghe on Sri Lankan teachers in 2021 discovered that blended learning was superior to remote learning alone. The study found that students could access course materials online and go to physical classes to speak with their instructors and classmates. The study also discovered that blended learning gave students a sense of structure and routine, which improved learning outcomes.

Conclusion:

The research explores various aspects of using Google Meet sessions for remote learning during the COVID-19 pandemic. The studies examine the frequency of usage, average time spent on sessions, factors influencing usage and duration, and a comparison across different student populations. Additionally, the research investigates the types of Google Meet sessions, reasons for using the platform, challenges and limitations faced, assessment and feedback concerns, and instructor and student support. These studies provide valuable insights into the use of Google Meet for remote learning. Building on this knowledge, the next chapter will focus on the specific use of Google Meet in your university During the Covid 19 Pandemic. It will shed light into the Students experience with Google Meet sessions, considering many factors. This chapter will provide a deeper understanding of how Google Meet is utilized in your university, shedding light on its effectiveness and potential areas for improvement.

Chapter 03: Analysis and Discussion of the Results

Introduction :	74
1. Research Design:	75
1. Population and Sample:	75
1. Data Collection:	76
1. Students Questionnaire :	76
1.1 Description of Students Questionnaire:	76
1. Analysis of Students Questionnaire:	77
1. Focus Group Analysis:	98
1. Focus Group Analysis:	114
1. Synthesis and Discussion the Findings:	116
1.1 Student's Questionnaire:	116
1.2 Focus Group:.....	117
Conclusion:	118
General Conclusion:	119
References:	121
APPENDICES	134
Student's questionnaire:	135
Focus Group Questions:.....	139
المخلص	140

Introduction :

The current research aims to explore the effect of Students' Attitudes towards the Use of Google Meet Sessions during the COVID-19 Pandemic. More details, this chapter will conduct the results and discussing the methods that has been used to this study. Additionally, it will present the research strategy, data collection besides of the sample methodologies. To finalize, the study's findings will be succinctly reported, and conclusions and suggestions will be made in light of the data analysis and interpretation. In the end, this research aims to explore students' attitudes towards the use of Google Meet for virtual classroom sessions.

1. Research Design:

We rely on a descriptive method to gain results and answer the current study questions. The major focus of this research is to explore Attitudes towards the Use of Google Meet Sessions. Moreover, we opted to use the mixed-method approach because it fits the unity of this study and also because of its reliability and strengths.

1. Population and Sample:

The target population for the current study was English master one students at the University of Mohamed Khider in Biskra. The choice wasn't made randomly; it was under a multitude of circumstances. At this level, students are Master 1 students who were affected by the COVID-19 pandemic. On the other hand, master's students studied many sessions online using Google Meet during the COVID-19 era.

To collect data from the students, we started by utilizing a questionnaire. This method or technique allows us to discover the students' perceptions about the topic and their attitude

toward the use of Google Meet. Finally, eight students were chosen to participate in the focus group to express their perspectives toward the use of Google Meet and whether it reflects a negative or positive perception among students.

1. Data Collection:

The data collection tools tend to achieve numerous objectives: test the validity of the hypotheses and answer the research questions. This includes a student's questionnaire to gather the students' perception of Google Meet. Moreover, it aims to elicit students' views on Google Meet sessions. On the other hand, we spoke to eight students to extract their experiences with using Google Meet and reflect on their opinions.

1. Students Questionnaire :

1.1 Description of Students Questionnaire:

The Questionnaire was designed for Master One English students at the University of Mohammed Khider (Biskra). In the population, which consisted of a total of (169) students, we chose a sample that included (20) students. The purpose of the questionnaire is to discover how students feel about Google Meet sessions, identify some of the obstacles they have when learning through it, and determine how they see the use of Google Meet in the future.

The semi-structured questionnaire had one main section that is a closed-ended questions. For it, students were required to select an answer using a Likert scale.

1. Analysis of Students Questionnaire:

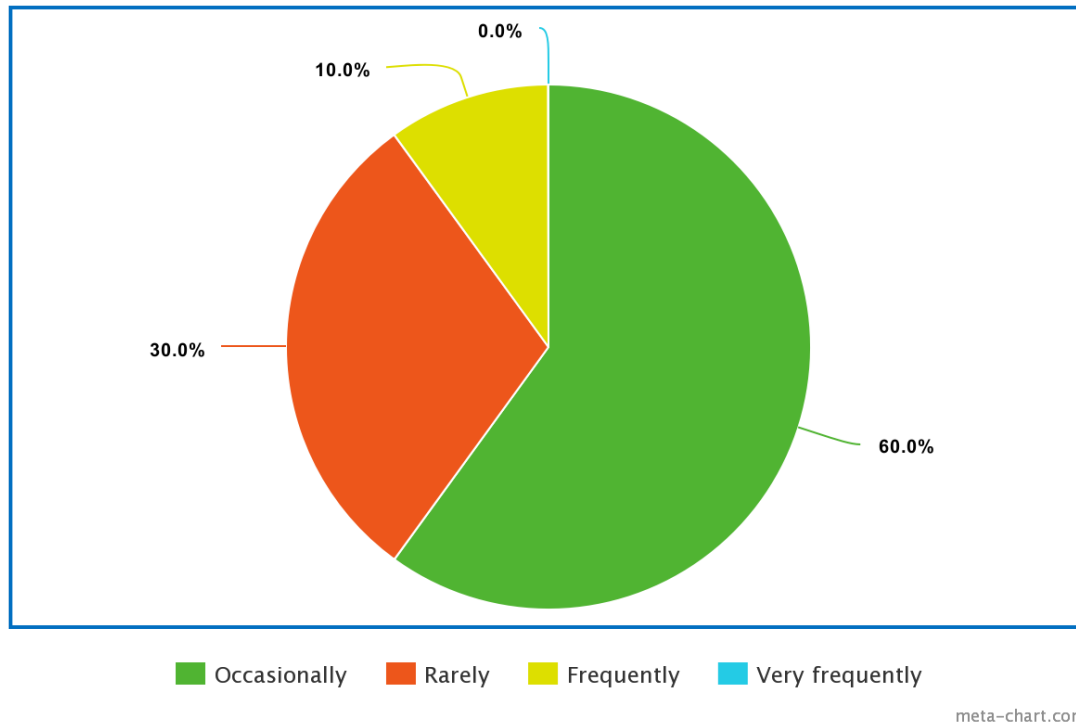


Figure 1: Frequency of Google Meet Attendance

This distribution gives us some insight into the frequency of students' participation in Google Meet sessions. The majority of respondents (60%) fell into the occasional category, suggesting that they attended these sessions sporadically or on an irregular basis. This could be due to a variety of reasons, such as other commitments, technological constraints, or personal preferences. The next largest group (30%) reported attending rarely, indicating that a significant portion of the participants had limited involvement in Google Meet sessions during the pandemic. This might suggest that alternative modes of learning or communication were preferred or available to these individuals.

Lastly, a smaller percentage (10%) reported attending frequently, indicating a consistent and regular participation in Google Meet sessions. These individuals likely had a higher level of engagement and reliance on this platform for their academic activities during the pandemic.

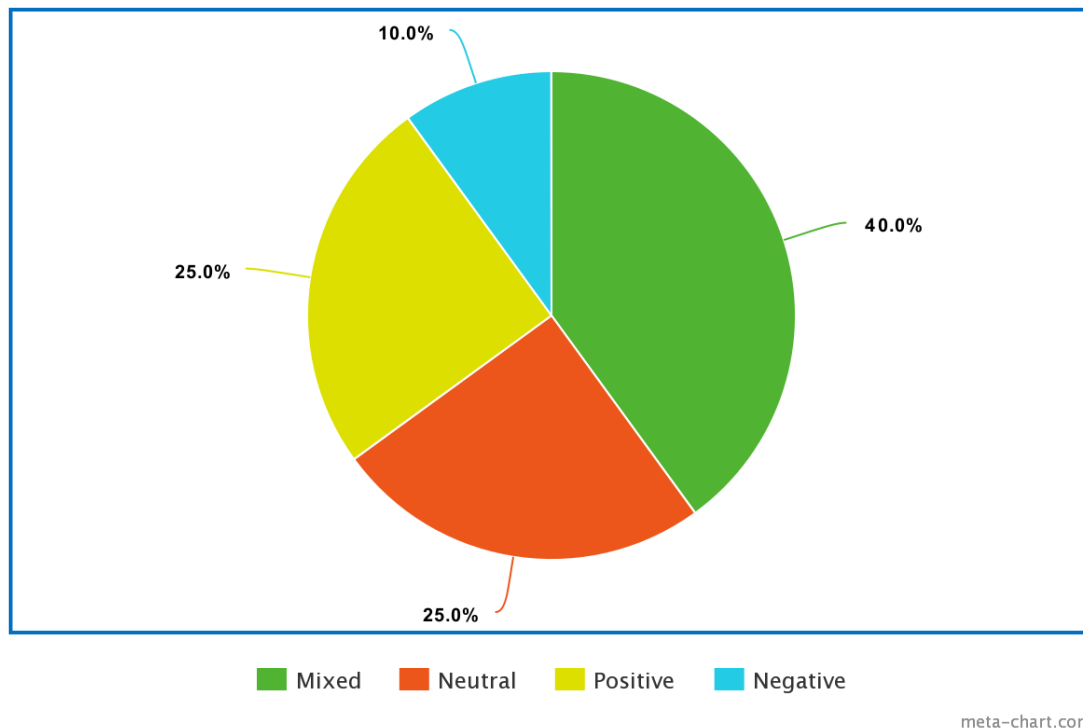


Figure 2: Initial Reaction to Attending Classes via Google Meet

The largest group (40%) with a mixed initial reaction suggests that participants had a combination of positive and negative feelings or uncertainties about this mode of attending classes. This could be attributed to various factors such as unfamiliarity with the platform, concerns about the effectiveness of online learning, or challenges in adapting to a new learning environment.

The small percentage (10%) of participants with a negative reaction indicates that some individuals may have had reservations or strong concerns about attending classes via Google Meet. These negative reactions could stem from factors like technological difficulties, limitations in interaction, or preferences for traditional face-to-face learning.

The equal distribution of participants with a neutral reaction suggests that a quarter of the respondents neither had a strongly positive nor negative initial perception of attending classes via Google Meet. This group may have adopted a wait-and-see approach or had a more neutral stance towards this mode of learning.

Finally, an equal percentage of participants had a positive initial reaction, indicating that they embraced the idea of attending classes via Google Meet. These individuals may have seen the advantages of flexibility, convenience, or enhanced digital tools provided by this online platform.

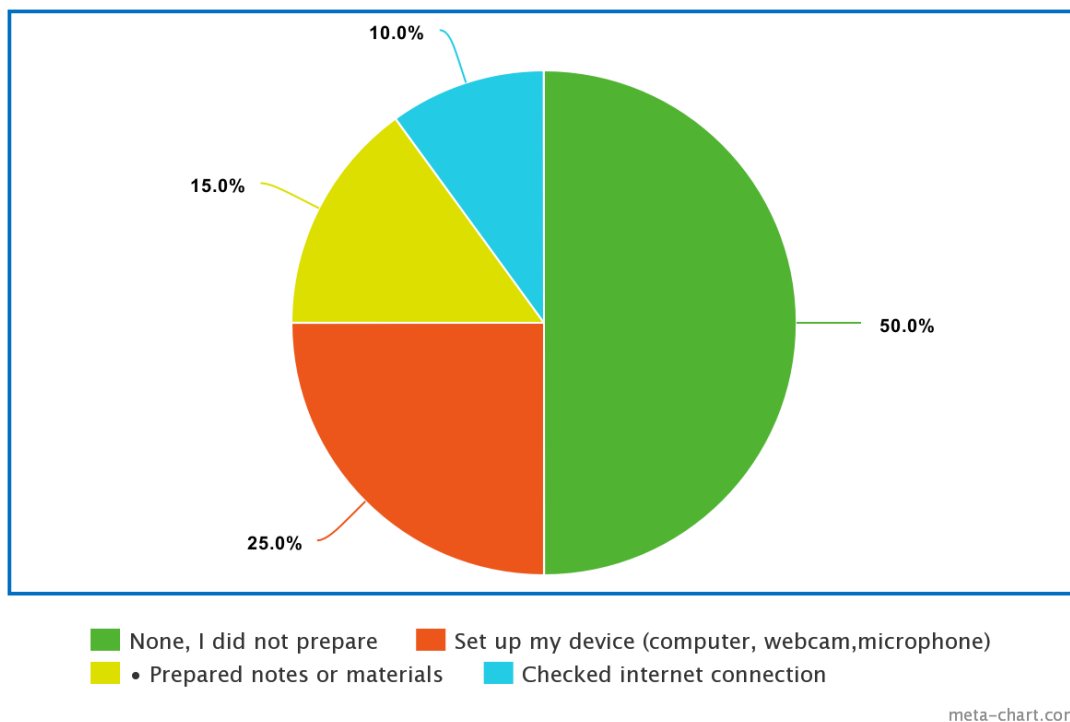


Figure 3: Preparation Methods for Google Meet Sessions

The percentage of participants (25%) who reported setting up their device suggests that they recognized the importance of having the necessary equipment in place to ensure a smooth and effective online learning experience. This could include ensuring that their computer,

webcam, and microphone were functioning properly, as these are essential tools for participating in Google Meet sessions.

A smaller percentage (10%) of participants indicated that they checked their internet connection before the sessions. This suggests that they were aware of the potential impact of a stable and reliable internet connection on their ability to actively participate and engage in the sessions.

Another group (15%) reported preparing notes or materials in advance. This indicates that they recognized the value of being organized and having relevant materials ready to enhance their participation and understanding during the Google Meet sessions.

Interestingly, a significant proportion (50%) of participants reported not preparing at all for the Google Meet sessions. This could be due to various factors such as time constraints, a perception that minimal preparation was required, or a preference for a more spontaneous approach to learning.

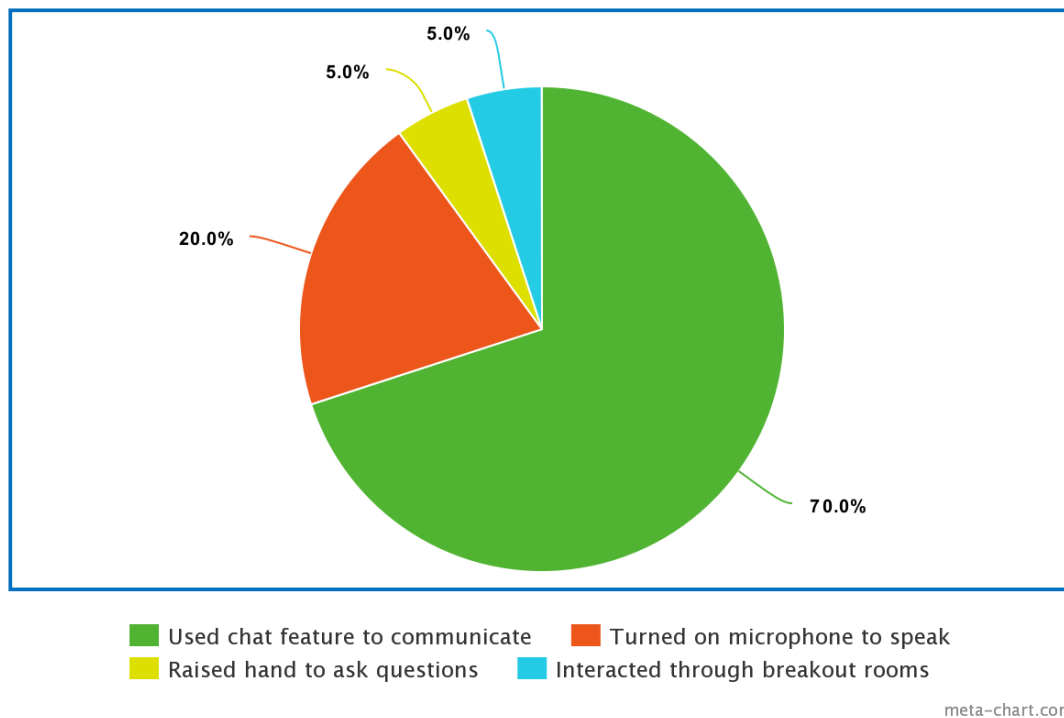


Figure 4: Interaction with Instructor during Google Meet Sessions

The majority of participants (70%) reported using the chat feature to communicate. This suggests that written communication via chat was a popular method for engaging with the instructor. The chat feature likely facilitated real-time questions, comments, and discussions, allowing participants to actively participate in the sessions.

A smaller percentage of participants (20%) indicated that they turned on their microphone to speak during the sessions. This suggests that they actively engaged in verbal conversations with their instructors, potentially asking questions, providing answers, or contributing to class discussions. The use of the microphone can enhance real-time interaction and foster a more dynamic learning environment.

A minority of participants (5%) reported interacting through breakout rooms. Breakout rooms provide an opportunity for smaller group discussions or activities within the larger

Google Meet session. This indicates that some participants engaged in collaborative tasks or had specific interactions with their instructors in these smaller breakout groups.

Similarly, another 5% of participants raised their hand to ask questions. This suggests that they used the virtual hand-raising feature to seek clarification or contribute to the discussion in a more structured manner.

It's important to note that participants may have used multiple methods of interaction during Google Meet sessions, highlighting the use of chat as the most prevalent method of communication.

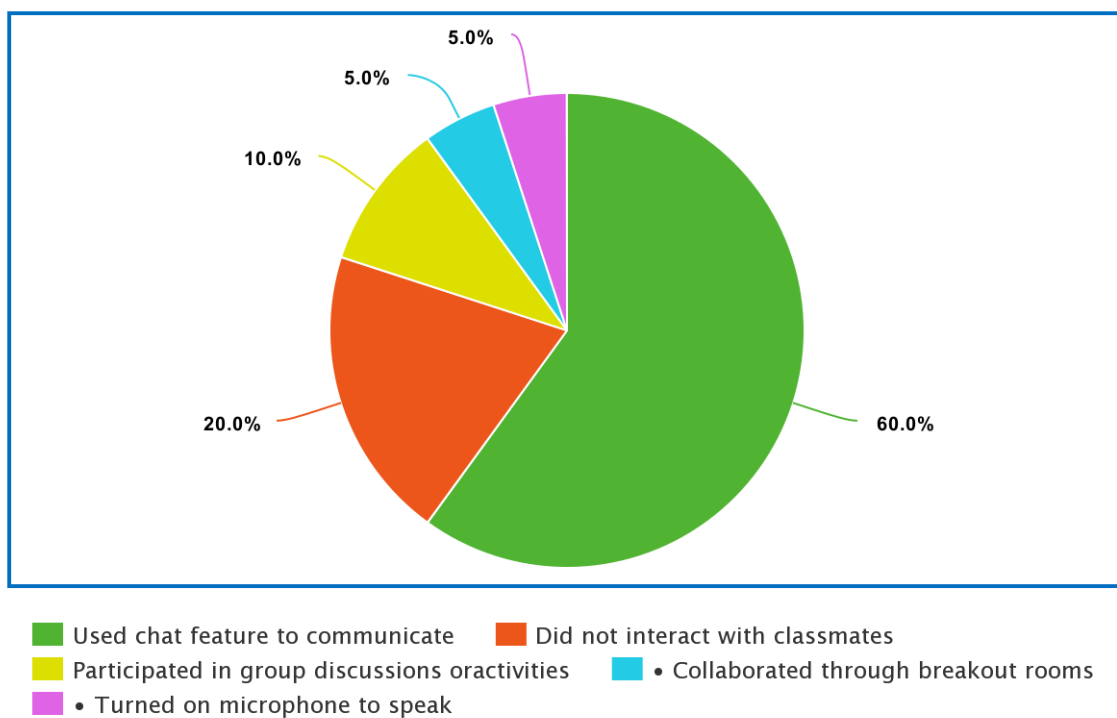


Figure 5: Interaction with Classmates during Google Meet Sessions

The majority of participants (60%) reported using the chat feature to communicate with their classmates. This suggests that written communication through the chat was a popular method

for interacting and engaging with peers. Participants likely used the chat to ask questions, share ideas, or provide comments during the sessions.

A smaller percentage of participants (5%) indicated that they turned on their microphone to speak and interact with their classmates. This suggests that they actively engaged in verbal conversations, potentially discussing topics, sharing opinions, or collaborating with their peers in real-time.

A portion of participants (10%) reported participating in group discussions or activities. This indicates that they actively engaged in collaborative tasks or participated in group discussions facilitated by the instructor. These activities likely encouraged interaction and cooperation among classmates.

A minority of participants (5%) reported collaborating through breakout rooms. Breakout rooms provide an opportunity for smaller group interactions within the larger Google Meet session. This suggests that some participants actively engaged in collaborative tasks or discussions within these smaller groups.

Interestingly, 20% of participants reported not interacting with their classmates during the Google Meet sessions. This could be due to a variety of reasons such as personal preferences, limited opportunities for interaction, or a lack of comfort with virtual socialization.

These statistics provide an overview of the predominant modes of interaction, highlighting the use of chat as the most prevalent method of communication with classmates.

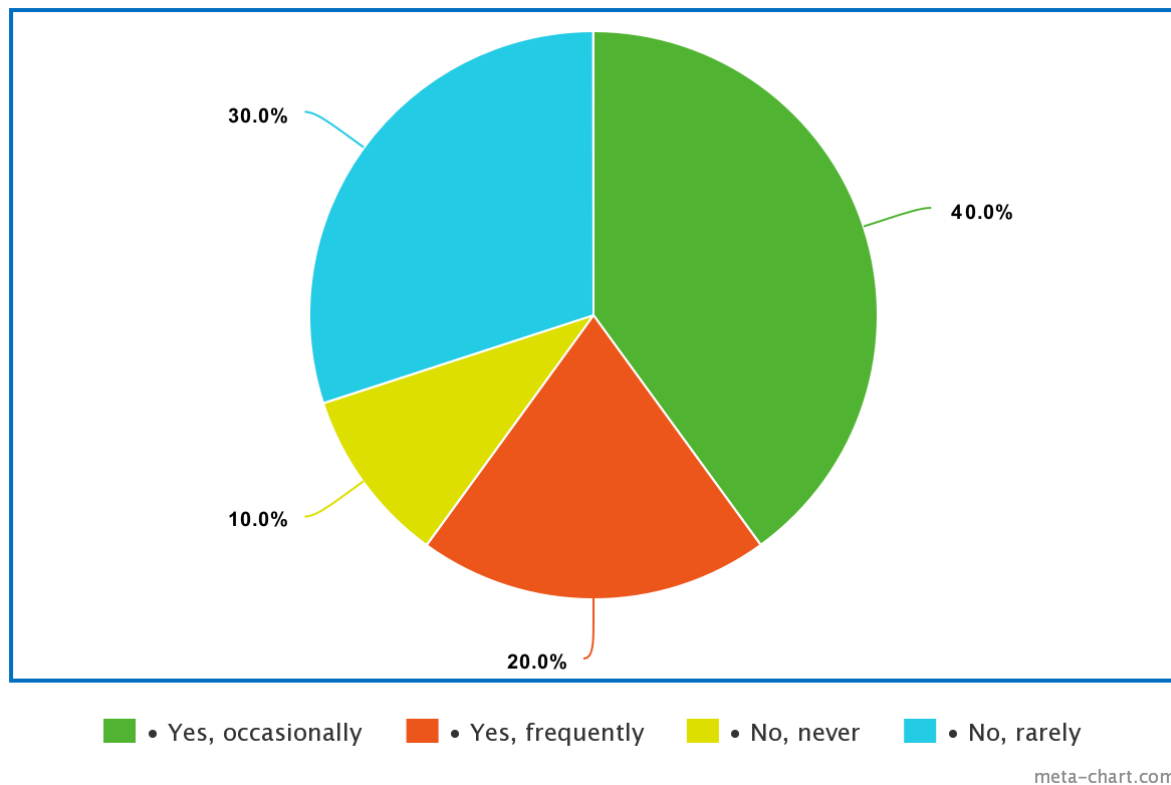


Figure 6 : Technical Difficulties during Google Meet Sessions

A small percentage of participants (15%) reported facing technical difficulties frequently. This suggests that these individuals encountered consistent challenges with their devices, internet connectivity, or other technical aspects that affected their ability to fully participate in the sessions.

A larger percentage (40%) of participants reported experiencing technical difficulties occasionally. This indicates that they encountered issues from time to time, but not as frequently or consistently as the first group. These occasional technical difficulties may have caused disruptions or temporary interruptions during the sessions.

Another significant portion (30%) of participants reported experiencing technical difficulties rarely. This suggests that they encountered technical issues on rare occasions, implying a relatively smooth experience overall.

Lastly, a small percentage of participants (10%) reported never experiencing any technical difficulties. These individuals had a seamless experience without facing any notable technical challenges during the Google Meet sessions.

Technical difficulties during online sessions can have various causes, such as network connectivity problems, hardware or software issues, or limitations in the participants' technological setup. These difficulties can impact the overall learning experience, causing frustration and hindering active participation.

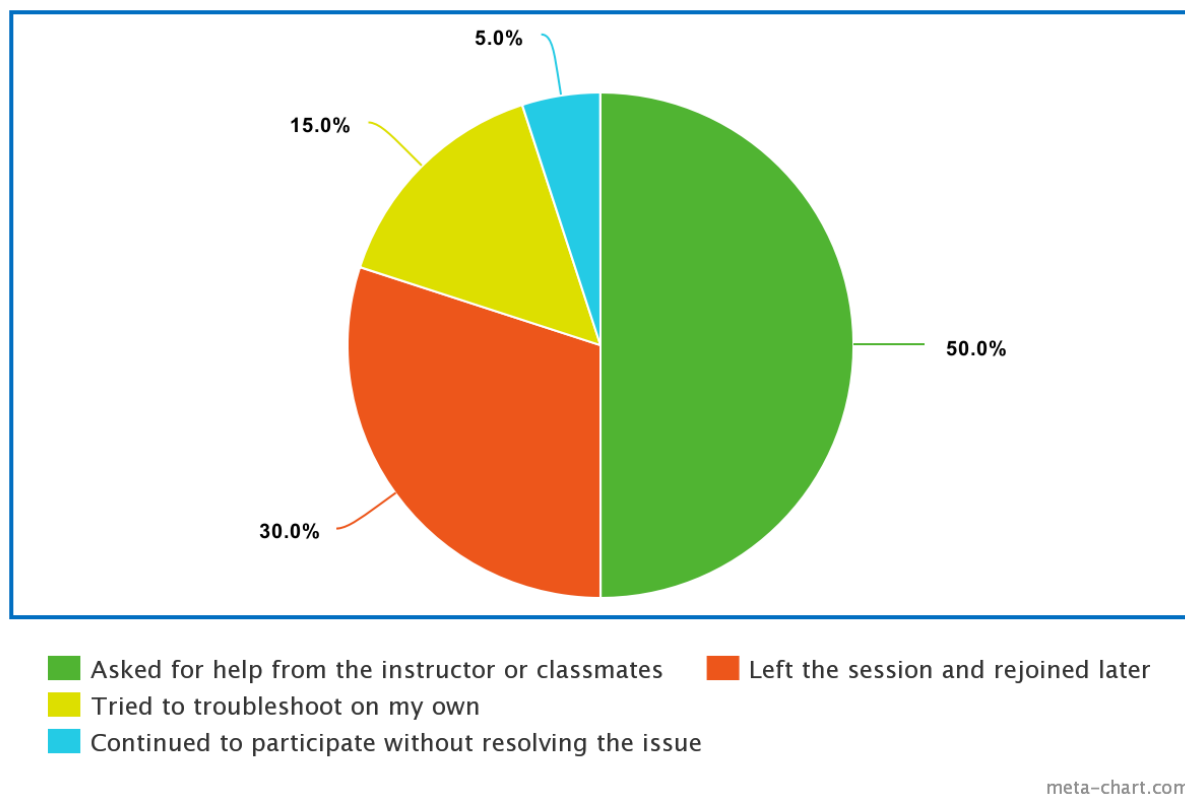


Figure 7: Handling of Technical Difficulties during Google Meet Sessions

A portion of participants (15%) attempted to troubleshoot technical difficulties on their own. This suggests that they took the initiative to identify and resolve the issues independently. They may have tried troubleshooting steps, such as checking connections, restarting devices, or adjusting settings to address the problem.

A larger percentage of participants (50%) sought help from the instructor or classmates. This indicates that they recognized the value of seeking assistance from those in the virtual classroom environment. They likely reached out through the chat feature, raised their hand to ask for help, or communicated their technical difficulties to the instructor or peers to receive guidance or support.

A small percentage of participants (5%) continued to participate in the session despite the technical difficulties. This suggests that they opted to continue their involvement without resolving the issue, potentially adapting their participation to work around the limitations caused by the technical difficulties.

Another notable percentage (30%) of participants chose to leave the session and rejoin later. This indicates that they preferred to temporarily exit the session, possibly to troubleshoot or resolve the technical issue independently before rejoining. By doing so, they aimed to ensure a smoother and uninterrupted experience once they returned.

These statistics provide an overview of the predominant methods employed by participants.

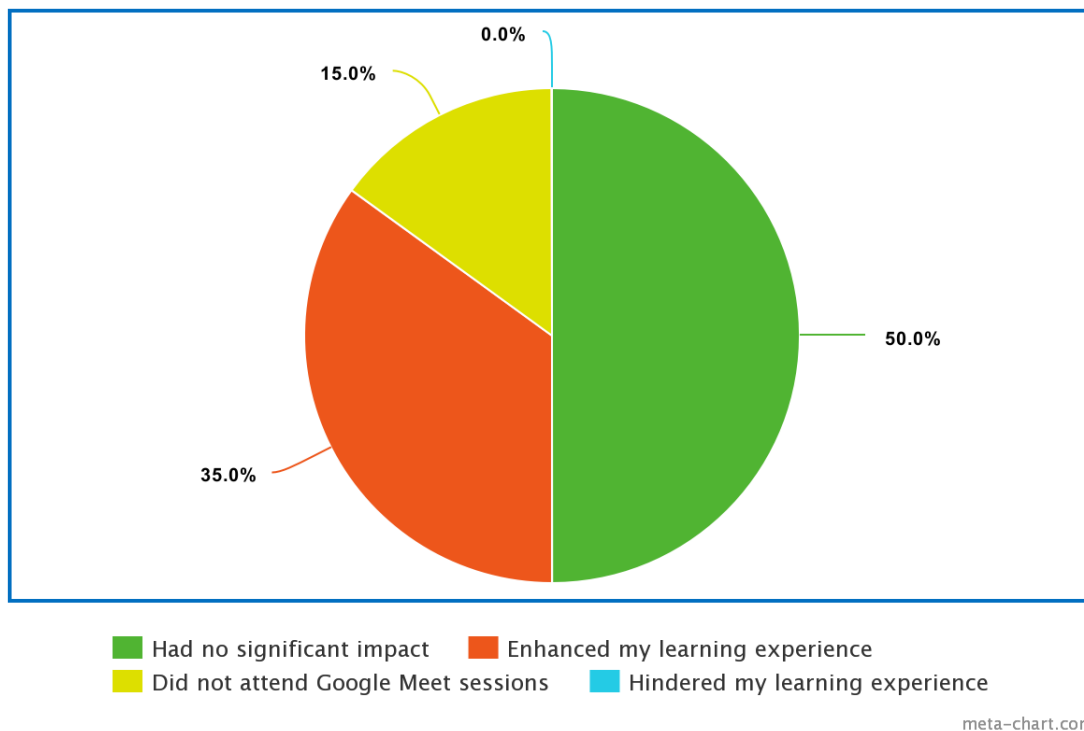


Figure 8: Impact of Attending Classes via Google Meet on Learning Experience

For the (35%) respondents who reported an enhanced learning experience, attending classes via Google Meet provided them with positive benefits. This could include advantages such as increased flexibility in accessing classes, the ability to review recorded sessions, improved access to digital resources, or the opportunity to engage in interactive online discussions. These individuals likely found that the online platform enriched their learning and allowed for a more engaging and efficient educational experience.

The majority of respondents (50%) indicated that attending classes via Google Meet had no significant impact on their learning experience. This suggests that they did not perceive any notable advantages or disadvantages in comparison to traditional in-person classes or other modes of remote learning. This group may have found the online format to be a reasonable substitute for face-to-face interactions, but without any remarkable positive or negative effects on their learning outcomes.

A small percentage of respondents (15%) stated that they did not attend Google Meet sessions. It is important to note that the reasons behind their non-attendance were not specified in the data provided. Factors such as technical difficulties, personal circumstances, or alternative modes of instruction could contribute to their lack of participation. Consequently, their learning experience may have been affected differently, depending on the alternative methods they employed.

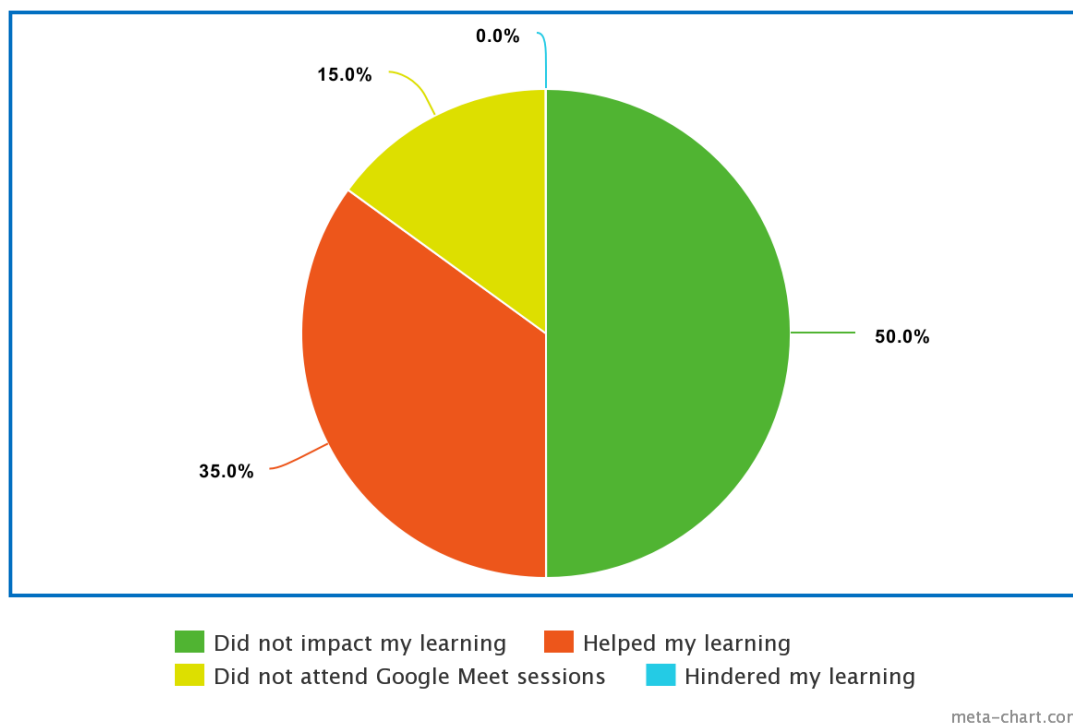


Figure 9: Effect of Attending Classes via Google Meet on Learning

The majority of respondents (35%) expressed that attending classes via Google Meet helped their learning. This suggests that they found value in the online platform, possibly due to advantages such as increased accessibility, the ability to review recorded sessions, engagement with digital resources, or the opportunity to participate in interactive online discussions. These individuals likely experienced positive effects on their learning outcomes as a result of attending classes via Google Meet.

A significant portion of respondents (50%) stated that attending classes via Google Meet did not impact their learning. This indicates that they did not perceive any remarkable positive or negative effects compared to other modes of instruction. Their learning experience may have been relatively consistent, regardless of whether they attended classes in person or through online platforms. A small percentage of respondents (15%) reported that they did not attend Google Meet sessions. The reasons behind their non-attendance were not specified in the data provided. Consequently, their learning experience may have been impacted differently, depending on the alternative methods they employed or the reasons for their absence. This Statistiques suggests that the online platform did not have a detrimental effect on their ability to learn and engage with the course material.

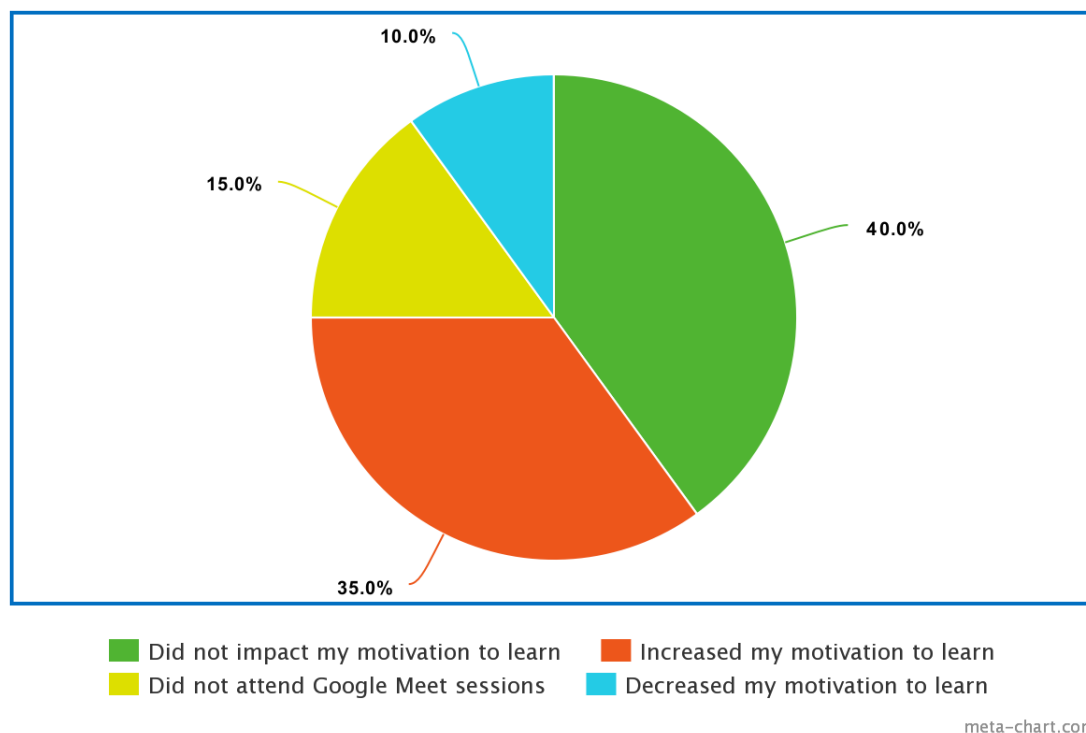


Figure 10: Impact of Attending Classes via Google Meet on Motivation to Learn

For the (35%) respondents who reported an increase in motivation, attending classes via Google Meet seemed to have a positive impact on their eagerness to learn. The online

platform may have provided them with unique opportunities for engagement, interaction with instructors and classmates, or access to resources that stimulated their motivation to actively participate in the learning process.

An equal percentage of respondents (40%) indicated that attending classes via Google Meet did not impact their motivation to learn. This suggests that their motivation remained consistent regardless of the learning modality. These individuals likely maintained their intrinsic motivation or external factors that drove their desire to learn, and the online format did not significantly influence this aspect.

A small percentage of respondents (10%) reported that attending classes via Google Meet decreased their motivation to learn. The reasons behind this decrease were not specified in the data provided. Factors such as challenges with the online learning environment, decreased engagement or interaction, or personal circumstances could have contributed to this decrease in motivation.

Furthermore, a portion of respondents (15%) stated that they did not attend Google Meet sessions. Therefore, their motivation to learn may have been affected differently, depending on the alternative methods they employed or the reasons for their non-attendance.

It is important to recognize that motivation to learn is a complex and multifaceted construct, influenced by various internal and external factors. The online learning environment, including platforms like Google Meet, can impact motivation in different ways for different individuals.

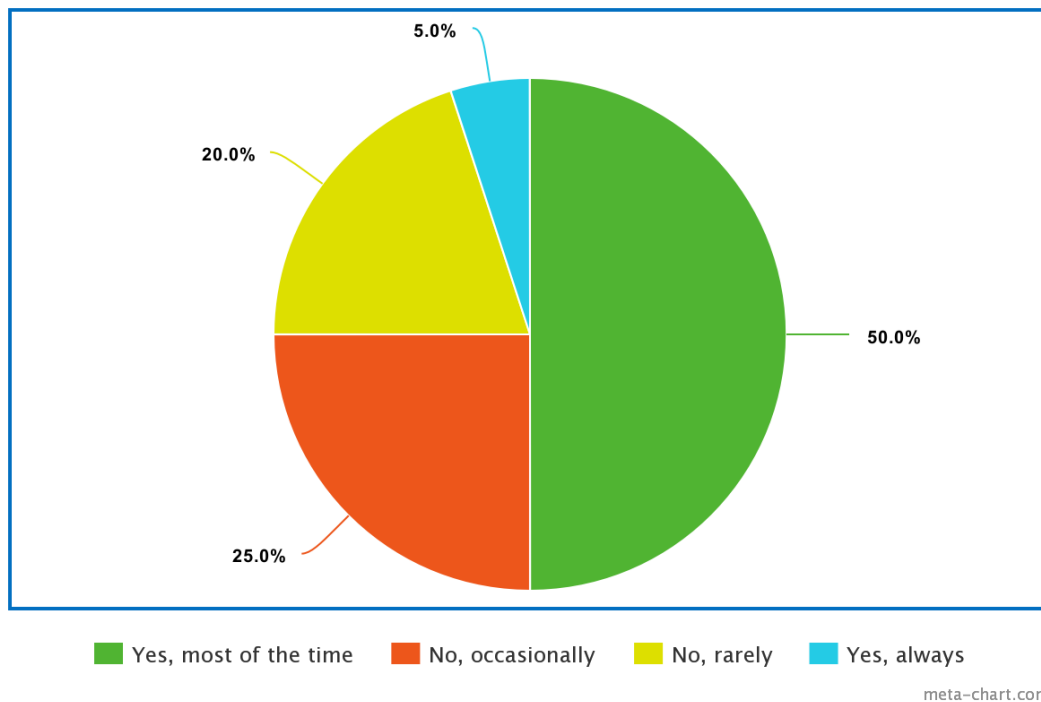


Figure 11: Ability to Concentrate during Google Meet Sessions

A small percentage of respondents (5%) reported being able to concentrate always during Google Meet sessions. This suggests that they experienced a high level of focus and attention throughout the sessions, indicating a favorable learning environment that allowed them to fully engage with the content and discussions.

The majority of respondents (50%) reported being able to concentrate most of the time during Google Meet sessions. This indicates that they generally maintained their focus and attention throughout the majority of the sessions. While they may have experienced occasional lapses in concentration, they were able to sustain their attention for the most part.

A portion of respondents (25%) reported being unable to concentrate occasionally during Google Meet sessions. This suggests that they experienced intermittent difficulties in maintaining their focus and attention. External distractions, technical issues, or other factors might have disrupted their concentration on occasion.

Similarly, another (20%) of respondents reported being unable to concentrate rarely during Google Meet sessions. This implies that they faced challenges in sustaining their focus and attention more frequently. Various factors such as personal distractions, lack of engagement, or difficulty adapting to the online learning environment might have contributed to their decreased concentration.

Creating a conducive learning environment, minimizing distractions, and implementing engaging instructional strategies can help improve participants' ability to concentrate during Google Meet sessions.

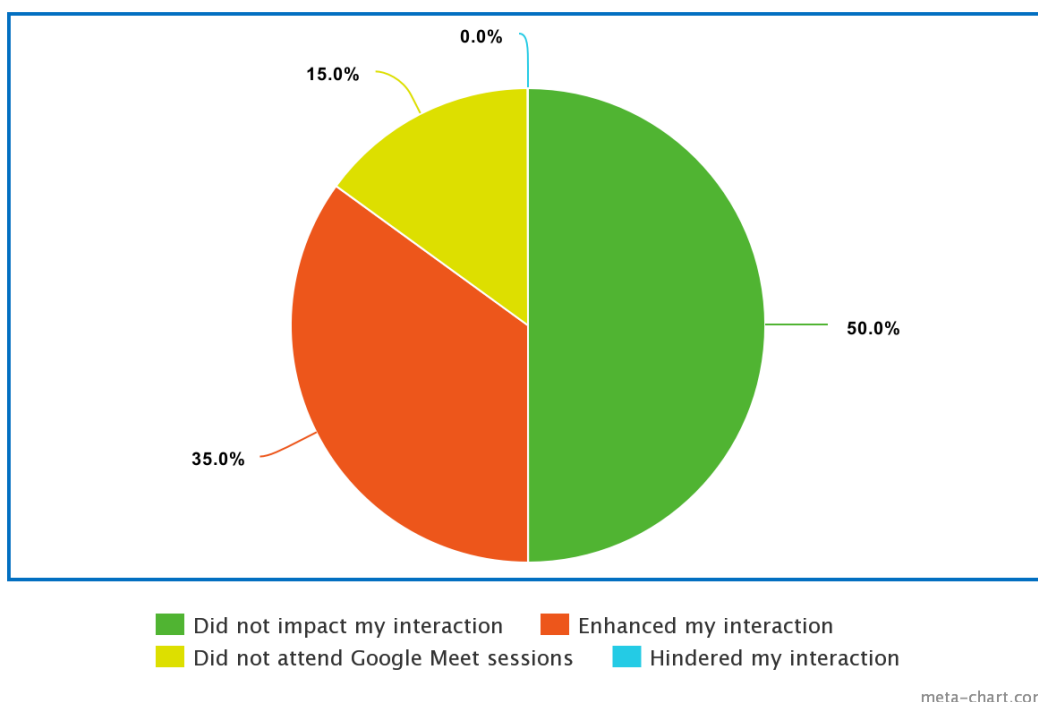


Figure 12: Impact of Attending Classes via Google Meet on Interaction with Classmates and Instructor

The (35%) respondents who reported an enhanced interaction, attending classes via Google Meet provided them with positive opportunities for engagement and communication. The online platform likely facilitated active participation, collaboration with classmates, and interaction with instructors through features such as chat, breakout rooms, or video

conferencing. These individuals found that the virtual environment promoted meaningful interactions and enhanced their overall learning experience.

A significant percentage of respondents (50%) stated that attending classes via Google Meet did not impact their interaction with classmates and instructors. This suggests that their level of interaction remained consistent regardless of the learning modality. They likely maintained similar levels of engagement, communication, and participation as they would in traditional in-person classes.

A portion of respondents (0%) reported that attending classes via Google Meet hindered their interaction. The reasons behind this hindrance were not specified in the data provided. Factors such as technical difficulties, limitations in the online platform, or difficulties in engaging with peers and instructors through the virtual medium could have contributed to this perceived hindrance in interaction.

Furthermore, a percentage of respondents (15%) stated that they did not attend Google Meet sessions. Consequently, their interaction with classmates and instructors would have been different based on the alternative methods they employed or their absence from the sessions.

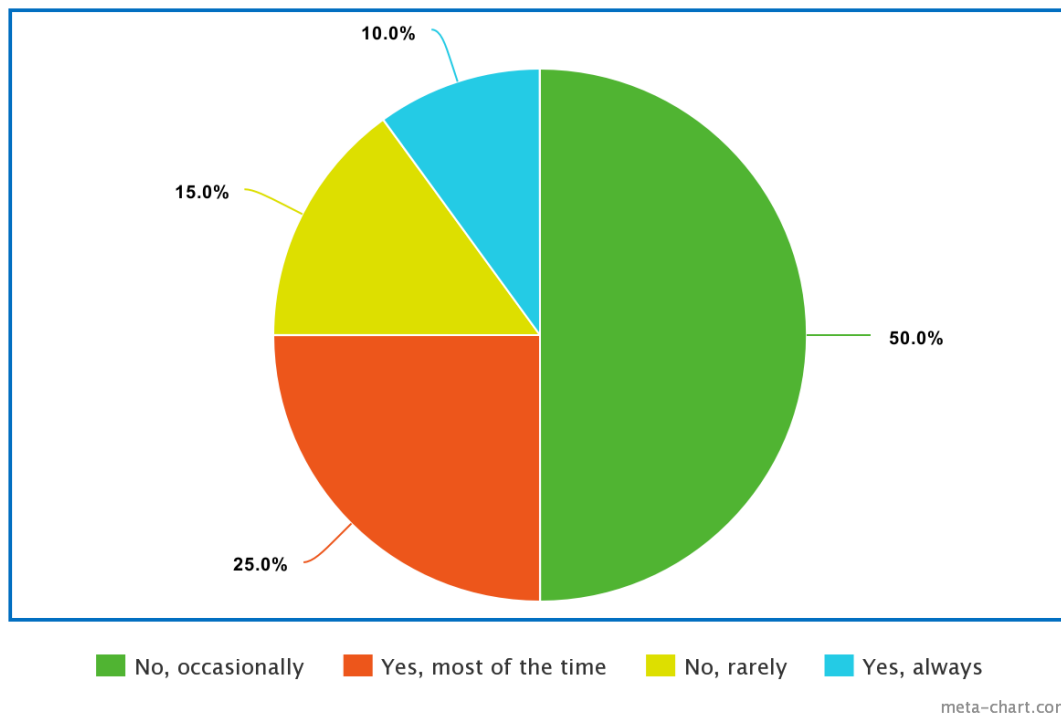


Figure 13: Engagement Levels during Google Meet Sessions

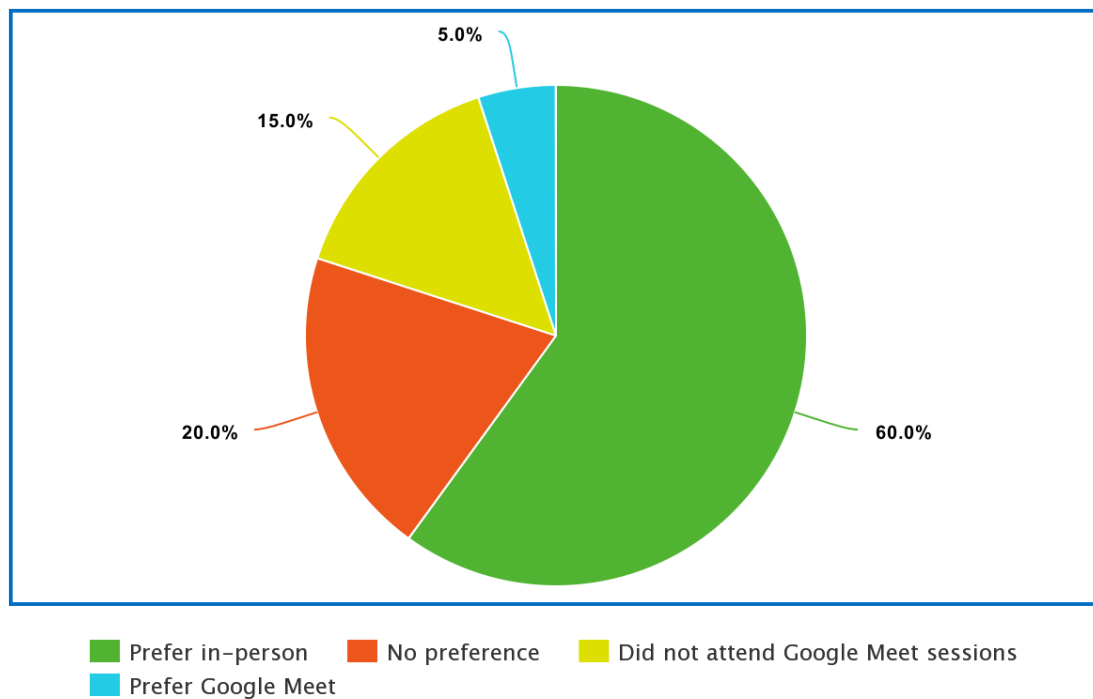
A small percentage of respondents (10%) reported feeling engaged always during Google Meet sessions. This suggests that they consistently experienced a high level of engagement, indicating a positive learning environment that kept them actively involved and connected with the content and discussions.

The majority of respondents (25%) reported feeling engaged most of the time during Google Meet sessions. This indicates that they generally felt connected and involved with the sessions, although there might have been moments of decreased engagement or distractions.

A significant portion of respondents (50%) reported feeling engaged occasionally during Google Meet sessions. This suggests that their engagement varied, with some instances of active participation and involvement, but also moments of decreased engagement or disconnection.

A smaller percentage of respondents (15%) reported feeling engaged rarely during Google Meet sessions. This implies that they faced challenges in maintaining engagement throughout the sessions, experiencing difficulty connecting with the content or staying actively involved.

Creating interactive and participatory learning experiences, utilizing engaging teaching strategies, and fostering a sense of community can help enhance participants' engagement during Google Meet sessions.



meta-chart.com

Figure 14: Preference for Attendance Mode: Google Meet vs. In-Person

A small percentage of respondents (5%) expressed a preference for attending classes via Google Meet. This suggests that they found value in the online platform, possibly due to reasons such as convenience, flexibility, or the ability to engage in virtual discussions and activities. These individuals likely preferred the virtual format over in-person classes for their learning experience.

The majority of respondents (60%) indicated a preference for attending classes in-person. This implies that they preferred the traditional face-to-face classroom environment, possibly due to reasons such as direct interaction with peers and instructors, the opportunity for hands-on activities, or the overall atmosphere of in-person learning.

A portion of respondents (20%) stated that they had no preference between attending classes via Google Meet or in-person. This suggests that they were open to both formats and did not have a strong preference for one over the other. These individuals might have valued the benefits of each mode of instruction and were comfortable with either approach.

Furthermore, a percentage of respondents (15%) reported that they did not attend Google Meet sessions. Therefore, their preference for attending classes via Google Meet or in-person could not be determined based on the data provided.

Preferences can also vary depending on the context and circumstances, such as during the COVID-19 pandemic.

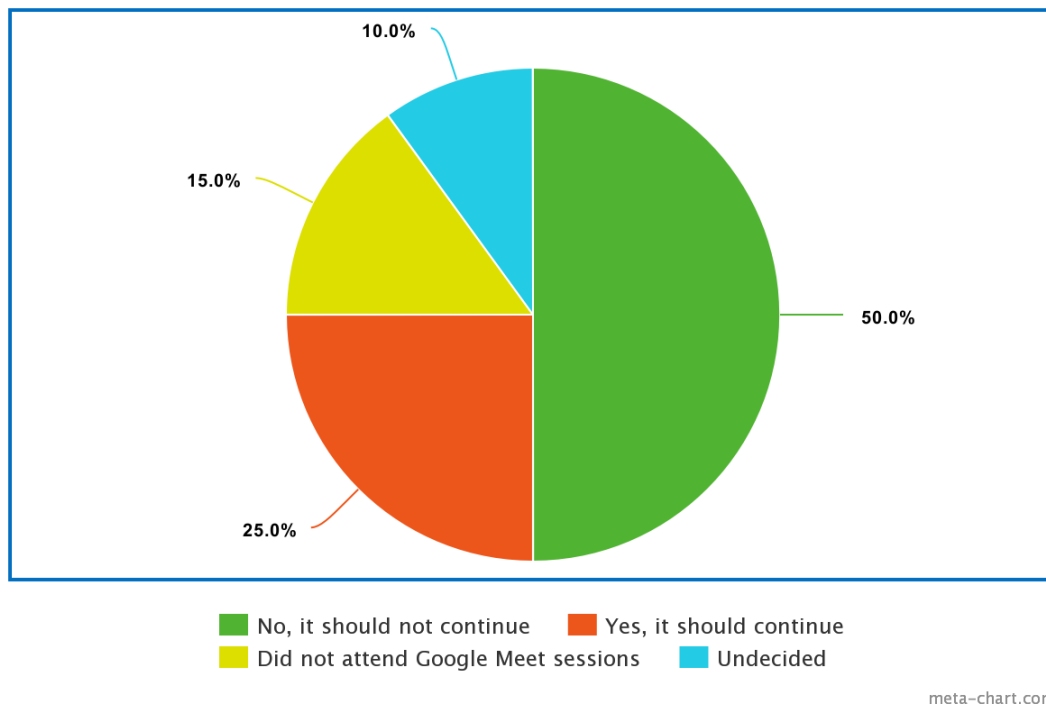


Figure 15: Opinion on Continuing Google Meet Sessions

Half of the respondents (50%) expressed the opinion that attending classes via Google Meet should not continue after the pandemic. These individuals likely preferred the traditional in-person classroom setting, emphasizing the importance of face-to-face interaction, hands-on activities, and the social aspects of learning. They may believe that the online platform is not as effective or suitable for their learning needs.

A small percentage of respondents (25%) believed that attending classes via Google Meet should continue even after the pandemic. This suggests that they found value in the online platform and recognized its potential benefits for flexible learning, accessibility, or the ability to connect with a broader range of resources and experts. They may have experienced positive outcomes or preferred the convenience and flexibility offered by the virtual format.

A portion of respondents (10%) were undecided about whether attending classes via Google Meet should continue after the pandemic. This indicates that they may have recognized both

advantages and disadvantages of the online format, or they might have had limited experience with it and felt unsure about its long-term viability.

Furthermore, a percentage of respondents (15%) reported that they did not attend Google Meet sessions, therefore their opinion regarding its continuation could not be determined based on the data provided.

The decision of whether to continue attending classes via Google Meet after the pandemic involves considering multiple factors such as pedagogical goals, instructional design, student preferences, technological infrastructure, and the specific context of the learning environment.

1. Focus Group Analysis:

Q1 : What was your initial reaction when our university first implemented the use of Google Meet for online classes during the pandemic?

Student 1: Initially, I was thrilled because It provided a convenient and efficient way to continue our education remotely.

Student 2: I was hesitant and worried about the technical issues and possible difficulties with switching to a new platform.

Student 3: I preferred face-to-face interactions and felt that online learning would be less engaging and effective.

Student 4: I was excited because I saw it as an opportunity to learn new technological skills and adapt to the changing educational landscape.

Student 5: I had mixed feelings While I appreciated the flexibility it offered, I was uncertain about how it would impact the quality of education and student-teacher interactions.

Student 6: I was relieved. It provided a sense of continuity and allowed us to stay connected with our professors and classmates despite the challenging circumstances.

Student 7: I saw it as a convenient solution that eliminated the need for commuting and allowed me to attend classes from the comfort of my home.

Student 8: I had concerns about the potential for distractions and difficulties in maintaining focus compared to traditional classroom settings.

It is evident that most students had varied initial reactions to the implementation of Google Meet for online classes during the pandemic. Some students expressed positive feelings, highlighting the convenience, efficiency, and continuity it provided. Others had apprehensions about technical difficulties, the impact on engagement and effectiveness, and uncertainty about the quality of education and student-teacher interactions. Others to appreciate the convenience and elimination of commuting. On the other hand, others had a more sceptical view, expressing concerns about distractions and maintaining focus in an online setting These diverse perspectives showcase the different experiences and expectations students had during the transition to online learning.

1. **Q2 :** What have been your experiences with using Google Meet for online classes?
Have there been any challenges or benefits?

Student 1: it took some time to adjust and navigate the platform. However, once I became familiar with its features, I found it to be a convenient tool for attending classes and interacting with my professors and peers.

Student 2: Without any experience, using Google Meet for online classes presented some difficulties at first. It took some trial and error to figure out how to use the different controls and settings. I enjoyed being able to participate in discussions and attend classes remotely once I got used to it.

Student 3: Transitioning to Google Meet any experience was a bit overwhelming I had problems with audio/video problems. However, I was able to overcome these challenges and make the most of the platform.

Student 4: It has allowed me to attend classes from any location and participate in group activities and presentations seamlessly. The screen-sharing feature has been particularly beneficial for collaborative projects.

Student 5: Understanding the interface, managing mute/unmute options, and troubleshooting audio or video problems initially posed difficulties. However, the benefits of attending classes remotely and having easy access to class materials outweighed these initial challenges.

Student 6: It took time to understand the platform's features and functionalities. However, once I got the hang of it, I appreciated the opportunity to interact with my professors and classmates virtually and engage in meaningful discussions.

Student7: The platform has allowed me to maintain a regular class schedule and receive real-time feedback from my professors. However, there have been occasional challenges with connectivity and audio quality, which required troubleshooting.

Student 8: My professors helped me and i quickly adapted to the platform. The ability to virtually raise my hand, participate in breakout rooms, and collaborate with classmates has been beneficial for my learning experience.

it is evident that the students had varying experiences when using Google Meet for online classes without any prior experience. While some students found it to be a convenient tool for attending classes and interacting with professors and peers once they became familiar with its features, others encountered initial challenges and a learning curve.

Technical difficulties, such as connectivity issues, audio/video problems, and understanding the various settings and controls, were common challenges mentioned by some students. However, they expressed that with time, support from professors, and troubleshooting, they were able to overcome these obstacles and make the most of the platform.

Q3 : How has using Google Meet impacted your ability to learn and stay engaged in class?

Student 1: Using Google Meet has had no noticeable impact on my ability to learn and stay engaged in class. I have been able to actively participate in discussions, ask questions, and follow along with the lectures as I would in a traditional classroom setting.

Student 2: I haven't experienced any significant impact on my ability to learn and stay engaged. I have maintained my focus during lectures.

Student 3: I have been able to access course materials, listen to lectures, and participate in discussions with the same level of attentiveness and involvement as in a physical classroom environment.

Student 4: I have been able to concentrate on the course content, actively participate in class discussions, and complete assignments effectively, similar to how I would in face-to-face classes.

Student 5: I have been able to follow the curriculum, interact with my peers, and absorb the course material with no noticeable differences in my level of engagement.

Student 6: I have actively participated in discussions, taken notes, and absorbed the course content just as effectively as I would have in a traditional classroom setting.

Student 7: I have continued to actively participate in lectures, ask questions, and collaborate with classmates without experiencing any significant changes in my level of engagement.

Student 8: I have maintained my focus, actively participated in class activities, and absorbed the course material effectively, similar to how I would in face-to-face classes

Taking into account all the answers provided, it is evident that the students feel that using Google Meet for online classes has had no noticeable impact on their ability to learn and stay engaged. They emphasize that they have been able to actively participate in discussions, ask questions, follow lectures, and absorb course material with the same level of attentiveness and involvement as they would in a traditional classroom setting.

Q4: Have you found it easy or difficult to communicate with your teachers and classmates using Google Meet? Are there any features that you find particularly useful or frustrating?

Student 1 : The platform's chat feature allows for seamless messaging, and the ability to share screens and documents has been particularly useful for collaborative projects, It was easy to use.

Student 2: Communicating with my teachers and classmates using Google Meet has been a breeze. and I haven't encountered any difficulties in connecting with others or engaging in discussions.

Student3: I have had no difficulties communicating with my teachers and classmates using Google Meet. The platform's audio and video quality have been consistently good. The option to raise my hand virtually and participate in class discussions has been a useful feature.

Student 4: Communicating with my teachers and classmates through Google Meet has been hassle-free. The ability to share my screen and present my work to the class has been a valuable feature.

Student 5: The platform's intuitive design and clear instructions have made it effortless to connect and engage in discussions. The chat feature has been particularly useful for asking questions during class.

Student 6: I have found it easy to communicate with my teachers and classmates using Google Meet. The platform's audio and video quality have been consistently reliable,

ensuring smooth interactions. The ability to record sessions has been a useful feature for reviewing class content.

Student 7: I have encountered no difficulties in establishing connections or participating in discussions. The screen-sharing feature has been particularly helpful for presenting projects and sharing relevant materials.

Student 8: The platform's functionality and ease of use have made it effortless to engage in conversations and collaborate on assignments. The option to use breakout rooms for group work has been a valuable feature.

The students have had positive experiences with communicating through Google Meet with their teachers and classmates. They find the platform easy to use and appreciate its various features that facilitate seamless interactions and collaboration.

The students consistently mention the benefits of features such as the chat function, screen sharing, breakout rooms, and the ability to raise virtual hands for participation. They highlight the platform's user-friendly interface, clear instructions, and reliable audio and video quality, which have contributed to smooth communication and engagement.

Q5 : Have you noticed any differences in the quality of education you receive through Google Meet compared to in-person classes?

Student1: Yes, I have observed differences between the education I receive through Google Meet and traditional in-person classes in terms of quality. Although the online format allows

for remote learning and flexibility, I find that occasionally a less immersive and engaging learning experience can result from the lack of physical presence and face-to-face interaction.

Student 2: The absence of immediate feedback and non-verbal cues from professors and classmates can make it more challenging to gauge comprehension and engage in meaningful discussions.

Student 3: Yes, I have noticed differences, the online format offers convenience, it can sometimes lack the same level of personal interaction and collaborative learning opportunities that come with in-person classes.

Student 4: The virtual setting can sometimes lead to technical difficulties, limited access to resources, and a potential loss of focus due to various distractions.

Student 5: Yes, there is differences in the quality of education ,I sometimes miss the in-person interactions, hands-on activities, and immediate feedback that contribute to a more dynamic learning experience.

Student 6: Personally, I have not noticed any significant differences, the professors have successfully adapted their teaching methods

Student 7: I have not noticed any significant differences in the quality of education.

Student 8: The professors have done an excellent job of maintaining engagement and delivering course content effectively

The students have varying perspectives on the differences in the quality of education they receive through Google Meet compared to in-person classes.

Some students express that they have noticed differences in the quality of education through Google Meet. They mention the potential lack of face-to-face interaction, immediate feedback, non-verbal cues, personal interaction, and collaborative learning opportunities that can impact the immersive and engaging nature of the learning experience. Additionally, technical difficulties, limited access to resources, and distractions in the virtual setting are mentioned as potential challenges.

On the other hand, a few students mention that they have not noticed significant differences in the quality of education between Google Meet and in-person classes. They appreciate the effective adaptation of teaching methods by professors and feel adequately supported in their learning journey. They express that they can grasp the course material and actively participate in class, indicating a positive learning experience through the online format.

Q6: How has the use of Google Meet impacted your social interaction with classmates?

Do you feel connected to your peers even though you are not physically together?

Student 1: it had no noticeable impact on my social interaction with classmates as the interactions have remained the same as before.

Student 2: I have not noticed any significant impact on my social interaction with classmates due to the use of Google Meet. Despite attending classes virtually, the level of connection and engagement with my peers has remained unchanged.

Student 3: Although we are not physically together, Using Google Meet has not affected my social interaction with them.

Student 4: The use of Google Meet has not had a noticeable impact on my social interaction with classmates. While we communicate virtually, I still feel connected to my peers and maintain a similar level of interaction as I did in physical classrooms.

Student 5: I haven't noticed any significant impact on my social interaction with classmates as a result of using Google Meet. Although we are not physically together, I still feel connected to my peers and have been able to engage in discussions and collaborative work as usual.

Student 6: I still feel connected to my peers and have been able to maintain regular communication and engagement despite the virtual setting.

Student 7: I have not experienced any notable change .I still feel connected to my peers and have been able to engage in meaningful conversations and group activities.

Student 8: I still feel connected to my peers and have been able to maintain relationships and engage in collaborative work as before.

it is evident that the use of Google Meet has not had a noticeable impact on the social interaction between the students and their classmates. They consistently express that despite attending classes virtually, their level of connection, engagement, and interaction with their peers has remained unchanged.

The students mention that they still feel connected to their classmates and have been able to maintain regular communication, engage in discussions, collaborate on projects, and participate in group activities. They emphasize that the virtual setting has not hindered their ability to form relationships and engage socially with their peers.

These responses indicate that Google Meet has successfully facilitated social interaction and fostered a sense of connection among the students. Despite the physical distance, the platform has allowed them to maintain the same level of engagement and social interaction as they would in physical classrooms.

Q7: How do you feel about the amount of screen time and online learning you have been doing during the pandemic? Has it been challenging to balance your academic and personal life?

Student 1: I have no particular feelings about the amount of screen time I have been doing during the pandemic, I cannot argue for or against it being challenging to balance my academic and personal life.

Student 2: I find it okay. While it may have its challenges, I have been able to balance my academic and personal life adequately without feeling overwhelmed.

Student 3: I cannot argue against it being challenging to balance my academic and personal life.

Student 4: Personally, I have no opinion on the amount of screen time and online learning during the pandemic, so I cannot argue whether it has been challenging to balance my academic and personal life or not.

Student 5: I don't have a strong feeling about the amount of screen time and online learning I have been doing during the pandemic. Therefore, I cannot argue whether it has been challenging to balance my academic and personal life or not.

Student 6: it doesn't particularly bother me. I haven't found it challenging to balance my academic and personal life, as I have established a routine that allows me to manage both effectively.

Student 7: I don't have a specific feeling, so I cannot argue

Student 8: Personally, I find it to be manageable. While it may require some adjustment.

In the students' responses, there is a general consensus that the amount of screen time and online learning during the pandemic has not posed major challenges in balancing their academic and personal lives. Some students express a neutral stance or lack of strong feelings about the matter, indicating that they don't have a specific opinion or emotional attachment to the situation. For them, the transition to online learning and the increased screen time have not been particularly burdensome or difficult to manage.

On the other hand, a few students mention finding the amount of screen time and online learning to be okay or manageable. They acknowledge that while there may be challenges, they have been able to strike a balance between their academic responsibilities and personal life without feeling overwhelmed. These students have likely adapted to the new learning environment and have established routines or strategies that allow them to effectively manage their time and commitments.

Q8: Do you think that online learning through Google Meet will continue to be a valuable tool in education after the pandemic ends?

Student 1: I believe that online learning through Google Meet will continue to be a valuable tool in education after the pandemic ends. While some students may have concerns about internet speed in our country,

Student 2: Considering the challenges posed by the speed of the internet in our country, I don't think online learning through Google Meet will be as valuable once the pandemic ends. Without fast internet connections, students may face difficulties in accessing and participating in online classes

Student 3: Despite the concerns about internet speed in our country, I believe online learning through Google Meet will remain a valuable tool in education. The internet infrastructure improves making online learning more viable and beneficial for students.

Student 4: the current limitations posed by the speed of the internet in our country, I am skeptical about the long-term value of online learning through Google Meet.

Student 5: Without reliable and fast connections, students may face difficulties in accessing and fully participating in online classes.

Student 6: online learning through Google Meet will continue to be a valuable tool in education. Internet connectivity is a solvable issue.

Student 7: I am inclined to believe that online learning through Google Meet may not be as valuable. The unreliable connectivity may limit the effectiveness of this learning tool.

Student 8: Technological advancements can improve the internet making online learning more accessible and beneficial for students in the long run.

The students' responses reflect a range of perspectives on the future value of online learning through Google Meet after the pandemic. Some students believe that advancements in technology and infrastructure will address concerns about internet speed, making online learning more accessible and effective. They highlight the potential for improved connectivity and the continued viability of online learning tools.

On the other hand, some students express scepticism about the long-term value of online learning due to the challenges posed by unreliable and slow internet connections. They raise concerns about difficulties in accessing and participating in online classes, which may hinder the effectiveness of this learning approach.

Q9: Have you noticed any differences in the level of interaction and engagement between in-person classes and online classes using Google Meet?

Student 1: Yes, I have noticed a significant difference in the level of interaction and engagement between in-person classes and online classes using Google Meet

Student 2: In-person classes allow for face-to-face interactions, spontaneous discussions, and immediate feedback, fostering a higher level of engagement compared to online classes.

Student 3: there is a clear difference in the level of interaction and engagement between in-person classes and online classes using Google Meet. In-person classes there are direct interactions, group activities, and non-verbal communication.

Student 4: I have observed distinct differences in the level of interaction and engagement between in-person classes and online classes using Google Meet. In-person classes offer opportunities for spontaneous discussions.

Student 5: I have noticed a significant difference in the level of interaction and engagement between in-person classes and online classes using Google Meet. Traditional classes provide a more vibrant and interactive strict learning environment.

Student 6: In-person classes foster a sense of community, active participation, and immediate feedback that may be lacking in online classes.

Student 7: social interaction, collaborative work, and real-time discussions in traditional class , which contribute to a higher level of engagement compared to online classes.

Student 8: As compared to online classes, in-person classes allow for more spontaneous conversations, group activities, and a lively classroom environment, resulting in a higher level of interaction and engagement.

The students in the focus group consistently expressed their observation of a significant difference in the level of interaction and engagement between in-person classes and online classes using Google Meet. They highlighted the benefits of in-person classes, such as face-to-face interactions, spontaneous discussions, immediate feedback, and the ability to actively participate and collaborate with peers and instructors. They also noted that online classes can sometimes feel more detached, less interactive, and structured.

Q10: Overall, how do you feel about the use of Google Meet for online classes during the pandemic?

Student 1: Overall, I feel quite dissatisfied with the use of Google Meet. The experience has been challenging and has not met my expectations.

Student 2: I have had a negative overall experience with the use of Google Meet. The platform has presented various technical difficulties and limitations.

Student 3: The platform has proven to be unreliable and has caused numerous disruptions in my learning, leading to a less-than-ideal educational experience.

Student 4: Google Meet is quite disappointing overall. I have struggled to stay engaged and motivated in my coursework.

Student 5: The platform has not effectively replicated the classroom environment, leading to a diminished learning experience.

Student 6: I have felt disconnected from my peers and instructors throughout the online learning process.

Student 7: The platform has presented numerous challenges and limitations, making it difficult to fully grasp the course material and actively participate in class discussions.

Student 8: conducive learning environment does not go with Google Meet, and I have struggled to maintain focus and engagement in my coursework.

The students' responses indicate a collective dissatisfaction with the use of Google Meet for online classes during the pandemic. They express challenges, limitations, technical

difficulties, and a lack of engagement and interaction. Overall, their experiences have not met their expectations, and they find it difficult to effectively participate and stay motivated in their coursework. The students highlight that Google Meet has not effectively replicated the in-person classroom environment, leading to a diminished learning experience. Their comments suggest a need for improvement in terms of platform reliability, interaction, collaboration, and overall learning environment.

1. Focus Group Analysis:

The impact of Google Meet on social interaction was perceived differently by students. Some students reported no significant changes and felt their level of connection and engagement with peers remained similar to before. They saw Google Meet as a tool that allowed them to maintain regular communication without disrupting their social interaction. Opinions were mixed regarding screen time and online learning during the pandemic. Some students had no strong feelings, remaining neutral on the matter. Others found the amount of screen time and online learning manageable, striking a balance between academics and personal life. When it comes to the long-term value of online learning through Google Meet, students had diverse perspectives. Some believed that technological advancements could address internet speed challenges, making online learning more accessible and effective. However, other students expressed skepticism due to concerns about reliable and fast internet connections, casting doubt on the long-term value of online learning after the pandemic. The effectiveness of online learning was seen to be potentially hindered without factors such as face-to-face interactions, spontaneous discussions, and immediate feedback. Students acknowledged distinct disparities between in-person classes and online classes using Google Meet. They emphasized the advantages of in-person classes, including dynamic and

immersive learning experiences facilitated by face-to-face interactions and immediate feedback. In terms of overall satisfaction with the use of Google Meet for online classes, the majority of students expressed dissatisfaction. They faced challenges such as technical difficulties, limitations, disruptions, and a diminished learning experience. Students felt that Google Meet was unable to adequately replicate the in-person classroom environment, leading to difficulties in staying engaged and motivated in their coursework.

In general, students reported that their level of connection and engagement with their peers remained unchanged despite the virtual setting. They were still able to feel connected and participate in discussions and collaborative work as usual. However, opinions were mixed among students. Some had no strong feelings or opinions, while others found the amount of screen time and online learning manageable without feeling overwhelmed. Regarding the long-term value of online learning through Google Meet, students had varying perspectives. Some believed that advancements in technology and infrastructure could improve connectivity and make online learning more accessible and beneficial in the future. On the other hand, some expressed concerns about the limitations imposed by slow internet speeds in their country, casting doubt on the continued value of online learning after the pandemic. When comparing in-person and online classes, students consistently emphasized the advantages of in-person classes. They highlighted the importance of face-to-face interactions, group activities, and non-verbal communication in creating a more engaging and interactive learning experience, which they felt was lacking in online classes.

Lastly, students expressed overall dissatisfaction with the use of Google Meet for online classes. They mentioned various challenges, including technical difficulties, limitations, and a lack of engagement and interaction. Students felt that Google Meet did not provide a

conducive learning environment, making it difficult to grasp the course material and actively participate in class discussions.

1. Synthesis and Discussion the Findings:

This section of the study reviews and summarizes the crucial findings the student's questionnaire and The Focus Group. All in all, the hypotheses stand about e positive impact of Google Meet on students for future usage of the Program which has been denied.

1.1 Student's Questionnaire:

The analysis of the data indicates a substantial level of dissatisfaction among students with regards to Google Meet and suggests a negative impact on their learning experiences. Several key findings contribute to this conclusion. First, the mixed reactions and varied initial responses to attending classes via Google Meet highlight a lack of consensus and potential difficulties in adjusting to the online format. Additionally, the frequent technical difficulties encountered by a significant number of respondents further underline the challenges faced by students during virtual sessions. Moreover, the reported occasional difficulties in concentration and disengagement during Google Meet sessions point to a potential lack of effectiveness and reduced student involvement. The data also reveals a notable percentage of students experiencing decreased motivation and hindrance in interaction with both instructors and classmates, indicating a negative impact on their overall learning environment. Lastly, the preference expressed by a majority of students for in-person classes highlights their dissatisfaction with the Google Meet platform. These collective findings suggest that Google Meet has not met the expectations and needs of many

students, leading to a sense of dissatisfaction and highlighting its negative impact on the educational experience.

1.2 Focus Group:

The impact of Google Meet on students has many aspects. One of the key aspects is the shift to online learning during the pandemic. For some students, Google Meet has played a vital role in ensuring continuity of education by providing a platform for virtual classrooms. This has allowed students to attend classes, interact with teachers, and engage in academic discussions without the need for physical presence.

Furthermore, Google Meet has provided an opportunity for students to develop digital literacy skills. By using online communication tools like Google Meet, students have been exposed to new ways of learning and collaborating. They have had to adapt to the virtual environment, learn how to navigate online platforms, and effectively participate in online discussions.

However, it is important to acknowledge that the impact of Google Meet on students has not been uniformly positive. Some students have faced challenges with internet connectivity and technical issues, which have affected their overall learning experience. Limited access to reliable internet connections can disrupt online classes and hinder students' ability to fully engage in learning activities.

Moreover, the absence of face-to-face interactions and physical classroom environments has been a concern for many students. The spontaneous discussions, immediate feedback, and non-verbal cues that are typically present in traditional classrooms may be lacking in online

classes through Google Meet. This can lead to a sense of disconnection and reduced engagement for some students.

Additionally, the effectiveness of Google Meet as an educational tool depends on the quality of instruction and the adaptability of teachers. The ability of teachers to effectively utilize the features of Google Meet, such as screen sharing, breakout rooms, and interactive tools, can significantly impact students' learning experiences.

Overall, Google Meet has not proven to be a satisfactory substitute for traditional in-person learning, highlighting its negative implications for students.

Conclusion:

In conclusion, the impact of Google Meet on students has been mixed, with negative aspects outweighing its benefits. The platform has provided a means for online learning, but students have faced numerous challenges, including internet connectivity issues and technical difficulties that disrupt classes and hinder learning. The absence of face-to-face interactions and the classroom environment has resulted in a sense of disconnection and reduced engagement. The analysis of the data confirms a substantial level of dissatisfaction among students, with reports of difficulties in concentration, decreased motivation, and hindrance in interaction with instructors and classmates. The preference expressed by a majority of students for in-person classes further emphasizes their dissatisfaction with Google Meet. These findings collectively suggest that Google Meet has not met students' expectations,

leading to a negative impact on their learning experiences and highlighting the limitations of the platform.

General Conclusion:

The study conducted at the University of Biskra focused on investigating the attitudes of English as foreign language learners towards the use of Google Meet sessions as a means of remote teaching and learning during the COVID-19 pandemic. Like many other educational institutions worldwide, the University of Biskra had to implement online learning platforms to ensure the continuity of education while ensuring the safety of students. The research aimed to examine the students' perception of the effectiveness of Google Meet in promoting their autonomy and responsibility for their own learning. It sought to determine whether the use of this online platform had motivated students to take more ownership of their education and to what extent they relied on their teachers for learning support. To gather data and gain insights, the study employed a descriptive approach and utilized both focus group discussions and questionnaires. The focus group involved eight English as foreign language students, while the questionnaires were distributed to twenty English as foreign language students as well from the University of Biskra.

The findings of the study revealed that the students had demonstrated negative attitudes towards the use of Google Meet sessions for online learning. According to the students, this

online learning method did not contribute significantly to the improvement of their autonomy and language skills. The results shed light on the advantages and disadvantages of integrating online platforms like Google Meet into university classes in Algeria for the purpose of enhancing English language learning. Despite the negative attitudes expressed by the students, the study highlighted the importance of incorporating online learning tools in the future to support students' autonomy and language development. It emphasized that while the implementation of Google Meet during the pandemic may not have been entirely successful, online platforms still have the potential to enhance learning experiences and promote student engagement. The study's findings provide valuable insights for educational institutions and policymakers, as they navigate the challenges of remote teaching and learning in times of crisis. The results underscore the need for further exploration and improvement in the use of online learning platforms to effectively support students' autonomy and language development. In conclusion, this study conducted at the University of Biskra revealed that students had negative attitudes towards the use of Google Meet sessions for online learning. However, it also emphasized the importance of integrating online learning tools in the future to support students' autonomy and language development. The findings contribute to the ongoing discourse on the challenges and opportunities associated with remote education and underscore the need for continuous improvement in the implementation of online learning platforms.

References:

- Agarwal, A. (2013). Why massive open online courses (still) matter. *Educause Review*, 48(5), 62-64.
- Al Lily, A. E., Ismail, A. F., Abunasser, F. M., Alqahtani, R. S., Alabdulkareem, S. A., Alshumrani, S. A., & Alghamdi, R. M. (2021). Exploring the Reality of E-learning during the COVID-19 Pandemic in Saudi Arabia: A Qualitative Study. *International Journal of Distance Education Technologies*, 19(1), 25-47.
- Al-Emran, M., Elsherif, H. M., & Shaalan, K. (2016). Investigating attitudes towards the use of LMS in higher education: A case study. *Education and Information Technologies*, 21(5), 1071-1090.
- Al-Emran, M., Elsherif, H. M., & Shaalan, K. (2016). Investigating attitudes towards the use of mobile learning in higher education. *Computers in Human Behavior*, 56, 93-102.
- Aliakbari, M., & Gharavi, F. (2021). The Effect of E-Learning on the Academic Performance of University Students During the COVID-19 Pandemic in Iran. *Journal of Education and Practice*, 12(7), 29-39.
- Allen, I. E., & Seaman, J. (2017). *Digital Learning Compass: Distance education enrollment report 2017*. Babson Survey Research Group.
- Allen, I. E., & Seaman, J. (2017). *Digital Learning Compass: Distance Education Enrollment Report 2017*. Babson Survey Group.

- Alqurashi, E. (2021). The Impact of COVID-19 on the Quality of Education and Students' Performance in Saudi Arabia. *Journal of Education and Practice*, 12(18), 1-11.
- Altbach, P. G., & Kelly, G. P. (2018). *Education beyond borders: A history of American distance education*. Routledge.
- Anderson, T. (2003). Modes of Interaction in Distance Education: Recent Developments and Research Questions. In M. G. Moore & W. G. Anderson (Eds.), *Handbook of Distance Education* (pp. 129-144). Routledge.
- Anderson, T. (2008). Towards a theory of online learning. In T. Anderson & F. Elloumi (Eds.), *Theory and practice of online learning* (pp. 45-74). Athabasca University Press.
- Aparicio, M., Bacao, F., & Oliveira, T. (2016). Challenges for e-learning in universities: teachers' and students' perspectives. *Procedia Computer Science*, 100, 756-763.
- Bao, W. (2020). COVID-19 and Online Teaching in Higher Education: A Case Study of Peking University. *Human Behavior and Emerging Technologies*, 2(2), 113-115.
- Barkley, E. F., Cross, K. P., & Major, C. H. (2014). *Collaborative Learning Techniques: A Handbook for College Faculty*. San Francisco, CA: Jossey-Bass.
- Bates, T. (2015). *Teaching in a Digital Age: Guidelines for Designing Teaching and Learning*. BCcampus.

- Beatty, B. J. (2010). The Self-Paced Online Learning Model: A Review. *Performance Improvement Quarterly*, 23(1), 7-25.
<https://doi.org/10.1002/piq.20063>
- Benson, A. D., & Kilgore, W. (2018). Connectivist Learning Environments. In J. M. Spector, B. B. Lockee, & M. D. Childress (Eds.), *Learning, Design, and Technology: An International Compendium of Theory, Research, Practice, and Policy* (pp. 1-27). Springer.
- Betts, K. (2015). The challenges of online learning. *Journal of Educational Technology Development and Exchange*, 8(1), 1-14.
- Bonanno, P., Kommers, P., & Kumar, R. (2021). Covid-19 Pandemic in Education: The Pivot of the Schools to Remote Teaching. *Journal of Information Technology Education: Research*, 20(1), 633-652.
- Bozkurt, A., & Sharma, R. C. (2018). Best practices in e-learning course design. *Handbook of Research on E-Learning Standards and Interoperability: Frameworks and Issues*, 136-157.
- Cavanaugh, C. (2020). *Theoretical Foundations and Applications of Technology in Higher Education: Advances in Higher Education and Professional Development*. IGI Global.
- Cavanaugh, C., Gillan, K. J., Kromrey, J. D., Hess, M., & Blomeyer, R. (2004). *The Effects of Distance Education on K-12 Student Outcomes: A Meta-Analysis*. Naperville, IL: Learning Point Associates.

- Çelik, T. (2021). Distance Education Applications in the Time of Covid-19 Pandemic. *Journal of Human Sciences*, 18(1), 171-182.
- Chen, G., & Zhu, Z. (2020). Teacher immediacy and student learning outcomes in online learning: A meta-analysis. *Teaching in Higher Education*, 25(4), 377-394.
- Cheng, X., & Wang, J. (2021). An Empirical Study on the Impact of Covid-19 Pandemic on the Online Teaching Effectiveness of Higher Education Institutions in China. *Journal of Higher Education Policy and Management*, 43(3), 277-292.
- Clark, R. C. (2015). *E-Learning and the Science of Instruction: Proven Guidelines for Consumers and Designers of Multimedia Learning*. John Wiley & Sons.
- Clark, R. C. (2018). *e-Learning and the Science of Instruction: Proven Guidelines for Consumers and Designers of Multimedia Learning (4th ed.)*. Wiley.
- De Witte, K., & Rogge, N. (2021). Teachers' Professional Development for Online Learning in the COVID-19 Pandemic. *European Journal of Teacher Education*, 44(3), 395-407.
- Gamage, K. A. A., & Jayasinghe, M. T. N. (2021). Emergency Remote Teaching and Learning during the COVID-19 Pandemic: Perspectives of Sri Lankan Teachers. *International Journal of Emerging Technologies in Learning*, 16(8), 34-48.
- Garrison, D. R. (2003). *E-Learning in the 21st century: A framework for research and practice*. RoutledgeFalmer.

- Garrison, D. R., & Cleveland-Innes, M. (2005). Facilitating cognitive presence in online learning: Interaction is not enough. *American Journal of Distance Education*, 19(3), 133-148.
- Garrison, D. R., & Cleveland-Innes, M. (2005). Facilitating Cognitive Presence in Online Learning: Interaction Is Not Enough. *The American Journal of Distance Education*, 19(3), 133-148.
- Garrison, D. R., & Cleveland-Innes, M. (2005). Facilitating cognitive presence in online learning: Interaction is not enough. *The American Journal of Distance Education*, 19(3), 133-148.
- Garrison, D. R., & Kanuka, H. (2004). Blended Learning: Uncovering Its Transformative Potential in Higher Education. *The Internet and Higher Education*, 7(2), 95-105.
- Garrison, D. R., & Kanuka, H. (2004). Blended learning: Uncovering its transformative potential in higher education. *The Internet and Higher Education*, 7(2), 95-105.
- Garrison, D. R., & Kanuka, H. (2004). Blended learning: Uncovering its transformative potential in higher education. *The Internet and Higher Education*, 7(2), 95-105.
- Garrison, D. R., & Vaughan, N. D. (2008). *Blended Learning in Higher Education: Framework, Principles, and Guidelines*. San Francisco, CA: Jossey-Bass.

- Grewal, R., & Katsikeas, C. S. (2021). Marketing Academics' Perceptions of the Impact of COVID-19 and Remote Teaching on Higher Education. *Journal of Business Research*, 124, 424-436.
- Gurung, B., & Rutledge, D. (2014). Online teaching and learning in higher education. In *Teaching at its best: A research-based resource for college instructors* (pp. 145-160). John Wiley & Sons.
- Hamdan, A., Alebaikan, R., & Saeed, S. (2020). Students' Perceptions of E-learning in Saudi Arabia during the COVID-19 Pandemic. *Journal of Education and E-Learning Research*, 7(4), 311-318.
- Hülsmann, T., & Törner, M. (2017). A historical review of online learning. In *Handbook of Distance Education* (pp. 59-79). Routledge.
- Ives, C. (2019). *Online Learning Simplified: A Guide for Beginners*. Packt Publishing.
- Johnson, L., Adams Becker, S., Estrada, V., & Freeman, A. (2015). *NMC horizon report: 2015 higher education edition*. The New Media Consortium.
- Kanuka, H., & Anderson, T. (1998). Online Social Interchange, Discord, and Knowledge Construction. *Journal of Distance Education*, 13(1), 57-74.
- Keengwe, J., & Kidd, T. (2010). Towards best practices in online learning and teaching in higher education. *MERLOT Journal of Online Learning and Teaching*, 6(2), 533-541.

- Kim, J., & Lee, J. (2020). A Study on the Remote Lecture Satisfaction of University Students during the COVID-19 Pandemic: Focusing on the Effect of Perceived Value, Flow, and Satisfaction. *Journal of Digital Convergence*, 18(11), 251-259.
- Kim, K. J., & Bonk, C. J. (2006). The Future of Online Teaching and Learning in Higher Education. *Educause Quarterly*, 29(4), 22-30.
- Kizilcec, R. F., Piech, C., & Schneider, E. (2013). Deconstructing Disengagement: Analyzing Learner Subpopulations in Massive Open Online Courses. In *Proceedings of the Third International Conference on Learning Analytics and Knowledge* (pp. 170-179). Leuven, Belgium: ACM.
- Kozan, K., & Richardson, J. C. (2021). Teaching in the Time of COVID-19: Perceptions, Challenges and Lessons Learned from Transitioning to Online Teaching. *Journal of Education and Learning*, 10(1), 151-164.
- Kozar, K. A., et al. (2014). The Impact of Online Learning on Students' Course Outcomes: Evidence from a Large Community and Technical College System. *eLearning Papers*, 38, 1-13.
- Leu, D. J. (2011). Online Assessment and Measurement: Foundations and Challenges. In L. Liu, D. L. Ginther, & R. L. Wiegand (Eds.), *The Routledge Handbook of Applied Linguistics* (pp. 480-492). Routledge.

- Li, L., & Irby, B. J. (2008). An Overview of Online Education: Attraction, Benefits, Challenges, and Recommendations for the Classroom Instructor. *College Teaching*, 56(4), 245-253.
- Li, N., & Irby, D. M. (2019). Telemedicine and online learning in ophthalmology. *American Journal of Ophthalmology*, 199, xv-xvi.
- Lin, Q., Wen, J., & Liu, L. (2020). Examining the Role of Information Sharing in Online Healthcare Community through the Lens of Privacy Concerns and Benefit. *Information & Management*, 57(1), 103-115.
- Lister, M., Dove, M., Mullan, J., & Byrne, M. (2007). Nursing students' experiences of e-learning in a blended learning environment. *Nurse Education in Practice*, 7(5), 291-296.
- Liyanagunawardena, T. R., Adams, A. A., & Williams, S. A. (2013). MOOCs: A Systematic Study of the Published Literature 2008-2012. *International Review of Research in Open and Distance Learning*, 14(3), 202-227.
- Maggioncalda, J. (2019). What is online learning? Coursera Blog. <https://blog.coursera.org/what-is-online-learning/>
- Mayer, R. E. (2014). Cognitive theory of multimedia learning. In R. E. Mayer (Ed.), *The Cambridge handbook of multimedia learning* (2nd ed., pp. 43-71). Cambridge University Press.
- Means, B., et al. (2010). *Evaluation of Evidence-Based Practices in Online Learning: A Meta-Analysis and Review of Online Learning Studies*. U.S.

Department of Education, Office of Planning, Evaluation, and Policy Development.

- Means, B., Toyama, Y., Murphy, R., Bakia, M., & Jones, K. (2013). Evaluation of evidence-based practices in online learning: A meta-analysis and review of online learning studies. US Department of Education.
- Moawad, A. F., & Darwish, A. M. (2021). Students' Perceptions of Online Learning during the COVID-19 Pandemic: A Case Study of a Public University in Egypt. *Education and Information Technologies*, 1-16.
- Moore, M. G. (1989). Three types of interaction. *American Journal of Distance Education*, 3(2), 1-6.
- Moore, M. G. (1993). Theory of transactional distance. In D. Keegan (Ed.), *Theoretical principles of distance education* (pp. 22-38). Routledge.
- Nambiar, R. M. K., & Reddy, Y. V. (2021). Perceptions and Attitudes towards Online Learning during the COVID-19 Pandemic in India: A Pilot Study. *Education Sciences*, 11(4), 196.
- Online Learning Consortium. (2021). Support Services in Online Education. <https://onlinelearningconsortium.org/topic/research/support-services-in-online-education/>
- Ostashewski, N., & Reid, D. (2013). Exploring the professional development needs of online instructors. *Journal of Asynchronous Learning Networks*, 17(1), 113-127.

- Ouyang, F. & Li, H. (2021). Online Learning in the Time of COVID-19: An Examination of the Relationship Between the Use of Videoconferencing and Learning Outcomes in Higher Education. *Journal of Educational Computing Research*, 59(2), 283-305.
- Paechter, M., Maier, B., & Macher, D. (2010). Students' expectations of, and experiences in e-learning: Their relation to learning achievements and course satisfaction. *Computers & Education*, 54(1), 222-229. doi: 10.1016/j.compedu.2009.08.005
- Palloff, R. M., & Pratt, K. (2007). *Building Online Learning Communities: Effective Strategies for the Virtual Classroom* (2nd ed.). Jossey-Bass.
- Palloff, R. M., & Pratt, K. (2013). *Lessons from the virtual classroom: The realities of online teaching*. John Wiley & Sons.
- Picciano, A. G. (2002). Beyond Student Perceptions: Issues of Interaction, Presence, and Performance in an Online Course. *Journal of Asynchronous Learning Networks*, 6(1), 21-40.
- Picciano, A. G. (2017). *Online and Hybrid Learning: Design Fundamentals*. Routledge.
- Picciano, A. G. (2017). Theories and frameworks for online education: Seeking an integrated model. *Online Learning*, 21(3), 166-190.

- Raman, K. S., & Abidin, M. J. Z. (2021). Examining Student Perceptions and Acceptance of e-Learning Platforms in Higher Education during COVID-19 Pandemic. *Education Sciences*, 11(1), 29.
- Reimann, P. (2016). Learning Analytics and Educational Data Mining in Practice: A Systematic Literature Review of Empirical Evidence. *Educational Research Review*, 17, 1-24.
- ResearchAndMarkets. (2021). Global Online Education Market By Product, By Learning Type, By End User, By Region, Industry Analysis and Forecast, 2020-2026.
- Richardson, J. C., & Swan, K. (2003). Examining Social Presence in Online Courses in Relation to Students' Perceived Learning and Satisfaction. *Journal of Asynchronous Learning Networks*, 7(1), 68-88.
- Richardson, J. C., & Swan, K. (2003). Examining social presence in online courses in relation to students' perceived learning and satisfaction. *Journal of Asynchronous Learning Networks*, 7(1), 68-88.
- Rovai, A. P. (2007). Facilitating online discussions effectively. *The Internet and Higher Education*, 10(1), 77-88.
- Salmon, G. (2011). *E-moderating: The key to teaching and learning online*. Routledge.
- Seaman, J. E., Allen, I. E., & Seaman, J. (2018). *Grade increase: Tracking distance education in the United States*. Babson Survey Research Group.

- Siemens, G. (2002). Instructional Design in Elearning. Elearnspace. <https://www.elearnspace.org/Articles/InstructionalDesign.htm>
- Siemens, G. (2018). The Challenges of Digital Learning: An Interview with Dr. George Siemens. In T. Martin & M. A. Parker (Eds.), *The Digital Learning Challenge: Obstacles to Educational Uses of Copyrighted Material in the Digital Age* (pp. 139-150). Johns Hopkins University Press.
- Spector, J. M. (2008). Assessment in E-Learning Environments. *Educational Technology*, 48(6), 25-32.
- Suttie, J. W. (2016). Instructional Design and the Library: An Introduction. In J. W. Suttie & D. W. L. Hopkinson (Eds.), *Instructional Design and the Library: Strategies for Online Teaching and Learning* (pp. 3-14). Chandos Publishing.
- Swan, K. (2003). Learning effectiveness: What the research tells us. In J. Bourne & J. C. Moore (Eds.), *Elements of quality online education: Engaging communities* (pp. 13-45). Sloan Consortium.
- Swan, K. (2016). Improving Online Learning: Student Perceptions of Useful and Challenging Characteristics. *The Internet and Higher Education*, 29, 1-14.
- Togliatti, M. & Marelli, S. (2021). Remote Teaching During COVID-19: A Comparison of Synchronous and Asynchronous Instructional Approaches in an Italian University. *Education Sciences*, 11(6), 305.
- Venable, M. (2019). *Designing and Teaching Online Courses*. Routledge.

- Venable, M. (2020). *Personal Learning Networks for Online Learning: Insights and Practical Advice*. Stylus Publishing.
- Wang, C., Cheng, Z., & Tao, J. (2021). Online Learning in the COVID-19 Pandemic and Beyond: A Comprehensive Review. *IEEE Transactions on Education*, 64(2), 138-159.
- Weng, X., Xu, Q., & Hou, Z. (2021). Teachers' Perception and Experience of Online Teaching During the COVID-19 Pandemic: A Case Study of Chinese Universities. *Educational Sciences: Theory & Practice*, 21(3), 23-41.
- Wiley, D. (2014). The Access Compromise and the 5th R. *The International Review of Research in Open and Distributed Learning*, 15(4).
- Zhu, M., & Bonk, C. J. (2020). Preface to the special issue on teaching and learning in the time of COVID-19. *Journal of Educational Technology Development and Exchange*, 13(1), 1-2.
- Zimmerman, B. J. (2002). Becoming a self-regulated learner: An overview. *Theory Into Practice*, 41(2), 64-70.

APPENDICES

Student's questionnaire:

Thank you for participating in this study exploring students' attitudes towards the use of Google Meet sessions during the COVID-19 pandemic. The purpose of this study is to gain insights into how students feel about attending classes via Google Meet, and how it has impacted their learning experience during the pandemic. Your participation in this study is voluntary, and all information provided will be kept confidential.

How often did you attend Google Meet sessions during the pandemic?

- Rarely
- Occasionally
- Frequently
- Very frequently

What was your initial reaction to the idea of attending classes via Google Meet?

- Positive
- Neutral
- Negative
- Mixed

c. How did you prepare for Google Meet sessions?

- Set up my device (computer, webcam, microphone)
- Checked internet connection
- Prepared notes or materials
- None, I did not prepare

How did you interact with your instructor during Google Meet sessions?

- Raised hand to ask questions
- Used chat feature to communicate
- Turned on microphone to speak
- Interacted through breakout rooms
- Did not interact with the instructor

How did you interact with your classmates during Google Meet sessions?

- Used chat feature to communicate
- Turned on microphone to speak
- Participated in group discussions or activities
- Collaborated through breakout rooms
- Did not interact with classmates

Were there any technical difficulties that you encountered during Google Meet sessions?

- Yes, frequently
- Yes, occasionally
- No, rarely
- No, never

How did you handle technical difficulties during Google Meet sessions?

- Tried to troubleshoot on my own
- Asked for help from the instructor or classmates
- Continued to participate without resolving the issue

- Left the session and rejoined later

How did attending classes via Google Meet affect your learning experience?

- Enhanced my learning experience
- Had no significant impact
- Hindered my learning experience
- Did not attend Google Meet sessions

Did attending classes via Google Meet help or hinder your learning?

- Helped my learning
- Did not impact my learning
- Hindered my learning
- Did not attend Google Meet sessions

Did attending classes via Google Meet affect your motivation to learn?

- Increased my motivation to learn
- Did not impact my motivation to learn
- Decreased my motivation to learn
- Did not attend Google Meet sessions

Were you able to concentrate during Google Meet sessions?

- Yes, always
- Yes, most of the time
- No, occasionally

- No, rarely

Did attending classes via Google Meet affect your interaction with your classmates and instructor?

- Enhanced my interaction
- Did not impact my interaction
- Hindered my interaction
- Did not attend Google Meet sessions

Did you feel engaged during Google Meet sessions?

- Yes, always
- Yes, most of the time
- No, occasionally
- No, rarely

Final thoughts: a. Do you prefer attending classes via Google Meet or in-person?

- Prefer Google Meet
- Prefer in-person
- No preference
- Did not attend Google Meet sessions

Do you think attending classes via Google Meet should continue after the pandemic?

- Yes, it should continue

- No, it should not continue
- Undecided
- Did not attend Google Meet sessions

Focus Group Questions:

1. What was your initial reaction when our university first implemented the use of Google Meet for online classes during the pandemic?
2. What have been your experiences with using Google Meet for online classes? Have there been any challenges or benefits?
3. How has using Google Meet impacted your ability to learn and stay engaged in class?
4. Have you found it easy or difficult to communicate with your teachers and classmates using Google Meet? Are there any features that you find particularly useful or frustrating?
5. Have you noticed any differences in the quality of education you receive through Google Meet compared to in-person classes?
6. How has the use of Google Meet impacted your social interaction with classmates? Do you feel connected to your peers even though you are not physically together?
7. How do you feel about the amount of screen time and online learning you have been doing during the pandemic? Has it been challenging to balance your academic and personal life?
8. Do you think that online learning through Google Meet will continue to be a valuable tool in education after the pandemic ends?

9. Have you noticed any differences in the level of interaction and engagement between in-person classes and online classes using Google Meet?
10. Overall, how do you feel about the use of Google Meet for online classes during the pandemic

الملخص

واجهت المؤسسات التعليمية إثر جائحة كوفيد-19 في جميع أنحاء العالم تحديات في تقديم تعليم ذو جودة عالية مع ضمان سلامة الطلاب. قامت جامعة بسكرة، مثل العديد من الجامعات الأخرى، بتقديم الدروس عبر منصات التعلم عبر الإنترنت، مثل جوجل ميت، لتسهيل التدريس والتعلم عن بُعد. تهدف هذه الدراسة إلى التحقيق في آراء متعلمي اللغة الإنجليزية كلغة أجنبية في جامعة بسكرة تجاه استخدام جلسات جوجل ميت خلال جائحة كوفيد-19. يركز البحث على ادراك الطلاب لفاعلية جوجل ميت في تعزيز استقلاليتهم ومسؤوليتهم في التعلم الخاص بهم. وهو يسعى لتحديد ما إذا كان استخدام هذه المنصة عبر الإنترنت قد حفز الطلاب على امتلاك مسؤولية أكبر عن تعليمهم وإلى أي مدى يعتمدون على معلمهم للحصول على الدعم التعليمي. لجمع البيانات واكتساب رأي الجميع، تم إجراء دراسة وصفية تعتمد على منهجية نوعية. شملت الدراسة مناقشة جماعية تضم ثمانية طلاب لغة إنجليزية كلغة أجنبية وتوزيع استبيانات أيضا على عشرين طالبا من طلاب اللغة الإنجليزية كلغة أجنبية في جامعة بسكرة. تشير نتائج الدراسة إلى أن الطلاب قد أظهروا اتجاهات سلبية تجاه استخدام جلسات جوجل ميت. وافق الطلاب على أن هذه الطريقة التعليمية عبر الإنترنت لم تسهم في تحسين استقلالية الطلاب ومهاراتهم اللغوية. تسلط النتائج الضوء على مزايا وعيوب دمج منصات التعلم عبر الإنترنت مثل جوجل ميت في دروس الجامعة في الجزائر لتعزيز تعلم اللغة الإنجليزية. بشكل عام، تسلط هذه الدراسة الضوء على ادراك الطلاب واتجاهاتهم تجاه استخدام جلسات جوجل ميت خلال جائحة كوفيد-19 وتؤكد أهمية دمج أدوات التعلم عبر الإنترنت لدعم استقلالية الطلاب وتطوير لغتهم في المستقبل.