UNDERSTANDING THE DIFFERENT LEARNING STYLES OF STUDENTS IN ONLINE TEACHING-LEARNING, PEMA GATSHEL MIDDLE SECONDARY

2020

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Thank you all

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Abstract

This study analyses students' teaching-Learning Styles in awake of COVID-19 pandemic in Pema Gatshel Middle Secondary School. For this purpose, we designed a questionnaire both qualitative and quantitative based on [1]cognitive constructivism learning theory. We designed a questionnaire using pedagogical thematic online teaching-learning for the students, teachers, and parents. We conducted a survey and interview with objectives: first, to find out the effectiveness of the online teaching-learning process. Second, we proposed a pedagogical thematic representation of the students' online teaching-learning styles. The results show that the realistic pedagogical methods and teaching strategies design and the contextualization of the teaching have a direct notable influence on students learning. The quantitative data were analysed using SPSS22 and qualitative under six pedagogical thematic presentations; pedagogy, assessment, participation, planning, mode of delivery, and teaching/learning resources. The results suggest a high correlation between teachers' lesson design and learning by the students. Moreover, [2]chronological analysis of the teaching-learning reveals that the intention to participate in the teaching-learning process could be a simple need of awareness and training on the use of various online teaching-learning mediums. Thus, introducing the online teaching-learning improves teaching-learning and consolidates their knowledge on online teaching-learning engagement.

Keywords: Online, pedagogical, teaching-learning, students, teachers

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[1] Constructivism is the theory that says learners construct knowledge rather than just passively take in information. As students experience the world and reflect upon those experiences, they build their own representations and incorporate new information into their pre-existing knowledge (schemas).

[2] Chronological Analysis is a simple, commonsense approach towards tracking down the root cause of a problem. Chronological Analysis works by piecing together a timeline of activities working back from the problem being raised or otherwise bought to the attention of the relevant staff.

Introduction

Advances in information technology have presented new challenges and opportunities for teaching and learning in traditional education institutions (Tehrani, 2015). Online teaching-learning in the education system has proliferated dramatically in recent years and particularly in the times of the COVID-19 pandemic. While giving students educational opportunities that otherwise might not available to them, the environment for the learner has altered dramatically from face-to-face teaching-learning to cyber and virtual learning. E-learning, also known as online learning, can be defined as any curriculum delivered to a student separated by time or space from the teacher. Online learning is used interchangeably with web-based learning, computer-based learning, and E-learning. E-learning covers web-based learning, digital collaboration, and virtual classrooms, and the delivery of content via the internet. According to Tehrani (2015), online education is not a new concept and known as far back as the mid-19th century when it was referred to as "correspondence courses". This is fuelled by the emergence of worldwide information and computer communications technologies.

The 2020 academic year was an entirely different year. In school, teaching and learning have almost come to a halt. However, advances in information and communication technology (ICT) are changing the face of the education and learning process (Pham, Limbu, Bui, Nguyen, & Pham, 2019). The Ministry of Education made it possible for our teachers and students to participate and continue their teaching-learning process online. The pandemic was experiential, as it offered a reason for teachers and students to proceed with the teaching and learning process. In the history of the Bhutanese education system, online classes began for the first time. While there are some obstacles, the teachers were capable to take online classes via Google classrooms and other [3]social media platforms. This new normal scenario offers the ability for teachers and learners to reflect and evaluate how the learning is going on.

Significance of the Study

The findings of this study will provide knowledge on online teaching-learning and student learning styles. It might help teachers to choose teaching strategies and approaches. It might benefit the parents in understanding that the support and environment they provide to their children have an impact on learning and change their attitude and participate in their child's learning. It would also help the school administration to make informed decisions and plan programs and activities based on evidence from this study. It might also help the teach-

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[3]Social media platforms; WeChat, Facebook Messenger, Telegram, Zoom, Telephone, BBS

ers to understand students' learning styles and design appropriate teaching strategies and brain-based learning.

The findings may also help different stakeholders to come up with evidence-based capacity building training and workshops for teachers, students and parents. It is hoped that this study will contribute to the stock and scope of literature existing on online teaching-learning styles. The findings of this study might help future researchers to direct more research in this field.

Literature Review

The & Usagawa, (2018) have defined online teaching-learning as the use of the internet for teaching and learning. It is used interchangeably with web-based learning, computer-based learning, and E-learning. E-learning covers web-based learning, digital collaboration, and virtual classrooms, and the delivery of content via the internet. According to Tehrani, (2015), online education is not a new concept and known as far back as the mid-19th century when it was referred to as "correspondence courses". The advances in information and communication technology (ICT) are changing the face of the education and learning process (Pham et al., 2019). Fayer, (2004) also agreed that while giving students educational opportunities that otherwise might not be available to them, the environment for the online learner has been altered dramatically from face-to-face teaching-learning to virtual teaching-learning.

Currently, the use of computers is increasing in all walks of life and expressly in the field of education. Online teaching-learning in Bhutan has progressed away from the traditional medium due to the increased use of electronic gadgets, accessibility, and connectivity. The Education in Emergencies (EiE) such as present pandemic (COVID-19), war, disasters, famine, etc. have pushed the limit of resources and adaptation for countries around the world and Bhutan is no exception. According to Moazami, Bahrampour, Azar, Jahedi, & Moattari, (2014) online learning is an important tool in evidence-based learning because it is continually being developed and updated. In this pandemic, it is proved that online teaching-learning is indispensable. Online teaching-learning is a real-time web-facilitated learning where ICT tools are integrated to deliver educational content to students (Sharma, B., and, R., Naseem, M., Reddy, E. V, Nand, R., Naseem, M., & Reddy, E. V., 2020). The use of online learning is growing quickly at all levels of education in both developed and developing countries. Currently, using the internet, teaching and learning processes are becoming updated and teacher-centred education is transforming into student-centred education. However, Belair, (n.d.) pointed out that teacher communications are the vital factors for virtual school success. There are no limitations concerning place and time, virtual learning reduces many boundaries seen in traditional education. Besides, it encourages individual

students to expand their self-study habits (The & Usagawa, 2018). Garratt-reed, Roberts, Heritage, & Garratt-reed, (2016) identified a lack of communication, low levels of individual accountability, and questionable behaviours by students as negatively affecting teaching and assigning work online.

Fayer, (2014) discussed the role of instructors in understanding the online learning experience from the student's perspective. Since online teaching-learning is relatively new, growing, and has now become important, it is essential to know the perceptions of students, teachers, and parents. From the educational point of view, the online teaching-learning approach improves other horizontal skills such as self-efficacy, goal setting, and cooperation. However, Astri & Wahab (2018) suggested that teachers should match the teaching styles or teaching method with the students' learning and personality styles, to achieve better performance. Learning style as one of the student variables is sometimes not considered by the teacher when teaching in the online or in the classroom. One of the concerns is related to the lack of knowledge about the use of online teaching-learning mediums by both teachers, students, and parents. There are issues, but not limited to, lack of good internet coverage, feelings of isolation, lack of support from parents, lack of student motivation, and deprivation of mobile phones which led to the ineffectiveness of online teaching-learning. In the field of

education, motivation has been identified as a critical factor affecting learning (Chen & Jang, 2010). Motivation at home depends on the availability of time, parents' educational background, and how well to do off. According to Holmes, (2018) student engagement and student involvement was defined as the amount of physical and psychological energy that the student devotes to the academic experience. Online teaching-learning provides learners with a variety of benefits such as convenience and opportunities to work collaboratively and closely with teachers and other students from different schools or even across the world (Hung, Chou, Chen, & Own, 2010).

Motivation should be taken seriously in the online learning environment. An online learning environment refers to any setting that uses the Internet to deliver some form of instruction to learners separated by time, distance, or both (Chen & Jang, 2010). Holmes (2018) suggested that student engagement refers to the time, energy, and resources spent on activities designed to enhance learning.

Methodology

This study utilizes mixed methods, a blend of qualitative and quantitative study methods. The advantage of adopting mixed methods to study is that it offers a complete description

and analysis of a study subject, without limiting the scope of the study and the nature of participant's responses (Hung et al., 2010). Three distinct

groups of participants have been included in the sampling for this study; teachers, students, and parents. 6 parents from different localities with equal numbers of gender could draw authenticated information. We took 2 students each, each class 1 male and 1 female. It is a purposeful sampling. All the teachers in the school are included in the sampling. As the data for this study is obtained in both qualitative and quantitative ways, the qualitative study did not include the participants who took part in the quantitative method to avoid duplication of the information. The study covered 58 samplings altogether. Quantitative data were analysed using BMI 22 SPSS and data presented are in the descriptive statistic in the form of simple bar graphs. Qualitative data are shown under thematic orders.

1. Quantitative Data findings

Table 1Medium Adopted by students to access online learning
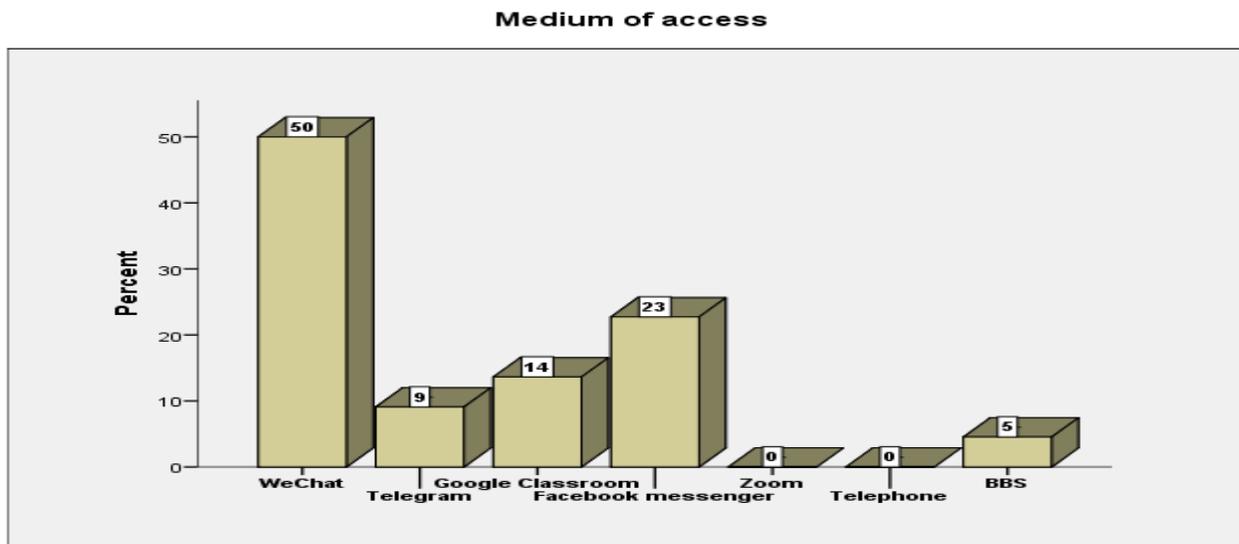
*Figure 1*. Medium of access

Figure 1 represents the medium through which students have access to online teaching-learning. 50 % of the students have responded that they access online teaching-learning through WeChat, and 23 % of students have access through Facebook Messenger, and the least of the students (5 %) have access to online teaching-learning through BBS (Bhutan Broadcasting Service).

Table 2 Medium Adopted by teachers to deliver the online teaching-learning
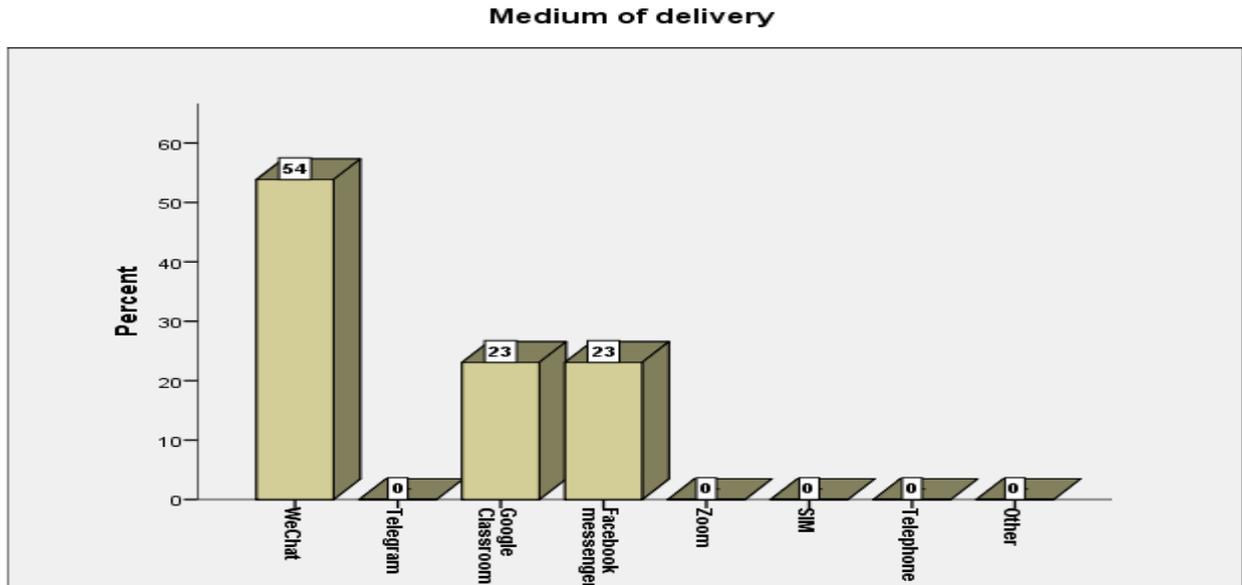
**Medium of delivery**

Figure 2. Medium of delivery

Figure 2 shows the medium of delivery teachers adopted to teach online teaching-learning. 54% of teachers responded that they use WeChat to deliver a lesson on online teaching-learning. 23% of teachers responded that they use Google Classroom and Facebook Messenger.

Table 3 Pedagogy

Pedagogy in practice
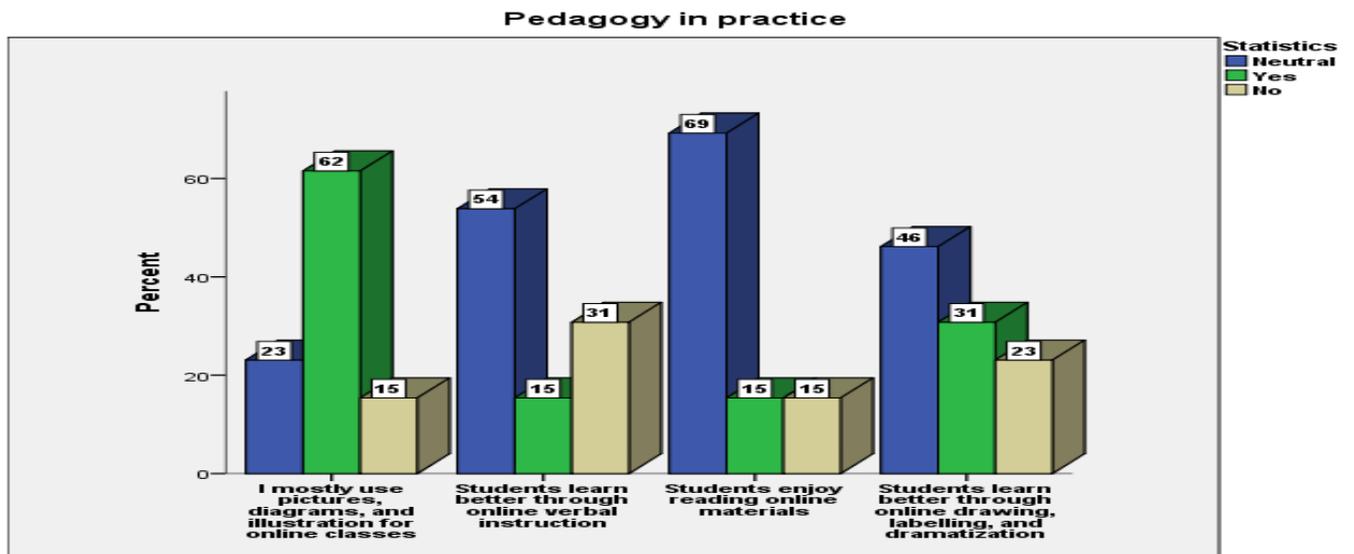
Figure 3. Pedagogy in practice

Figure 3 illustrates that 62% of the teachers use visual-spatial to teach students online, 15% of teachers do not use visual-spatial to teach students online and 23% of the teacher respondents remained neutral. The above figure also depicts that 15% of the teacher respondents use verbal instruction to teach students online teaching, 31% of teachers responded that they don't use verbal instruction to teach students online and 54% of teacher respondents have remained neutral. Figure 3 also explains that 31% of the teachers have used kinesthetic teaching to teach students online, 23% of teachers do not use kinesthetic teaching to teach students online and 46% of the teacher respondents have remained neutral. The above figure also concludes that 15% of the teachers say that online teaching materials are appropriate for students and 15% of teachers have agreed that online teaching-learning materials are not appropriate for students and 69% of teacher respondents have remained neutral.

Table 4 Learning styles
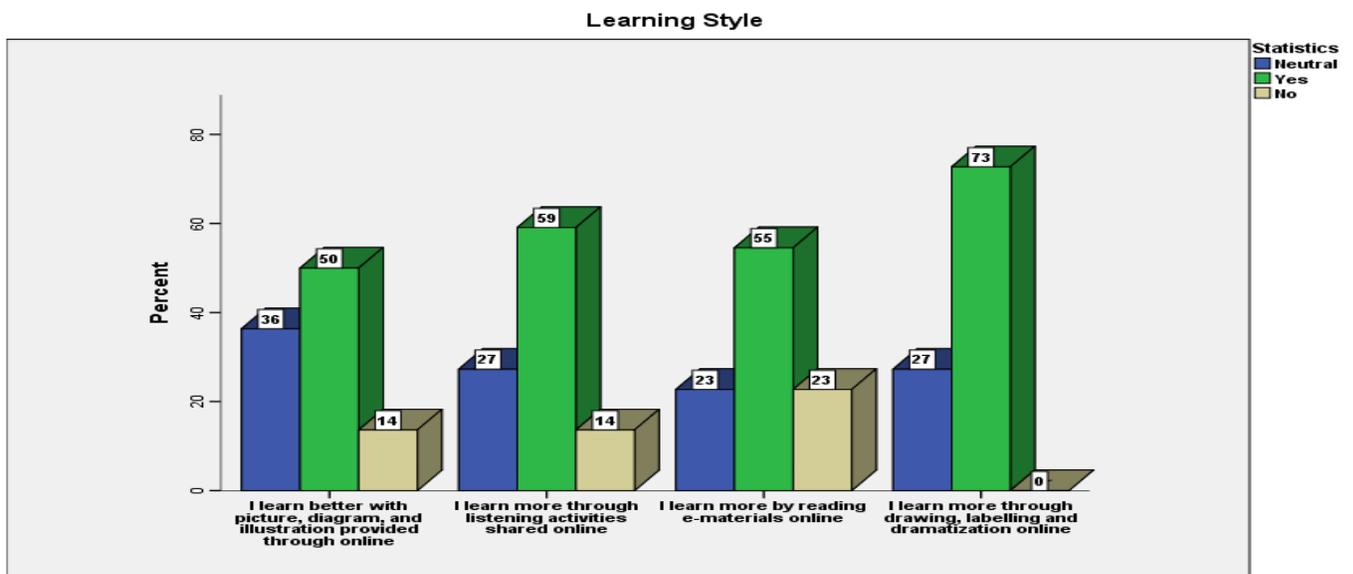
Figure 4. Learning styles

Figure 4 shows that 50% of students learn through visual teaching, 14% of students responded they don't learn through visual teaching and 36% of student respondents have remained neutral. The above figure also explains that 59% of the students learn through verbal teaching, 14% of students responded that they don't learn through verbal instruction and 27% of students have remained neutral. The figure also depicts that 73% of the students learn through kinesthetic teaching, and 27% of the student respondents have remained neutral. The figure also concludes that 55% of the students learn through reading materials, 23% of students responded that they don't learn through e-learning materials and 23% of respondents have remained neutral.

Table 5 Teaching and planning
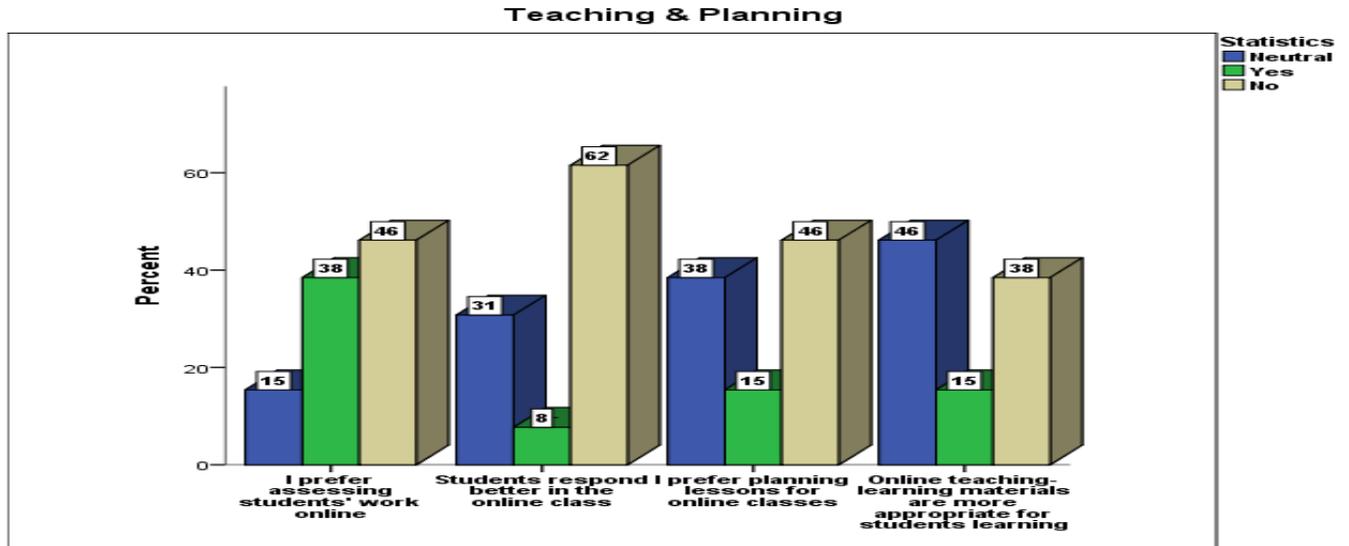
Figure 5. Teaching and Planning

Figure 5 illustrates that 38% of the teachers prefer to assess students' work online, 46% of the teachers have responded that they don't like assessing students' work online and 15% of respondents have remained neutral. The above figure also depicts that only 8% of teachers have responded that students participate in online teaching-learning, 62% of teacher respondents have shared students don't participate in online teaching-learning and 32% of respondents have remained neutral. The figure also explains that 15% of the teachers prefer planning lessons for online teaching-learning, 46% of teachers have responded they don't prefer planning lessons for online teaching-learning and 38% of respondents have remained neutral.

Table 6 Online teaching preference

Online teaching preference
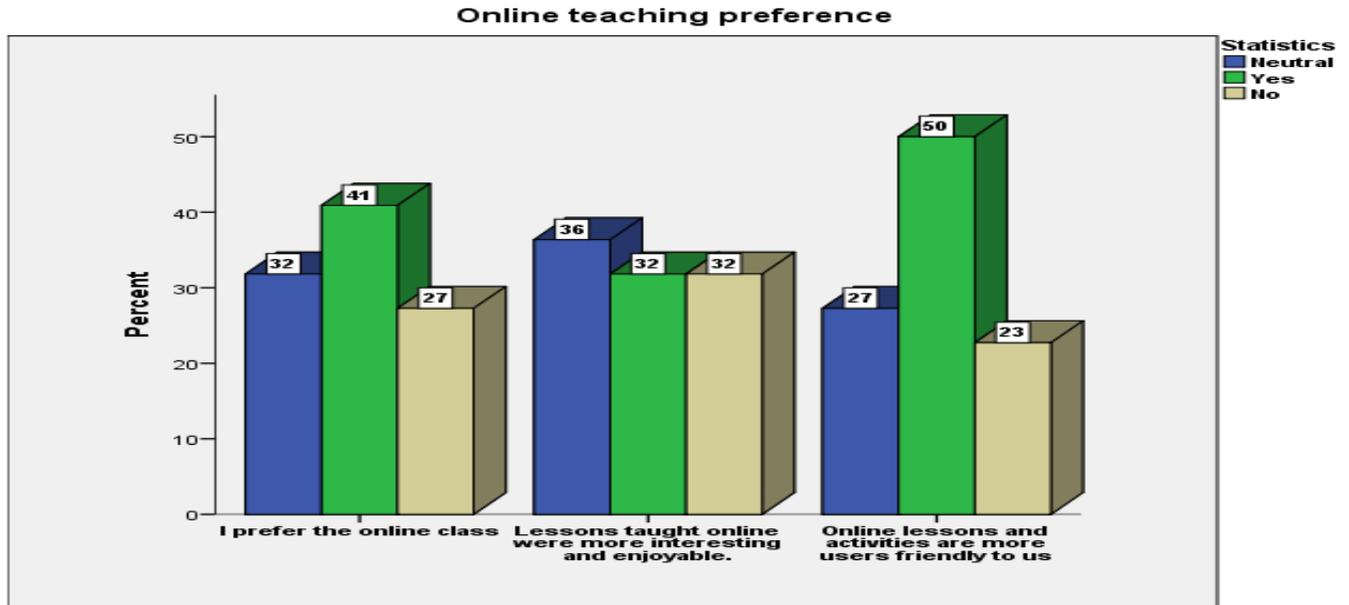
Figure 6. Online teaching preference

Figure 6 explains that 41% of the students responded that they prefer online teaching-learning, however, 27% of students have responded that they do not prefer online teaching-learning and 32% of student respondents have remained neutral. The above figure also depicts 32% of the students who responded that online teaching-learning lessons are interesting and enjoyable, however, 32% of students have also responded online teaching-learning lessons are not interesting and enjoyable and 36% of students have respondents have remained neutral. The figure also concludes that 50% of the students responded that online lessons and activities are user friendly, 23% of the students have responded online lessons and activities are not user friendly and 27% of student respondents have remained neutral.

2. Qualitative Data findings

Ball, (2000) articulated pedagogy as the proper relationship between theory and practice. What matters is caring for students and having the skills to work effectively with diverse learners, and it is believed that good teachers are those who could recognize and create genuine intellectual capacity in students. Effective teaching and learning require the use of different methodologies and strategies to meet the demands of the learners. The challenge is to find new ways and strategies to stimulate and motivate the creative abilities of today's generation who have varied set of orientations towards learning than the learners in the past.

Teaching is a complex process; therefore, teachers must manage the fluid interplay between content, technology, and pedagogical processes as well as

between themselves and their students. Furthermore, functioning effectively in the media-rich online classrooms of the 21st century requires a skilful and appropriate application of technology that is linked strongly to the curriculum. Moreover, online teachers require even more technological proficiency than their face-to-face counterparts. Students must indeed do more than just listening and note-taking: They must read, write, discuss, or be engaged in solving problems. Zewdu, (2017) has pointed out that the traditional 'chalk and talk' approach with the students as recipients of knowledge may not be suitable for today's generation. The approach does not provide opportunities for students to interpret, organize and transfer knowledge to solve authentic problems.

It is generally acknowledged that assessment is the fundamental driver of student learning (Mcnamara & Brown, 2009) and therefore assessment activities must drive intended learning outcomes. The ability to take responsibility for one's learning is generally a goal of online teaching-learning and accordingly, an assessment must be learner-centred. Therefore, it is important to create learning communities that facilitate students' and teachers' interaction, and it is also equally important to make students understand the purpose of the assessment. It is equally important to make students understand how the digital assessments are being carried out and transparent. Students are from different parental backgrounds and therefore, teaching-learning has to cater to and reach diverse learners.

Shaw, (2013) pointed out that students' participation in learning must articulate their points of view and listen to the views of others to create knowledge and meaning in learning. Online learning emphasizes the sharing of authority and responsibility among individuals. When learners in a collaborative situation share the same goal, they can learn from one another through group discussion and sharing. But below are some of the inconveniences shared by the students when it comes to online learning.

2.1 Pedagogy

The finding shows: "Teachings are normal as usual, used only activity-based strategies for the online."
"Teaching strategies used during a pandemic are not specified but it was based on SIM."
-Teachers
"The answers we required has been reflected at the end, but we need to understand the method only."
"I prefer classroom teaching-learning method as it is adaptable and more interactive."
"I watch the E-learning broadcast in BBS and understand more and can do the assignment/work easily."
"I understand more, and it is more convenient to share my ideas and doubts through classroom learning."
-Students

"My understanding of online teaching-learning is the informal means of teaching and learning through various social media and resources."
"It is more burden to the parents."
"I would say that the online teaching and learning process had engaged my kids and had gain lots of knowledge as they browse and learned the meaning of lots of new words."
- Parents

2.2 Assessment

The study shows;
"Students were assessed based on their activity by preparing appropriate rubrics for the task. As such, I didn't use any feedback but as soon as they send the answer on any social media, I checked their activity and wrote comments on it."
-Teacher
"I prefer exam and monthly test assessment not online because there is less chance to cheat or copy than those monthly assignments."
-Student
"Online assessment may be done but won't be very efficient as assessing during the normal classroom situation. There are chances of biases because of different parental background."
-Parent

2.3 Participation

"Students' participation in online classes is active mostly, but in case of few students, their participation is not up to my expectation, yet I manage to contact through personal chat. In that way, I feel it is a kind of new experience, new learning in the new situations."
"Their participation was good in my subject. Every student had responded timely to my assigned works."
-Teachers

"No good network server."
"Sometimes busy with household chores."
"Sometimes no data package."
"Sometimes no phone of our own."
"Lack of resources."
"Some phones don't support the app."
-Students
"I pass the instruction given by the teachers and I also help them in doing their work and make sure they submit on time."
-Parent

2.4 Planning

"There is no difference in planning lessons for normal and online teaching."
"Planning of lesson in online teaching was made easier because of SIM provided by the Ministry of Education."
"Online teaching plan is more difficult."
-Teachers
"If there is an assignment given by teachers, I ask them to do the work during evening hours when I am with them and give my mobile for them to use it."
-Parent
"Assigning homework through google classroom."
"Some of the topics are not related to us."
"The teachers share the work in WeChat, Messenger, Telegram, and Google Classroom. If one doesn't work others work easily."
-Students

2.5 Mode of delivery

"I used almost all social media for online teaching, but I found Messenger is most feasible for online teaching and learning."

-Teacher

"WeChat because it is user friendly for both the teachers and students. It is easier also to upload."

"The most feasible mode of delivery for children's online learning would be either WeChat or Telegram so, that the teacher can guide them through voice messages and help in explanation."

-Parents

"I feel Google Classroom convenient as it has many features designed to help students and teachers. It helps us catch up with our work with a constant reminder."

"E-learning on TV is more convenient for online because it doesn't require net and it is cheap to use."

-Students

2.6 Teaching/learning resources

"The main challenges are the TLM could not be used as like normal teaching, only some questions and reading materials were sent."

"Having offline video app could be best."

-Teacher

"No data."

-Students

2.7 Others (Advantages of online learning)

1. Self-exploration

2. Student-centred

3. Student get to enhance ICT skills

4. Students can be kept engaged

5. Can learn from anywhere

-parents

1. Opportunities to develop self-leadership

2. Accountable to self

3. Exploratory in nature

-Teachers

Discussion and findings

According to Astri & Wahab (2018) learning style is one of the characteristics of students that has not received enough attention. Most teachers use their learning methods to teach rather than consider the student's learning style. This study explored how students view online teaching-learning. We hypothesized that students would show a preference for traditional ways of learning; face to face contact teaching, using books to learn and attending school. There are several reasons for this expectation. First, students may not know about the various functions of educational mobile applications, second, parents may differ in their beliefs about the potential information to be gained from either books or educational mobile applications. This could affect how parents discuss learning with their children and the extent to which they turn to books or educational mobile applications when their child wishes to learn. Eisen & Lillard (2016) pointed out that in the past parents prefer to use books for educational needs. Third, although educational mobile applications are increasingly integrated into online teaching-learning, the traditional book still reigns supreme in these settings, particularly in our school. The consistent use of books within teachers may send an implicit message of their utility in education. Contrary to our hypothesis, figure 6 repudiates that 41% of the students have responded that they prefer online teach-

ing-learning. However, 61% of teachers responded that students don't participate in online teaching-learning. There can be many reasons; deprivation of smartphones, data exhaustion, poor network connectivity, the inexperience of using educational mobile applications (technology-savvy). The popular medium of online teaching-learning access among children are; WeChat, Google Classroom, and Facebook Messenger. 50% of the children access online teaching-learning through WeChat. There are numerous educational mobile applications available. When it comes to mode of delivery online teaching-learning, 53% of teachers responded that they use WeChat to deliver lessons online.

The use of smartphones connected to the internet is increasingly becoming popular in the online teaching-learning process. The students' participation, teachers' lesson planning, mode of delivery, and availability of teaching/learning resources have a lot of outcomes of online teaching-learning. Overall learning outcomes of online learning of students depend on pedagogical methods adopted by the teachers in delivering their lessons, support system available at home, and affordability on data recharge.

Moreover, overall online teaching-learning service is related to online students' participation and teachers' satisfaction in teaching students online. The finding confirms that 61% of the teachers

have responded that students do not participate in online teaching-learning. According to Moradi, Liu, Luchies, Patterson, & Darban (2018) to promote personal and educationally meaningful learning outcomes of online teaching-learning, it is important to have designed online teaching-learning activities. The finding validates with only 15% of the teachers prefer planning lessons for online teaching-learning. The noteworthy discovery of this study is that online teaching-learning quality is the most important factor perceived by teachers and parents. The online learning system can be manifested to students through training and capacity building of the teachers. Therefore, online teaching-learning success can be considered as the students' readiness to use online learning applications, support systems, and learning materials. Teachers providing online teaching-learning services must ensure that the online teaching-learning applications are easy to use and compatible so that the online teaching-learning operates smoothly and reliably. As students have more confidence using virtual learning to become more interested in learning, their level of participation in online learning will also increase. Of course, network connectivity and data affordability will also determine the students' participation in online teaching-learning as finding substantiates that 50% of the students responded that they enjoy and find online teaching-learning interesting. However, online teaching-learning success depends on

teachers adopting different teaching strategies, planning lessons online, assessing online work, providing feedback, and the quality of reading materials they share online with students. Teachers with both theoretical and practical knowledge, care about students' interests and learning styles, and motivate students to interact continuously will help achieve a better learning outcome. Materials for teaching and learning should be appropriate and logical so that students can easily feel what to do first and what to do next. In this case, teaching materials and approaches can be included as aspects that affect student performance. The finding confirms that 55% of students responded that they learn through reading materials provided by teachers online. Students learn effectively if the teacher presents appropriate reading materials to the student. Teaching and learning materials must be both theoretical and practical, ensuring that continuity and relevance are updated to meet students' learning needs and more importantly, to make students enjoyed learning.

Recommendations and Conclusion

The data revealed that 41% of students prefer online teaching-learning and 50% of the students find online teaching-learning enjoyable and interesting. Therefore, teachers can use technology to make the lesson more responsive and interactive;

text to emoji, use of symbols, graphic representation, and video clip, and use of 2D to 3D images. Teachers may design activities to pull the students in: for example, encouraging students to share real-life experiences and to vote on or comment on issues about online teaching-learning. Teachers can also use interactive video lessons, interactive power point, and interactive worksheets/diagrams. Teachers can use [4]tools for creating online assessments and using online quizzes will help students to become more familiar and comfortable with the process of completing assessments digitally and automated grading.

Since motivation is one of the important factors in online learning, teachers can help students stay motivated on online learning by providing timely feedback and support. School administration can provide students with an appropriate orientation into the world of online learning.

Limitations

This study also has some limitations. Data was collected from only Pema Gatshel Middle Secondary School. Although schools experienced over 9 months of online teaching-learning, the generalization of this study's findings to other schools should be made with caution.

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[4] Online assessment tools; Google forms, Edupuzzle, Poll Everywhere, Moodle, Mentimeter, Kahoot, near pod, exe, Socrative.

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APPENDIX

I. Quantitative- Questionnaires for Students

1. Tick (√) the most appropriate medium you have used for online classes during the school closure.

Mode of delivery	WeChat	Telegram	Google Classroom	Facebook messenger	Zoom	Telephone	BBS
I prefer online class presented through;							

2. Tick (√) the most appropriate response.

Si.No	Pedagogical	Yes	Neutral	No
a	I learn better with picture, diagram, and illustration provided online			
b	I learn more through listening activities shared online			
c	I learn more through reading e-materials online.			
d	I learn more through drawing, labelling, and dramatization online.			

3. Tick (√) the most appropriate response.

Si.No	Students learning style	Yes	Neutral	No
a	I prefer an online class			

4. Tick (√) the most appropriate response.

Sl. No	Teaching/Learning Planning Item	Yes	Neutral	No
a	Lessons taught online were more interesting and enjoyable.			
b	Online lessons and activities are more users friendly to us.			

5. Tick (√) the most appropriate response.

Teaching/Learning Resources							
Si.No	Teaching/Learning resources Item	Smart Phone	Laptop	SIM	TV	Radio	SIM and Radio	Others
a	I access online class mostly through;							

II. Quantitative-Questionnaires for Teachers

1. Tick (√) the most appropriate medium you have used for online classes during the school closure.

Si.No.	Delivery mode	We-Chat	Telegram	Google Class-room	Facebook messen-ger	Zoom	Telephone	BBS	Others
1	I prefer to present online class through;								

2. Tick (√) the most appropriate response.

Si.No.	Pedagogical Item	Yes	Neutral	No
1.	**Visual** I mostly use pictures, diagrams, and illustrations for online classes.			
2.	**Auditory** Students learn better through online verbal instruction.			
3.	**Reading** Students enjoy reading online materials.			
4.	**Kinesthetic** Students learn better through online drawing, labelling, and dramatization.			
5.	**Students Assessment Item** I prefer assessing students' work online.			
6.	**Students Participation Item** Students respond better to an online classes.			
7.	**Teaching Learning and Planning** I prefer planning lessons for online classes.			
8.	**Teaching/Learning resources Item** Online teaching-learning materials are more appropriate for students learning.			

III. Qualitative-Questionnaires for Students

1. Pedagogy:
1.1. State reasons why you prefer the particular method of teaching-learning.
Answer:

1.2. Explain how you would prefer to learn a lesson.
Answer:

2. Assessment:
2.1. Share your opinions on the best-preferred assessment strategy carried out by your teachers.
Answer:

3. Participation:
3.1. What are the challenges you face in attending online assignments?
Answer:

4. Planning:
4.1. Share your views about how the school manages online teaching/learning.
Answer:

4.2. Share how you have managed online teaching and learning activities.
Answer:

5. Mode of delivery:
5.1. Mention a few reasons for media that you feel is most convenient for your online learning.
Answer:

6. *Teaching/learning resources:*
6.1. Give the list of challenges that you faced associated with online teaching and learning resources.
Answer:

IV. Qualitative-Questionnaires for Teachers

1. *Pedagogy:*
1.1 Share your opinion about teaching strategies during a pandemic?
Answer:

2. *Assessment:*
2.1 How are students' online tasks assessed? In what ways assessment feedback is used for improvement?
Answer:

3. *Participation:*
3.1 How do you feel about students' participation in online classes?
Answer:

4. *Planning*:
4.1 Express your views on planning lessons for normal and online teaching.
Answer:

5. *Mode of delivery:*
5.1 Which mode do you find the most feasible for online teaching-learning? Justify.
Answer:

6. *Teaching-learning resources*:
6.1 What are the challenges of online teaching- resources? How can we resolve them?
Answer:

7. *Others*
7.1 In your opinion what are some advantages of on-line teaching?
Answer:

V. Qualitative - Questionnaires for Parents

1. Pedagogy:
1.1 What is your perception of online teaching and learning?
Answer:

2. Assessment:
2.1 Share your opinion on an online assessment.
Answer:

3. Participation:
3.1 What was your role in your children's participation in online classes?
Answer:

4. Planning:
4.1 Comment on managing online classes for your children.
Answer:

5. Mode of delivery:
5.1 Justify which mode of delivery you find the most feasible for children's online teaching-learning.
Answer:

6. Teaching-learning resources:
6.1 What are the challenges related to online learning- resources?
Answer:

7. Others
7.1 In your opinion what are some of the advantages of online learning?
Answer: