

# Experiences of Teachers in Implementing the “Education in Emergency” During COVID-19 pandemic, 2020: A Case Study in Lower Secondary School in Eastern Bhutan.

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DOI: <https://doi.org/10.17102/bjrd.rub.11.2.032>

## **Abstract**

This paper reports a case study carried out in a lower secondary school in the eastern district of Bhutan on implementing the “Education in Emergency” program during the closure of schools in 2020 due to the novel COVID-19 pandemic. It investigated teachers’ experiences of how effectively they implemented the “Education in Emergency” (EiE) Programme initiated by the Ministry of Education, Bhutan through various online tools. This study employed a sequential multi-method paradigm starting with the survey of all teachers (n=35), preceded by in-depth semi-structured interviews, observations, and detailed field notes of teachers (n=6) who were purposefully selected based on the survey findings. The study focused on understanding the teachers’ awareness of the change of curriculum, students’ level of preparedness for online learning, support from various stakeholders; school, parents, and Dzongkhag Education Sector, and perceptions of teachers on the special program “Reaching the Unreached” initiated by the school solely aimed at benefiting the students who were unable to access from the e-learning platforms. The study revealed some of the barriers to effective teaching and learning such as teachers’ inadequate skills in using technological devices, lack of smart phoness or laptops, data packages, and weak internet connectivity. The study also reveals numerous positive findings, such as proactive support from schools in implementing EiE, parents’ support for students’ learning and pioneering “reaching the unreached” initiatives to support students who were not favoured by e-learning platforms. Although the school has showcased exemplary professionalism, additional improvements and modifications are required to successfully navigate the EiE.

**Keywords:** *Education in Emergency, Adaptive curriculum, e-learning, Google Classroom, SIM.*

## **1. Introduction and Context**

The novel corona-virus disease (COVID-19) outbreak was first identified in December 2019 in Wuhan, China. The effect internationally was profound, contributing to a large interruption of the education system. It affected nearly 1.6 billion learners in not less than 200 countries (Pokhrel & Chetteri, 2021). To stop the proliferation of the pandemic

around the world, stringent strategies such as lockdowns and staying home were enforced to control the transmission of the disease (Sintema, 2020).

Bhutan first experienced the entry of COVID-19 when a positive COVID-19 case was confirmed on March 6, 2020, by a 76-year-old American tourist from the USA State of Maryland (The Economic Times, 2020). The surge of the pandemic was followed by the second positive confirmation of the index patient's partner, who was also an American tourist (Lamsang, 2020a). However, Bhutan had already taken several containment steps to combat the transmission of the virus by closing land borders, institutions, schools, implementing hand washing, wearing face masks, physical distancing, avoiding mass gatherings or assemblies prior to the declaration of COVID-19 as a pandemic by the World Health Organisation (WHO) on March 11, 2020.

Based on the risk of spreading the COVID-19 virus and the awaiting threat to lives of the youth, by the decree of executive order of the Government, all schools remain closed from March 18, 2020 (MoE, 2020) impacting nearly 180,000 school children, and a complete nation-wide lockdown was enforced from 1st August 2020 (Palden, 2020) seriously interrupting the contact mode of classroom teaching-learning for many months (UNESCO, 2020). On the impact of the prolonged closure of schools, the Ministry of Education (MoE, 2020, p.3) noted:

The prolonged closure of schools is a great concern because it affects students' education and achievement of the expected learning outcomes for all key stages. It also poses an unprecedented risk to the safety, well-being and developmental growth of students. Other secondary effects include increased anxiety and restlessness when they are removed from the one and structured activities.

In an effort to provide uninterrupted learning for children during the pandemic, the Ministry of Education adopted the "Education in Emergency" [EiE] programme in collaboration with the Royal Education Council (REC), Bhutan Council for School Examinations and Assessment (BCSEA) and other relevant agencies. As a result, the "Adapted and Prioritized" curriculum was developed for classes PP-XII, which comprised five Key Stages. Furthermore, many online platforms, such as Google Classroom, Zoom, virtual learning environment and social media; radio and television, and various group forums such as Telegram, Messenger, WhatsApp and WeChat are employed for teaching and learning to continue education. These were previously unused in education in Bhutan. For remote rural and mountainous areas of Bhutan with limited access to television connectivity and the poor internet, Self-Instructional Materials (SIM) was deployed to ensure curriculum delivery (MoE, 2020). However, no study has been conducted to gauge the effect of the EiE programme.

In an endeavour to adapt to the paradigm shift from traditional face-to-face learning to e-learning, and ensure effective learning, it was the responsibility of individual schools to implement and engage all children. In response to this, Trashi

Yangtse Lower Secondary School incorporated all directives and changed policies. The school ensured that every student possessed learning materials such as instructional materials, worksheets, photocopying of instructional materials, issuing of additional notebooks and library books to ensure effective learning. Furthermore, all teachers, used Google classroom for teaching learning and other group forums such as WeChats and Telegram. In order to maintain effective learning and teaching for children who were unable to access the online resources, the school adopted the “Reaching the Unreached” programme and all staff were required to visit the designated catchment areas weekly (Trashiyangtse LSS, 2020). All staff were involved in the programme and used their own resources such as budget and personal time to participate in the programme.

In order to support the innovations and changes to the education system required by the Ministry of Education, the school invested in additional resources and materials to ensure a positive outcome for students. The effect of this large expenditure should be studied to ascertain its impact on achieving the intended aspirations and desires. Many researchers have studied the quality of education and learning experiences for students and the impact on staff during COVID-19. (e.g., Petrie, 2021). Petrie (2021) reported that many students in home/living space have experienced psychological and emotional distress which has impacted their ability to learn. Research should examine successful online schooling. This paper presents a case of a school that was involved in implementing the change in the education system during the COVID-19 pandemic.

## Study Objectives

The main objectives of the study were to:

- Explore the experiences of teachers in the implementation of e-learning strategies including the use of technology;
- Examine the challenges faced while employing Google classroom teaching;
- Examine the learning experiences of students and teachers through e-learning and instructional materials;
- Document the “Education in Emergency” programme initiated by the school.

## 2. Literature Review

### 2.1 Medium for effective instructions

To prevent the transmission of COVID-19, governments across the globe instituted lockdown, self-isolation, social distancing, and stay-at-home orders, resulting in nationwide school closures. To minimize the possibility of an outbreak within Bhutan, all schools were closed from 19, 2020 (OVC, 2020). Therefore, schools were dependent on remote learning strategies, which needed to provide learning strategies for all

students regardless of their geographical location. Educators were required to engage with the online environment to provide learning strategies, but many teachers lacked the required technological skills. However, teachers adapted quickly to the new reality of using technologies and could communicate with students through different online social platforms such as Google Classroom, WeChat, and WhatsApp (Verma & Wangmo, 2021). Such e-learning tools have played a critical role during the pandemic, helping facilitate student learning during the closure of schools (Subedi et al., 2020). In places where children could not connect to the internet and needed special care due to learning difficulties or disabilities, teaching and learning were ensured through the supplementation of Self-Instructional Materials (MoE, 2020). There is no one-size-fits-all pedagogy for online learning. Therefore, ranges of learning opportunities were deployed in order to maximize the benefits for students during the school closure.

## **2.2 Teachers' pedagogical knowledge and skills**

Previous literature considers teachers at the heart of the education system, where they play a pivotal role in ensuring quality learning. Nothing can replace a good teacher in a student's education (Holt, 2003; Osborne, 1999; UNESCO, 2004 as cited in Sherab & Dorji, 2013). Irrespective of the differences in gender, needs, language and culture of students, teachers can provide positive learning experiences and motivation for all students (UNESCO, 2004).

Working online means teachers have to "adapt to new pedagogical concepts and modes of delivery for which many have not been trained" (Schlichter 2020, p. 4). This is the case in Bhutanese schools, where some teachers have not been trained in the use of new and online technologies. Research indicates that training is essential if teachers are going to integrate technology successfully (Hepp et al., 2015). Therefore, research suggests that many teachers with little or no training encounter major changes in their implementation of teaching strategies (Winter et al., 2021).

The shift to using technology for online delivery of lessons will be challenging for teachers, and some teachers may not adapt to this new mode of delivery (Palloff & Pratt, 2007). However, teachers' levels of technological skills and capability to adapt are important for the quality and success of the curriculum.

Some of the online platforms used until now include Google Classroom, Microsoft Teams, and Canvas (Petrie, 2020). Teachers must be knowledgeable and skilled in sharing content from Word, PDF, Excel, audio, video, and YouTube links. Furthermore, teachers must know how to track students' progress through learning and assessment.

## **2.3 Reaching the Unreached Initiative**

Though schools remained closed since March 18, 2020 (MoE, 2020), Trashy Yangtse Dzongkhag Education Sector ensured students and teachers remained connected through various social media platforms and made home visits while coping with COVID-19 protocols. Yangtse Sherig (2020, p. 17) remarked:

With the motive to reaching out to all the students irrespective of the distances they live in, Yangtse Sherig has facilitated reaching out programs in all the schools. At the school level, children who are deprived of online learning should have a school visit... doing so allows schools to track students' progress and well-being.

This programme was also aimed at reaching out SIM to those who lacked access to the internet and television. Moreover, the programme provided the opportunity to monitor the lessons aired on television, follow up on SIM, Worksheets and provide feedback on assigned tasks (Yangtse Sherig, 2020). The programme was considered a crucial tool to gather information on issues and challenges faced by students living in far-flung communities.

#### **2.4 Conducive learning environment for students**

Transitioning from face-to-face learning to online learning in an unprecedented global pandemic can be a different experience for learners. According to Pokhrel and Chetteri (2021, p. 135), the learner with a "fixed mindset" finds it difficult to adapt and adjust, whereas the learners with a "growth mindset" quickly adapt to a newly learning environment. This indicates that learners with a positive mindset are likely to adjust to the new learning environment and experience positive and effective learning through online facilities. Similarly, learners must be self-disciplined, motivated, self-directed, and good time managers to be successful online learners (Brown, 2019).

Students' learning at home is reinforced by accessibility to computers, internet services, and other required technologies (Willis, 2020), without which students will experience a decrease in learning due to stress and a lack of motivation. According to Ertmer (1999), a lack of technologies in learning is referred to as "first-order barriers." These initial challenges were encountered by students in Bhutan. The Bhutanese media reported the acute shortage of smart phones due to the increase in students purchasing these devices when online learning was instituted in March 2020 (Yuden, 2020). In addition, many Bhutanese students never had access to a computer at home. Moreover, the online learning environment was unavailable for students who lived in a geographical area with no reliable internet network, and within these communities, children were expected to help parents and neighbors with household chores, livelihood, and farm work (Dorji, 2020). Some students may not have a suitable learning space at home. According to the findings based on TALIS (2018), throughout the Organisation for Economic Co-operation and Development (OECD) countries, nine percent of 15-year-old students did not have space to study at home. Parental support, both direct and indirect, may also be lacking (Di Pietro et al. 2020). Therefore, considering these issues, it is possible that not all students will be successful online learners.

Although research on online teaching practices is growing (Noor et al., 2020), the question of the effectiveness of its implementation remains vague. There is a literature review (Pokhrel & Chhetri, 2021) in Bhutan that focused on the impact of the COVID-19 pandemic on teaching and learning, minimal or no studies were carried out on teachers’ experiences of the implementation of e-learning platforms during the pandemic. As previously mentioned, teachers may not have the expertise to teach online (Palloff & Pratt, 2007), nor not all students will be successful online learners due to the challenges they encounter (Leidner & Jarvenpaa, 1995). This study explored the teachers’ experiences with e-learning during school closure in one lower secondary school.

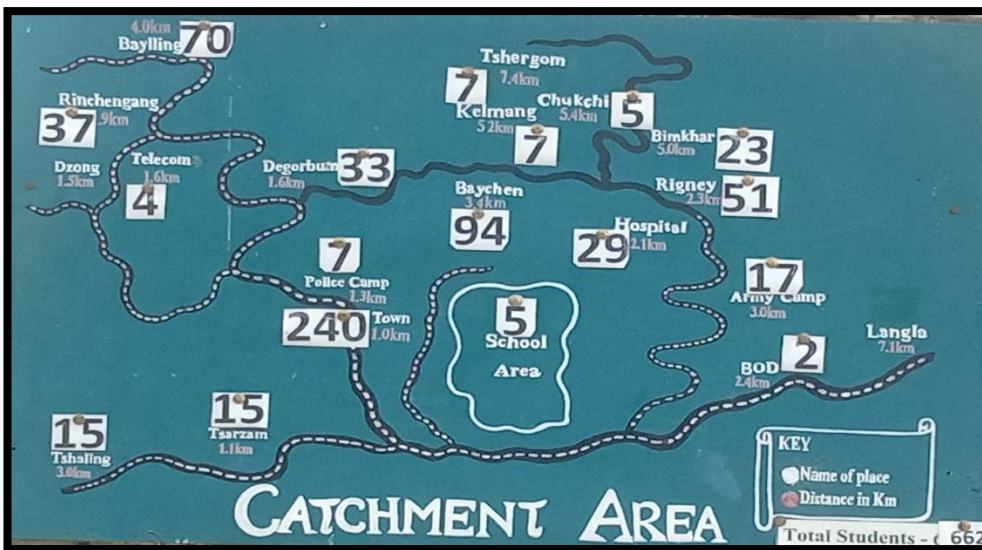
### 3. Research question

What are the experiences of teachers of case study school implementing “Education in Emergency” during the COVID-19 pandemic in 2020?

#### 3.1 Demographic information of the school

The study was carried out in a day school located in the vicinity of Trashi Yangtse town. The school has the largest number of students and teachers in the Dzongkhag. It has about 646 students and 35 teachers (male = 18 and female = 17). The school was established in 1961 and has classes from pre-primary-VIII. The school is equipped with internet connectivity, spacious computer labs, LED TVs, and overhead projectors. Teachers and students make optimum use of these learning resources during face-to-face classroom teaching. Students from various catchment areas attend the school. The detailed information is provided in Table 1 and Table 2.

**Table 1.** Map showing catchment areas.



**Table 2:** Number of students and working distance

SL.NO.	CATCHMENT AREA	NO. OF STUDENTS	WALKING DISTANCE FROM SCHOOL (KM)
1.	Bayling	61	4 km
2.	Rinchengang	29	3.9 km
3.	Dzong area	11	1.5 km
4.	Telecom	6	1.6 km
5.	Degorbum	26	1.6 km
6.	Police camp	10	1.3 km
7.	Town	247	1.0 km
8.	Tshaling	10	3.0 km
9.	Tsarzam	14	1.1 km
10.	Tshergom	10	7.4 km
11.	Kelmang	1	5.2 km
12.	Chukchi	4	5.4 km
13.	Baychen	69	3.4 km
14.	School area	10	0 km
15.	Bimkhar	37	5.0 km
16.	Rigney	55	2.3 km
17.	Hospital	30	2.1 km
18.	Army camp	6	3.0 km
19.	BOD	4	2.4 km
20.	Langla	2	7.1 km

#### 4. Methodology

An explanatory sequential multi-method approach (Cooksey & McDonald, 2011; Creswell & Clark, 2011) was employed (Yin, 2003; Stake, 1995; Merriam, 1998) to explore and understand the adaptive curriculum, e-learning and actions, and impact of EiE that was perceived to have been implemented successfully. The approach consists of a quantitative phase (numbers) and then collecting qualitative data (personal experience) (Creswell, 2013) to aid in elaborating the quantitative findings. The quantitative data and results give a "general picture of the research problem" (Subedi, 2016, p. 572) and qualitative data can "enhance and enrich the findings" (Taylor and

Trumbull, 2005; Mason, 2006, as cited in Bowen et al., 2017, p. 12). In this study, teachers' perceptions and experiences of online teaching were explored in depth during the COVID-19 crisis in the case study school. In this study, the explanatory sequential approach is deemed more appropriate in finding solutions to the research question because the nature of the study requires in-depth exploration through qualitative data based on the quantitative data.

#### 4.1 Sample and Data collection

The study employed the gender variables of teachers; 18 (51.4%) of 35 respondents were male and 17 (48.5%) were female. 4 (44 %) of 35 respondents possess 1-5 years teaching experiences, 19 (54.2 %) had 11-15 years experiences, and 12(34.2%) had 20 years and above teaching experiences. As of qualification, 5 (14.2%) had Master's, 26(74.2%) had a Bachelor's degree qualification, and 4 (11.4 %) were graduates appointed on consolidated contract. The school with maximum students, teachers with different gender, experiences, qualifications, and different levels of classes was chosen as the sample for the study. Through these variables, it is desired to explore the situations in-depth which are perceived to possess rich information. The two sample selection methods were deployed as first quantitative followed by qualitative data gathering. The study began with a survey of all the teaching staff (N=35) to explore their understanding of the curriculum, perceptions on their ability, support from different stakeholders, and actions taken to support students who could not participate in e-learning using a simple random sampling method.

To collect the quantitative data, a seven-item questionnaire was deployed using a 5-point Likert scale from 1 (strongly disagree) to 5 (strongly agree) to draw out teachers' experiences of the implementation of the EiE curriculum through the online teaching and learning process. The survey had 27 questions, and the data was collected using Google Form. As the school remained closed, the researcher used a password-protected electronic survey to safeguard the anonymity of the respondents. Google Forms and an electronic consent letter stating the purpose of the research, confidentiality, and completion time of the survey were shared with the principal and respondents through the school and personal mailing addresses. The survey data were collected from October 15, 2020, to October 25, 2020, and all respondents participated in the survey. The transcription of data for each respondent was carried out as soon as survey data were collected and initial codes were created.

In the second phase, to draw out wider perspectives or rich information about teachers' experiences with the implementation of online platforms, sampling was based on the idea of judgmental or purposive sampling (Etikan, 2017). Purposive sampling was chosen because it "is based on the assumption that the investigator wants to discover, understand, and gain insight and therefore must select a sample from which the most can be learned" (Merriam & Tisdell, 2016, p. 96). The data were collected using semi-structured interview questions with 6 of the 35 teachers who participated in the survey. Interview guides were coined based on the previous code from the first-



stage data. The purpose of the interviews, observations of "Reaching the Unreached" initiatives, and document analysis such as minutes of meetings, SIM, and assessment records was to obtain a broader perspective and rich information. Interviews were administered online for 30–40 minutes per respondent through TelegramApp from November 15, 2020, to November 30, 2020. All ethical norms were strictly followed throughout the journey of the study.

Prior to the implementation of the survey questionnaire, pre-testing was carried out in the case study school to authenticate the validation. According to Dargay and Gyeltshen, (2021, p. 17), pre-testing helps in the following ways:

1. Identify the question sequence.
2. Reviewing questionnaire.
3. Aids in making necessary corrections before the survey is actually conducted.
4. Thresh out unclear instructions, spelling mistakes, and ambiguous terms.
5. Confirmation of asking the right questions and estimate time bound

For validity and reliability, the researcher applied some of the strategies suggested by Merriam (1998), cited in Creswell (2007, p. 208), such as "member check, peer examination, triangulation, and research bias." To check credibility (especially with six interviewed teachers), they were asked to clarify their responses that were reflected in previous data. Respondents are referred to as T1, T2, T3,.. and T35, and for interviews, Teacher A, Teacher B,...., and Teacher F.

## 5. Data Analysis

In the first phase, survey data were gathered and analysed by recording them in an Excel spreadsheet for statistical analysis. For the quantitative data, the frequencies of responses on the data were calculated, converted into means and standard deviations, and then compared to examine the degree of understanding, perceptions of ability, supports, and actions and impact of EiE. In the second phase, in-depth interviews, observations, and documents were analysed through coding, which is in line with seven themes. Coding methods employ processes that generate themes embedded in the data, in turn suggesting thematic directionality toward categorizing data through which meaning can be negotiated, codified, and presented (William & Mosar, 2019). To compare and contrast data gathered from different sources, a multi-triangulation approach (Cooksey & McDonald, 2011) was employed.

## 6. Findings and Discussion

Findings from the survey, interviews, observations, and document are discussed through the seven predetermined themes: a) awareness on Adaptive Curriculum; b) teachers' level of preparedness for using e-learning tools; c) students' level of

preparedness and support for e-learning tools; d) support from the school in implementing EiE; e) support from parents in implementing EiE; f) support from the Dzongkhag Education Office in implementing EiE; & g) perceptions on the "Reaching the Unreached" initiative.

### 6.1 Overview of the quantitative data

An aggregate of seven measurement scales was designed to explore the EiE. Individual items were measured employing a five-point Likert scale-1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree and 5 = strongly agree. The mean and standard deviations for each these scales are shown in Table 2.

**Table 2: Mean and Standard Deviation of different scales**

SL #	EXPERIENCES DURING EDUCATION IN EMERGENCY	MEAN	SD	INTERPRETATION
1	Awareness on Adaptive Curriculum	4.42	0.15	Highest
2	Teachers' level of preparedness for using e-learning tools	3.51	0.15	High
3	Students' level of preparedness & Support for e-Learning tools	2.73	0.14	Moderate
4	Support from school in implementing EiE	4.47	0.05	Highest
5	Support from Parents in implementing EiE	4.12	0.17	High
6	Support from Dzongkhag Education Office in implementing EiE	3.95	0.22	High
7	Perceptions on "Reaching the Unreached" programme	3.85	0.25	High
Note: Interpretation for the score of the items were from 4.21-5.00 as Highest, 3.41-4.20 as High, 2.61-3.40 as Moderate, 1.81-2.60 as low and 1.00-1.80 as the Lowest.				

As reflected in Table 2, the mean for all the scales is above moderate to high, and two scales had the highest, indicating that the school and teachers were prepared to implement the "Education in Emergency" programme successfully to enable students to continue their education during the school closure. However, comparative analysis of the seven scales showed that student support for e-learning had the lowest score (M = 2.73; SD = 0.14), followed by degree of preparedness for using e-learning tools (3.51; SD = 0.15). The two highest scales were support from the school in implementing EiE (M = 4.47; SD = 0.05) and teachers' awareness of the developed curriculum (M = 4.42; SD = 0.15). Individual measurement scales are further explored in the next section with interviews, observations, field notes, and document analysis.

## 6.2 Presentation of themes and discussion

This research was guided by the seven predetermined themes. Based on the data from the survey, interviews, observations, field notes and school documents, themes were analysed as indicated above.

### 6.3 Teachers' Awareness on Adaptive Curriculum

Among the seven scales measured through the survey questionnaire, the teachers' awareness of the adaptive curriculum designed by the Ministry of Education in response to EiE was the second highest ( $M = 4.43$ ;  $SD = 0.15$ ), indicating that teachers were familiar with the contents that they were required to teach and the kind of assessment needed for fair assessment. This also shows that teachers are clear and confident in implementing a new curriculum during the school closure. This finding corroborates the findings of the interviews, observations, and documents. Prior to the school closure, teachers were exposed to an array of programmes with the objective of making changes in the curriculum as required. Some of the critical programmes were: the conduct of a Professional Learning Community (PLC) within the subject departments; general meetings organized by the school to inform the curriculum change; discussions among colleagues; and school-based in-service programmes on the mode of assessment by the academic head (Trashiyangtse Lower Secondary School [TYLSS], 2020). Even after the closure of the school, teachers had unanimously agreed to report to the school every week to discuss challenges and issues they encountered that related to the curriculum. The document analysis's finding (Staff Meeting Minutes) also illustrated how teachers were concerned about the Adaptive Curriculum.

...When doubts engulf teachers, Academic Head played proactive roles in clearing doubts by making direct calls to the erstwhile Royal Education Council (REC) or calling other schools. He also made sure that every teacher went through the curriculum in all subjects that the teacher teaches. A considerable amount of time was spent discussing different key stages of the curriculum.

Evidence indicated that teachers ensured they were well-equipped and informed about what they were doing. Though they had adaptive curriculum in soft copy, most teachers preferred to have hard copies of each curriculum they taught. They obtained their own hard copies from other sources as the school was not in a position to provide a hard copy to each of the teachers owing to a lack of resources. A teacher who believes in helping others print out a hard copy stated:

I am exploring different sources for printing a few copies for my friends who do not have hard copies. I prefer hard copies because they are easier to use; soft

copies are more difficult to read and hold my attention less (Interview, 10/17/2010).

This initiative taken by a teacher is worth mentioning, as most teachers depend on the school for the provision of all resources. Such initiatives promote collaboration, sharing, and team spirit in the school.

#### **6.4 Teacher's level of preparedness in using e-Learning platforms**

The survey data reveals that teachers' level of preparedness for using e-learning platforms was the second lowest (M: 3.51; SD: 0.15). Not being able to post the required materials, assess students' learning and assignments online, and design a variety of activities was seen as lacking preparedness in adapting to remote teaching and learning.

Interview findings further support the survey results on the degree of preparedness for using online platforms. For example, T5 opined, "I am a digital immigrant, and I am very poor at using technology. I am really challenged by the situation... It's really difficult" (interview, 10/21/2010). Another teacher commented, "I take pictures from the book and upload materials in the Google classroom for students... for assessment, I put tick mark..." "I had trouble uploading back to students after the assessment" (T2). Furthermore, findings from the observation records indicate that teachers frequently post materials directly from the text. This demonstrates a lack of technological skills and appropriate online teaching materials. It was observed that:

While assigning activities to students, teachers directly upload whole texts or snap photos from SIM. Teachers simply put big tick marks on or underline words when correcting students' work (via Google Classroom or WeChat) before returning to students. Teachers are faced with lots of challenges when designing a variety of activities. Some depended on other colleagues. (Field notes)

On the other hand, findings from the interview indicated that teachers are very optimistic since challenges they encountered while migrating from traditional face-to-face teaching to online have provided opportunities to learn new things in the world of technology. This finding backs up earlier research by Pokhrel and Chetteri (2021), which found that online learning provided an opportunity to teach and learn in ways that were not possible in the traditional classroom setting.

#### **6.5 Students' level of preparedness & Support for e-Learning tools**

Of the seven themes, the survey questionnaire on students' level of preparedness and support for e-learning was the lowest (M = 2.73; SD = 0.14), showing that students are

ill prepared for e-learning through Google Classroom or other platforms such as WeChat, telegram, radio, and television during the implementation of EiE. Moreover, interview findings substantiate the survey findings on the lack of support from students. Teachers expressed that most students do not respond to the Google Classroom forum even after being called personally or by their parents. For instance, it was shared:

When I call, they [students] agree to follow up with the task assigned to them, but in vain. I provide additional time for them to submit their work, but they don't. When I call, they respond that they submitted it, but I don't get it. It is really difficult with most students. (T3)

This corroborates the previous findings of Yuden (2020) and Dorji (2020) that the unavailability of smart phones and making students help in household chores and on the farm prevents students from participating in e-learning. In contrast, it was noted:

Most students do not own personal phones. They either use their father's or mother's phone. When their parents go to the office or elsewhere, they are cut off from learning. Few parents do not possess a smart phone but they [students] manage to send their work from a friend's phone. (Field notes)

There are many reasons why students do not fully participate in e-learning, including not responding to tasks or other reading materials set by the teachers online. According to T5, "some children reside in a place where internet connectivity is weak, and mostly they [students] lacked data to explore in a Google classroom forum" (Interview, 10/22/20). These findings support those of Winter et al. (2021), who claimed that such critical factors were associated with poor learning online during the pandemic.

## **6.6 School's support in Education in Emergency Programme**

The support rendered in implementing the Education in Emergency programme in the school scored the highest mean (M: 4.47; SD: 0.05), indicating that the school had a clear vision of how to navigate the plans and programmes successfully as intended by the Ministry of Education and the Dzongkhag Education Sector. This finding was echoed in both the interview and observation data. The school had planned many programmes aimed at supporting teachers and students so that their teaching and learning during the pandemic would be uninterrupted. Some of the main programmes included; school-based in-service Programmes (SBIP) on the changed curriculum, becoming familiar with different key stages of the adaptive curriculum, alternative modes of assessment in the new adaptive curriculum, meetings of subject department heads, and scheduled staff meetings to discuss issues and challenges faced by teachers while implementing the adaptive curriculum. When the school received the Adaptive Curriculum, the academic head immediately initiated a staff meeting to inform

teachers of the change. The observation of the staff meeting data also illustrated how the academic head's deliberation gained the attention of the teachers.

The academic head notified all teachers through written notification that there would be a staff meeting on the change of curriculum. The meeting began with the power point presentation of various key stages. The adapted curriculum is based on literacy and numeracy at key stages I and II and a theme-based curriculum for key stages III, IV, and V. Topics covered in each key stage and assessment and examination modalities were also presented in subsequent presentations. This clear organization suggests careful planning and implementation of EiE. (Field notes)

Some other programmes that supported the effective implementation of EiE by teachers included scheduled Professional Learning Communities (PLCs) within subject departments and SBIPs initiated by the Master Lead Teacher. Such programmes were conducted with the intention of developing the professional competence of teachers so that they do not experience issues and challenges in implementing the EiE curriculum. The existence of a Teacher Resource Center (TRC) in the school was helpful in this situation. Adequate learning materials required by teachers were provided by the TRC. It was observed that the TRC administrative assistant was mostly busy printing and photocopying various materials for teachers. Observing the packed TRC, a researcher noted:

Interestingly, teachers were photocopying worksheets for those students who were unable to access the online materials and teaching. Some were producing additional SIM for providing to students, and a few were printing the adaptive curriculum. TRC ensured that adequate learning resources were available at all times. (Field notes).

The findings from this study suggest that adequate learning resources were provided to teachers to make learning more effective and support those students who had difficulty accessing the online learning environment. This result is consistent with the findings of Sinchuri (2013), who claimed that teaching-learning materials play a critical role in making lessons successful.

### **6.7 Perceptions on the “Reaching the Unreached” initiative**

The perception regarding "Reaching the unreached" initiated by the school had the third-lowest score (M: 3.85; SD: 0.22). This may be attributed to the distance that teachers were required to travel to meet with students who could not access the online learning materials. The journey to meet with these students facilitated contact teaching and allowed the teachers to assess their learning, which encouraged these students to learn. Interview data indicated that teachers showed a willingness to visit students at

home and assist them with their learning. The long distances over which teachers were required to travel were a challenge, but they managed to motivate students to keep learning. At times, teachers were not able to meet students, who sometimes ran away when the teachers arrived. For example, T2 spoke of personal experience:

Prior to my going for a visit, I inform them through a phone call that I will come the next day. When I arrive at their house, I am surprised to find them not there. Even their friend doesn't know their whereabouts. We carry materials for them [students], and when we don't meet, it is just a burden. We have to carry it back. It is really disheartening when we fail to meet them [students].

Similarly, T4 commented, "most of the time I don't meet students during the day because they are found working in the farms or on construction sites." This indicates that teacher home visits have not been as fruitful as teachers anticipated while implementing the program. This experience is in line with the findings of Dorji (2020), who was of the view that students were obliged to work in the fields, earn a living, or work in construction sites, which prevented them from participating in online learning. On the contrary, there are some teachers who have reaped the benefit from this programme as they could meet their students, provide materials such as SIM and other work sheets, and assess their learning. Students are encouraged to learn more when they meet teachers (T1 and T5).

Triangulating the interview data with observation records and school documents confirmed that teachers faced a variety of challenges, such as having to travel longer distances in their own cars and travelling during inclement weather, which contributed to their despair at times but motivated them to continue with the program. For instance, "all teachers agreed to adhere to the catchment area schedules as most students benefited from the programme" (Field Notes).

### **6.8 Supports from parents in implementing EiE**

As indicated by the high mean (M: 4.12; SD: 0.17), and further supported by interview data, parents appeared to support the implementation of EiE, making the task easier for teachers and students in the e-learning process. Educated parents have been playing an active role in facilitating teaching, helping children solve assigned tasks, and uploading and downloading the resources shared online by teachers. There are some uneducated parents too who were concerned about their children's learning. The finding from the interview data revealed that there is a significant difference between students who belong to concerned parents. For instance, T2 stressed, "concerned parents call us when we miss in assigning tasks or anything that is not clear." Another teacher remarked, "some parents are very concerned, and they ask for more reading materials for their children. And parents insist that their children complete all assigned

tasks" (T6). Furthermore, interview findings also affirm that parents support their children by providing the required learning materials and a personal phone with internet access for e-learning purposes. Additionally, findings from observational records show that parents support children to do the assigned tasks and submit them on time through various means, even if some learning platforms such as Google Classroom don't work, they use other media such as WeChat and Telegram. Even where there were no e-learning facilities, parents made sure that their children did the assigned work on time, whether it was on SIM or worksheets. It was observed that:

During the home visit by teachers, parents ensured that either the father or mother stayed home with the children to meet the teachers. He or she assists students in presenting their answers to teachers. Parents feel happy when they are told that their children are doing well. They feel encouraged. (Field notes)

Observations also revealed that amidst the financial crisis faced by parents at times, parents still regarded it as an obligation and explored ways to foster their children's e-learning. Such positive parental support for learning is encouraging. The findings highlighted the importance of parental support in children's learning, as parental engagement can have a positive impact on the development of children's cognitive skills (Driessen et al., 2010).

## **7. Recommendations and Conclusion**

Owing to the findings of this study, several recommendations are suggested that might benefit other schools and relevant agencies.

First, findings from this study indicated that the increased support provided by the school in implementing Education in Emergency (EiE), teachers' awareness of Adaptive Curriculum and support from parents in successfully navigating EiE during the pandemic resulted in a positive learning experience for students. Support programmes such as discussion on the change of curriculum (Adaptive Curriculum), scheduled PLC within a subject department, and discussion among colleagues during leisure time showed increased potential to successfully implement the EiE programme. This level of support is noteworthy and develops a culture that positively impacts teachers, students, and the community.

Second, the findings of this study are consistent with previous research by Yuden (2020) and Dorji (2020), which discovered that not all children own smart phones and that many children are involved in household chores. This has implications for the successful implementation of the EiE programme. A critical support system with parents, the education office, and the school needs to be established. Moreover, teachers have to be provided with regular professional development programmes on e-learning platforms with a specific focus on assessment and designing appropriate activities online. The better trained the teachers are, combined with well-designed online materials and activities, the more successful the implementation of EiE



programs will be. Thus, the more time invested in professional development programmes for teachers to effectively address change, the more likely the outcome will be enlightened citizens in Bhutan.

Third, the school had initiated various activities and programmes that have the potential to impact both teachers and students during challenging circumstances such as the COVID-19 pandemic. Such values have the potential to serve as a critical foundation for addressing some pertinent issues that may increase some difficulties in implementing change in the system.

Fourth, teachers need to be appreciated and thanked for unanimously agreeing to visit the homes of those children who live in remote areas and do not have access to the online learning environment. Such care and support demonstrated by the teachers is greatly appreciated by His Majesty the King (2020).

This study could not consider the participation of parents and students due to the limits of time and space. Future studies should include the perceptions of students and parents, as they would provide further insight into the issues and challenges encountered by parents and students during the COVID-19 pandemic. Perhaps it would be interesting to validate students' level of learning when they actually progress to the next level. This study has provided a platform to showcase the evidence of the proactive roles played by the school in implementing the Education in Emergency programmes which assisted the students to continue their learning during the pandemic and the community at large.

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