Equality in Online Education during COVID-19: Challenging the Educational Needs of Ethnic Minority Students in Vietnam

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Abstract

[**Purpose**] This study analyzes the inequalities of ethnic minority children to adapt to online education. This is also a challenge to the whole education system in Vietnam before the 4th COVID-19 outbreak is considered to have a serious impact on the economy and society of Vietnam.

[Methodology/Approach/Design] A case study is conducted in a cross-sectional form with 50 high school students and 10 teachers of the boarding ethnic minority school in Nam Pu district, Dien Bien province of Vietnam. Questions were conducted for students, teachers, and school administrators.

[Findings] The lack of WiFi catchers such as laptops, tablets, and smartphones along with poor infrastructure are the main factors affecting the effectiveness of online learning.

[Practical Implications] Equality in education is the sustainable development goal adopted by the United Nations in 2015. Geographical differences and economic conditions are factors that directly impact the effectiveness of students' online learning in the context of COVID-19 19. The Government of Vietnam should have an effective financial policy to provide connectivity for poor students, reducing the gap in access to general education services for online classes that are ethnic minorities.

Keywords: Equality. Online Education. COVID-19. Students. Vietnam.

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INTRODUCTION

Vietnam has 54 ethnic groups, of which Kinh ethnic groups account for the majority with 85.3% (82,085,729 people), while the remaining 53 ethnic minorities have a rate of 14.7% (14,123,255 people). The right to education is one of the most important human rights, in recent years, through policies, the Party and the State have supported and invested especially in the cause of education and training in ethnic minority areas. (Emilia Goland et al., 2012; X. N.C.M. Nguyen & Nguyen, 2019). This is expressed in the Constitution and a series of legal documents, such as the Law on Universal Primary Education, the Law on Protection, Care and Education of Children, the Law on Vocational Education, the Law on Education, and the Law on Higher Education. Many mechanisms and policies on prioritizing investment, education development, and training of ethnic minority areas are promulgated by the State, such as policy groups on educational contents and programs; policy groups to develop networks and scale of specialized schools in ethnic minority areas; group of investment policies and support on educational development facilities in ethnic minority areas; (DeJaeghere et al., 2015; Giacchino-Baker, 2007) policy group for teachers, education managers working in specialized schools, in areas with particularly difficult socio-economic conditions; priority policy group for learners who are ethnic minorities. In addition to the central policies, local governments of provinces with ethnic minority students have also issued separate support policies from local budgets.

Ethnic minorities often reside in uplands, and borders, belonging to traffic communes difficult due to the large slope, in the rainy season most of these localities are isolated from the surrounding area; lack of infrastructure and health services does not meet the health care needs of the people. (T. Nguyen et al., 2017). The special characteristics of this group are slow economic development, low per capita income, high poverty rate, people's awareness is still limited, and the ability to integrate and apply science and technology to production has not been effective. In addition, due to the small population, scientific knowledge is still limited. It is common for people to come from the same background, so they also create child marriage and inbreeding, leading to many students with disabilities, and slow cognition. has had a significant impact on improving the quality of human resources of ethnic minority people. (Reviews & 2000, 2020)

Intending to create conditions for the development of quantity and the quality of education for students, the Government of Vietnam has policies to prioritize enrollment and learning support for children, students, and students of ethnic minorities. Implementing the above policies, school and class facilities in villages and villages with ethnic minority students have been invested and built; The quality of teachers and education managers in educational institutions with ethnic minority students has been raised. The rate of mobilization of ethnic minority children and students to school increases, especially the rate of mobilization of ethnic minority preschoolers to participate in classes; the increase in the rate of mobilization of children and ethnic minority students to school has contributed greatly to the implementation of universal education, strengthening the results of universal primary education, universal secondary education in provinces with ethnic minority students. Students of ethnic minorities are allowed to study in schools 2 times a day. (Asia & 2019, n.d.; Walle et al., n.d.) The specific educational contents of national culture, preserving traditional cultural identity, and after-school activities are strengthened. The teaching of Vietnamese to ethnic minority students has been focused on, and the quality of comprehensive education for ethnic minority students has been raised. (E Goland et al., n.d.)

Education and training play an important role, both as key and as a driving force in the country's economic and social development. It is a prerequisite for contributing to economic development, socio-political stability and especially raising awareness and indicators of human development. However, in the context of digital transformation in education to adapt to the COVID-19 19 pandemic, ethnic minority children in Vietnam still have many challenges and risk being left behind. (Peoples et al., n.d.)

LITERATURE REVIEW

The COVID-19 pandemic is having a huge impact on children in many aspects, including the right to study and social welfare in schools – one of the most fundamental rights enmitties of the United Nations Convention on the Rights of the Child. That practice requires individual national efforts as well as global cooperation to protect the right to attend school and ensure learning and development conditions for children during and after COVID-19.

No Schooling and Inequality Online

Over the past year, the COVID-19 pandemic has not only threatened human lives but also led to serious problems for education around the world. Since the beginning of 2020, 130 countries have been forced to close schools and switch to online teaching. Many schools close and open again, then close again as the epidemic becomes more and more complicated. About 990 million children and adolescents worldwide are affected. The number of countries that also open schools is completely counted on the fingertips such as France, Switzerland, Belarus, Hungary, and Vietnam. (Hebebci et al., 2020; J Pittman et al., n.d.) So, in the 21st century, the era is considered an era of technology and innovation, but

the right to learn, a right considered to be a fundamental one for humankind, becomes more distant because of a pandemic in which man is defenseless and unable to turn back. This number is still changing day by day and we don't know what's ahead. (Prospects & 2020, 2020)

Access to online education in families, and other social groups is very different. Groups that lack equipment, networking, technology knowledge, fascinated people, and a convenient environment to access online education are extremely difficult. During the lockdown in England, the number of pupils in private schools studying online was twice as high as public school pupils. Every day, children in well-off families spend 30% more time studying online than poor students. (Mavin et al., n.d.; Mohan et al., n.d.) Even in the public sector, students from well-off families, who have a better learning environment, are more likely to receive positive support from schools. From July 2020, students from poorer regions and households tend to miss more school. Watchdog Ofcom estimates that more than 1.1 million children in the UK (9% of all pupils) are unable to have a laptop, desktop, or tablet, and more than 880,000 of them live in families with only one Internet connection from a mobile phone. To maintain their learning, countries have made efforts to provide online solutions or other media channels such as television and radio. The expected prospect is that even at home, students still "go to class" every day to meet teachers. Teaching and learning activities are maintained regularly and effectively. However, the reality is never "like a dream" (Wenham et al., n.d.)

In addition to the same reasons in developed countries, in developing countries, inequality also stems from the level of technology used by teachers. Recent surveys in China show that because rural teachers are not used to using technology platforms, online classes in rural areas are conducted by teachers in the city. Students are not familiar with teachers and new ways of learning, while online teachers do not understand local students well and teach at a faster rate than their ability to absorb. (Education & 2021, n.d.) Despite the state's efforts to limit the disruption of teaching and learning during the pandemic, the quality of education is not guaranteed, even causing the quality of education in rural areas to decline. Most rural families complain about online learning. They found that with this form of learning, teachers had little interaction with students, poor access quality, and no supervisor or academic support. This deepens the educational gap between rural and urban areas. Similarly, a preliminary survey by Malaysia's Ministry of Education in March-April found that 37% of children do not have any electronic devices and only 15% of students have personal computers. (Bozkurt et al., n.d.; Joyce Pittman et al., 2020)

For families with conditions, such as highly intellectual parents, there will be no problems when their children need to learn online: computers are always available, internet connection is stable, and parents are qualified to support them. But whether in Vietnam or any other developed country, there will still be a scene where the brothers and sisters in the house are sharing a laptop or tablet to learn lessons, connecting at the time when not. Many families don't even have the tools to access the Internet. (P Iyer et al., n.d.) If you study on the computer, you will listen to lectures on television, or while one is studying, the other plays. In addition, when not studying, the oldest child in the family will have to take care of you, to cook, and to do housework. Their parents are completely absent because they still have to go to work, rolling to earn money to pay for life. Or if you are forced to quit your job, soon you will be in a state of crisis and domestic violence may occur. There is no guarantee that children in this situation can maintain their education. (Padmini Iyer et al., 2021)

Whenever outbreaks break out, schools are always one of the first places to be closed. This fact causes children to lose a healthy environment to develop knowledge, physically and mentally. School closures have been even more seriously affected by the pre-pandemic group of children who have encountered barriers to access to education or who are at risk of not being able to attend school for a variety of reasons such as children with disabilities, students in remote areas, asylum seekers, asylum seekers and children in disadvantaged families, losing their jobs. (Akers et al., n.d.)

When schools close, online learning through the Internet is the leading solution implemented by education. However, the crisis has shown a large disparity in the ability to prepare for emergencies to maintain the right to continuous learning for children because of the conditions of internet access for students and the supply of learning materials and equipment between countries, the area has a difference. The World Bank recognizes that the loss of education caused by COVID-19 will increase inequality and have long-term consequences for both individuals and society. (Park & Inocencio, 2020) Especially, for families with special circumstances, the likelihood of them returning to school after the pandemic is extremely low. UNESCO estimates that 24 million children will drop out of school, and if countries do not see education as one of the pillars of recovery from the pandemic, it will deepen inequality, poverty, and social divisions. (D Gill et al., n.d.; Park & Inocencio, 2020; Sociologie & 2020, n.d.)

UNICEF says that at least one-third of the world's children (about 463 million children) were unable to learn remotely when schools were closed because of COVID-19. Through the results of the survey, which studied more than 100 countries, the report points to the limitations of distance learning (through broadcasting and in-stroke), showing deep inequalities in access to education. Despite a large focus on online platforms, many public schools do not have

computers or the technology and equipment to carry out teaching. (Fabrizio et al., 2020)

According to theU.S. Centers for Disease Control (CDC) data for September 2020, one in five children in the world's largest school-age economy do not have access to computers or high-speed internet at home. (Asanov et al., n.d.; Hjálmsdóttir et al., n.d.) In China, many students have to walk for hours in search of mobile signals on the top of the mountain to be able to have internet. Children living in the most disconnected places in the world will face using the internet at a much lower rate. Students in countries that are only connected to the internet in some regions (such as Bangladesh, India, Mi-an-ma, etc.), do not even have hope of learning online. (Diplomat & 2020, n.d.; Madgavkar et al., 2020)

According to surveys by many organizations, online learning also leads to the risk of data privacy invasion among children. Children's educational data is much less protected than health data. Although children's school data (names, home addresses, behaviors, and other personal details) when abused can be harmful to children and families, most countries do not currently have child data privacy laws.

Increased Risk of Abuse at Home

Not only is it a place to acquire knowledge, but for many countries that are or are underdeveloped, schools are also a place to provide essential meals and health services for children. According to UNICEF, nearly half of the world's students (about 310 million children) need to go to school for daily meals, including 100 million in India, 48 million in Brazil, and 9 million in Nigeria and South Africa. (Deborah Gill et al., 2020; Park & Inocencio, 2020)

UNICEF states: "In addition to learning, schools provide children with important health services such as immunization or nutrition, and it is a safe and supportive environment. However, these services were "suspended when schools were closed." That's why, according to UN agencies, long-term school closures can have devastating consequences for children. In addition to not being able to study or benefit, children are more likely to be physically and emotionally abused. Their mental health is also affected. (Wright et al., 2020) Children are more vulnerable to sexual abuse, and child labor, and less likely to escape poverty. For the most disadvantaged, not going to school "even for a few weeks" can lead to lifelong negative consequences. U.N. High Commissioner for Human Rights Michelle Bachelet noted that because of the absence of school, "children are increasingly being physically and psychologically abused, pushed into work, marriage, exploitation, and trafficking. And for many girls and young girls, the

biggest threat is where they need to be safest, in their own homes." (Azcona et al., 2020)

The UN also pointed out that the longer children leave school, the less likely they are to return and at least 24 million children will have to drop out of school because of the COVID-19 pandemic. By 2020, the number of children living in poverty will increase by 142 million. Many students may never return to school, others spend more time in front of screens and more exposure to inappropriate content and online predators. (Studies & 2020, n.d.)

METHODOLOGY

This article is based on the aggregate data on the results of digital transformation in education in the northern midlands and mountainous regions in Vietnam. The results of the case study were conducted with 50 high school students from the boarding ethnic minority school in Nam Po district, Dien Bien province of Vietnam. Nam Po High School with a size of 350 students is divided into levels 10, 11, and 12. We surveyed online with a sample that was specifically statistics as follows:

Number of Surveys	Grade 10/12	Grade 11/12	Grade 12/12	Total
High School Students	15	15	20	50
Teacher	3	3	4	10
Total				60

Table	1 –	Conducted	Surveys.
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The collection of student information is conducted through zoom online learning software. Questions discussed:

- Obstacles to online learning for students
- Causes of difficulties in accessing online learning services
- Strategies for students to learn effectively online

For teaching teachers, a group discussion is conducted with 10 teachers including school administrators and in-person teaching teachers. The questions discussed are focused on price:

- Educational effectiveness of online learning
- What challenges impact the outcome of online teaching
- The teacher's actions to make online learning effective

Periodic educational tests are considered the result of a comparison between online and in-person learning. The score of the test is the necessary tool to evaluate the effectiveness of this form of learning.

EXPERIMENTS AND RESULTS

Adaptation in Students' Online Learning

In the context of COVID-19 response, online learning is not only an alternative to in-person teaching, to ensure the safety of disease prevention, not disrupting the learning program, but this method also contributes to promoting digital transformation in the education sector, increasing the use of information technology, information media, and the internet in teaching and learning, develop the capacity of self-learning instruction, self-training of teachers and the ability of students to self-study.

In Vietnam, there are a total of 316 boarding schools in 49 provinces/cities with a total of 109,245 boarding students. Boarding ethnic minority schools have organized the application of knowledge and skills in management, teaching, and education of students to be acquired through capacity-building training courses for the management staff and teachers of specialized schools of the Ministry of Education and Training. Due to the complicated situation of COVID-19, organizing online teaching and learning for students is considered the optimal solution. However, one of the most difficult problems in online learning is that many students in difficult areas lack the means and equipment to learn.

"The school has just remodeled, disinfected classrooms, preparing to welcome students back to school, the locality appeared an outbreak in the community, must implement social distancing throughout the district at the request of the Prime Minister, but online teaching and learning are not feasible. Currently, only about 50% of the students of the school have access to this method of learning, the remaining students due to family difficulties, are unable to buy smartphones or computers and internet subscriptions for their children to study. The school hopes that in about 10 days, students will be able to go to school normally". – Schoolmaster.

Around the time students miss school due to COVID-19, the Ministry of Education and Training has implemented online teaching. This is an alternative to classroom learning, to ensure that students are both safe at home from epidemics and without losing knowledge. However, for online learning to go smoothly, many factors are needed. The most important thing is to have the internet.

"It's hard to teach online in my school. Because students in the highlands have no phone waves, no WiFi, they can't teach. If you teach, only the friends in town can learn". – Teacher

Online teaching, hybrid teaching, and blended online with face-to-face teaching are the solutions chosen by many countries and educational institutions during COVID-19. In particular, online teaching methods are quite effective that teachers and students need to apply in an oriented way to convey knowledge to students in a flexible way, helping learners to follow the lecture circuit and achieve the goals of lessons and subjects. Online teaching has become and will become a trend that has been strengthened, strengthened, and gradually become an inevitable trend, the main task in the tasks of implementing the school year is to adapt to the new situation.

The Ministry of Education and Training has developed a set of manuals and video tutorials to support parents in nurturing, caring, and educating when students are at home. Localities are flexible and creative in organizing and mobilizing the participation of education managers, and teachers to build support tools, repositories of materials, shared online learning materials, and learning materials to implement the scenario of implementing early childhood education programs in the context of COVID-19. Learning warehouses (interactive software, online materials, video banks) posted for exploitation on the internet through websites, such as Zalo, YouTube, and Facebook, have created conditions for early childhood education institutions to use or share between institutions in the same area.

For secondary education (including middle and high school), online and television teaching has been implemented following the needs and actual conditions of the COVID-19 epidemic and following the conditions of each school, ensuring a quality online teaching organization, make sure to follow the local school year plan. Schools have been creatively flexible in using active support software and applications in educational activities such as Microsoft Teams app to organize online teaching, using Google form to assign assignments to students; professional groups of schools develop plans, review contents, and banks posted on the school's website for students to follow the study of lessons and review. In particular, some localities in mountainous, remote, and commune areas have directed schools to photocopy lessons and transfer them to each village for students who do not have access to online learning. Surveys show that the majority of students at the school use smartphones to learn. However, not all students have smartphones to attend online sessions.

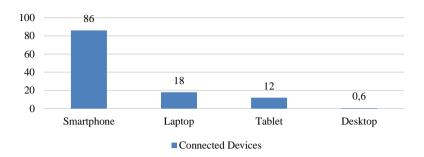


Chart 1 - Online Learning Connection Device.

Learning activities that take place under the direct influence of teachers include: receiving tasks and learning plans set by teachers; performing actions and manipulations of learning awareness to solve learning tasks; self-regulating your learning awareness activities under the influence of teacher testing; and analyzing the results of learning activities under the guidance of the teacher. Insufficient learning equipment in online learning is the biggest obstacle for students at the school.

"Many families here are very difficult. We strive to guide each student's family, share online learning stories or work together to support them in accessing knowledge in the 2021-2022 school year. Here, all households work, so only about 25% of families are eligible for their children to study online" – Teacher

"I can't continue my studies because my family is in remote areas, I don't have the means to support my studies like computers or phones like my friends in the city." – Student

In terms of the volume of knowledge, the process of online learning is also difficult to communicate to students. In the view of the Ministry of Education and Training of Vietnam, in the face of the COVID-19 epidemic, students are unable to attend school due to social distancing, so high school training programs will reduce the amount of knowledge compared to the situation before the epidemic. However, the survey found that the acquisition of knowledge in online learning is quite different from in-person learning.

"The hardest part of learning online is that we don't have internet or WiFi at home. He and his brother had to walk to the preschool 1km from my home to

use WiFi and download the documents that the teacher sent. My classmates or near my house don't have internet access at home."

"We teach at the school point, want to have a phone signal to call our family, have to go to the field and stand at a high position to detect the waves. Such a situation is very difficult to connect with students to teach online" – School Manager

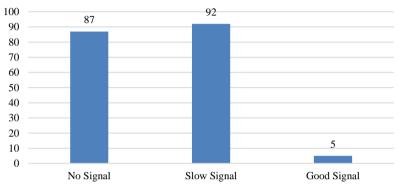


Chart 2 - Mobile Quality Rating

In the 2021-2022 school year, Nam Pu District High School conducted a survey of students about online learning, finding that about 20% of students can borrow their parents' smartphones to study. About 95% of students are in the minority, their families are agricultural, low-income, and do not have the conditions to equip the means of means such as smartphones or computers to learn online. Therefore, learning online will be very difficult. In addition, in villages, internet transmission lines are still limited, and phone waves are unstable, so knowledge acquisition activities are significantly affected.

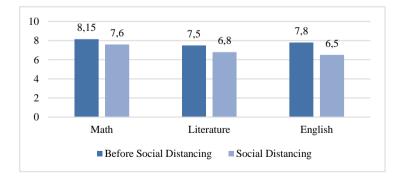


Chart 3 - Compare Scores of Subjects Before and After Social Distancing

HUU, N. D; TAN, L. V; LUVEN, P. T. Equality in Online Education during COVID-19: Challenging the Educational Needs of Ethnic Minority Students in Vietnam. The Law, State and Telecommunications Review, v. 14, no. 1, p. 31-51, May 2022.

The results showed that the differences in online learning before and after the gap were significant. The difficult group with the most internet-related responses (there are 45 comments) includes the results of unstable connection during learning, power outages, poor road speed, and use of 3G due to the absence of WiFi so the cost is high. This is the main reason why online learning becomes more difficult and also one of the reasons why students lose points because when lecturers enroll, students lose connection to the classroom. The second reason is the problem of using the system, and receiving information, 49 opinions of students said that this is their difficulty. Problems with assigning assignments, doing assignments, and sending them to the teacher for testing. The omission of a few grade-scoring learning activities makes students feel confused during online learning.

Due to the sudden epidemic, some instructors still use software such as Zoom or Google Meet. This makes it difficult for some students to grasp the subject content when studying online (there are 47 opinions) students who think that online learning is not effective, not easy to absorb as well as difficult to system knowledge while studying. The reason for this difficulty may be that students have not adapted to the new learning method when there is a sudden change or because students are not used to self-study or self-study through technology devices.

The fourth group of causes is a lack of interaction with faculty or inappropriate teaching methods. This is the reason for the 45 suggestions from students about finding it difficult to study. Some teachers have little interaction with students through channels, do not answer questions for students promptly, do not detail grade correction enough, and do not follow the student's learning process, leading to students not keeping up with the lesson.

Next, there were 36 comments that students said that the content of the lecture encountered some problems such as inappropriate, uneducated, still many errors, no specific examples, etc. There are many slides and videos of subjects that do not match in terms of content, making it difficult to synthesize the learner's knowledge.

Finally, 29 students failed to keep up with the online curriculum due to the amount of knowledge and assignments; they assumed that the amount of homework was more than when studying in person in the class. The eighth group of causes, audio during learning (mainly via video conference) is listed with 14 suggestions from the staff.

The Teacher's Change Strategy

The transition from teaching in-person to teaching online has led to many other changes. To come to the fundamental shift from traditional teaching to this new, modern form requires a lot of displacement around it. At school, the school board directs teachers to apply online teaching, forming an active teaching movement. Computer labs with multiple networked computers are ready to serve online teaching in the new school year. In the special circumstances of having to apply online teaching at the same time, the teaching staff has made rapid changes in both mentality and skills.

"When I was confused with the cherished transmission of lessons to students, the school board made effective decisions. The online training course on online teaching software has opened me up to interesting ways of teaching. I see this as an opportunity to change, adapt to the current situation, and be ready for the future. As someone very weak in technology, I've been working on how to use teaching software. I learned from school professionals, colleagues, students, and my children. I realized there was too much appeal from those lessons." – Teacher

Many teachers realize that teaching is not just a one-way lecture, but an exchange, discussion, inspiring students, and guiding them to work in groups. Teaching is the way students participate in the knowledge game thanks to teaching software. The process of online teaching is also the process of teachers exchanging and supporting each other in teaching. Many teachers are interested in writing lessons and teaching online. Teachers are also accustomed to teaching and managing students remotely. When mastering technology, teachers are more confident and proactive.

"When online teaching is somewhat interactive, teachers can rely on the available features of the software to design teaching activities. For example, during class, instead of speaking in person, students can rely on a chat window to fill out answers and short answers sent to teachers. Or you can press the "like" button if you agree with the rules your teacher has. These operations make them more interested in the lesson than sitting in front of the computer listening to lectures." – Teacher

The teacher's view is that it is the form of online learning that has created positive changes on the part of students. Many students in the class are very shy but when studying online, they are confident and bold. Some students show the ability to solve learning tasks at home very well. The students were fast-paced with the computer-based assessment test and were excited about taking the test. "For online teaching to maximize efficiency, the technology change is only the top, the change in foundational thinking is the root. That is, it must change from the way the curriculum is prepared, and the way the lecture is organized to the evaluation test to be suitable for online teaching. Instead of transmitting knowledge of lang class, the curriculum must be translated into research contents to assign specific tasks to learners to learn, grasp and solve learning tasks themselves. The role of the teacher in the classroom is to grasp, orient, answer questions, close knowledge based on the activities of learners". – Education Expert

The results showed that students had a near or above-average sense of online learning experience during the social distancing period in response to the COVID-19 epidemic. The difficulties of students are noted largely from the lack of learning equipment and the quality of the internet connection. On the other hand, this is also a difficulty for teachers who have not been able to update the program to convert to online learning. As a result, students' grades of academic performance decreased by 7% compared to the in-person form of learning. Online teaching and learning, especially at a time of COVID-19 outbreaks and complicated developments, not only help students to have conditions to practice, without interruption of knowledge but also strengthens the relationship between the school and their families in student management, while training and improving students' self-awareness. In the long run, the trend of online teaching should be encouraged so that teachers can more easily impart knowledge to students. For online teaching to achieve results, there are three factors:

- A reasonable technology solution;
- The management organization of the school; and
- The readiness of teachers and students.

Online teaching and learning, especially in ethnic minority areas, has encountered many difficulties due to the lack of means, equipment, and Internet connections. The percentage of students who do not attend enough is quite high, there is no funding to pay for online teaching for teachers. In order to organize online teaching effectively, it is necessary to focus on solutions that:

- Upgrade information technology infrastructure;
- Build a digital learning warehouse in the education sector;
- Train teachers; and
- Improve self-awareness and networking skills for students.

Accordingly, there should be regulations on online teaching regimes for teachers to be assured of implementing, soon promulgating the official Regulation on teaching and learning online at the high school level, moving towards standardization to apply uniformly throughout the country.

DISCUSSION

The COVID-19 pandemic is still complicated by the ons of many new strains entering countries. Countries are racing against time to ensure fast, effective and early vaccinations create community immunity. However, while the task of disseminating vaccines still takes time, children cannot wait too long to be restored to basic learning rights and other benefits at school. International organizations and education experts have mentioned a wide range of holistic solutions on a global scale as well as recommendations for each country to ensure children's right to school and access to school benefits. In his remarks on April 16, 2020, the Secretary-General of the United Nations called for the protection of children and the welfare of children; Urged national leaders to prioritize education, food, health, and safety for children with the message "jointly protect children and the welfare of children". For ethnic minority children in Vietnam, to ensure equal access to education services during online learning, the government needs to focus on the following:

(i) The government should prioritize the use of existing technology, including radio-television, telephones, computers, messaging apps, or other means to ensure universal education during and after the pandemic. Each country must have a roadmap for funding and mobilizing funding for schools in remote areas, lacking resources so that teachers can communicate with students, and print and distribute learning materials. Among the forms of distance education, resources should be mobilized to provide internet services to ensure the right to continuous learning, especially for poor and disadvantaged populations, including seeking to provide free and discounted access to services and computers. To create incentives for education officials, the government also needs to work with teachers, officials, and teachers' associations to come up with a plan to restore lost teaching hours, adjust school schedules and exam schedules and ensure fair compensation for teachers and school staff who are working overtime. It is necessary to prepare for the return of children to school after the crisis is over, including monitoring individual children who do not attend class; provide vouchers or financial support to cover school-related costs for children whose families are economically troubled and unable to return to school.

- (ii) COVID-19 public awareness campaigns should include contact information to support children who are victims of domestic violence and who may seek help. Governments need to ensure that domestic violence prevention services are not disrupted by COVID-19 and are always ready to support everyone including children and adults who are isolated or infected. Governments should expand education campaigns and raise public awareness about domestic violence and child abuse. At the same time, intensive measures must be focused on protecting adolescent girls from the risk of child marriage and children at risk of early labor.
- (iii) Many experts recommend that the government target economic assistance, including cash transfers to help poor, disabled, and vulnerable families to meet their basic needs without the use of child labor or child marriage options. The government urgently needs to expand food distribution programs for vulnerable families, including distributing free lunches from schools, even if they do not hold classrooms. Each country also needs to train health, education, and service personnel on the risks associated with protecting children from COVID-19, including preventing exploitation, and sexual abuse, and how to safely report concerns.
- (iv) COVID-19 may be prolonged. The government not only has a responsibility to take urgent action to protect children during the pandemic but also to consider whether their decisions can now best uphold children's rights after the pandemic ends. Therefore, among the priorities in emergencies such as epidemics, priority must be given to ensuring the right to study and enjoy the uninterrupted welfare of children. That requires international efforts, the responsibility of global organizations, the accomplices of developed countries with lowerconditioned countries, and especially the ability to forecast and upgrade the infrastructure (especially internet access for learning) of each country.

CONCLUSIONS

This study was conducted to assess students' access to online learning experiences in disadvantaged economic regions of Vietnam. Equality in education is the sustainable development goal adopted by the United Nations in 2015. Online learning is mandatory during the recent COVID-19 prevention period.

With 50 students and 10 teachers responding, the results describe the inequalities of ethnic minority and urban students when implementing social distancing. Geographical differences and economic conditions are factors that directly affect the effectiveness of students' online learning. Much of the economic hardship prevents families from being able to equip themselves with the learning facilities they need to support online learning, such as smartphones or laptops. In addition, the quality of internet transmission in the northern mountainous region of Vietnam, where the altitude is about 2000 m - 3000 m above sea level is a challenge in terms of infrastructure in connectivity. More than 80% of regular feedback is disconnected due to weak 3g waves or no cellular waves. To maintain online learning, the strategy of both teachers and students is quite flexible. Students can travel several kilometers away from home and teachers actively adapt to new educational conditions.

The implementation of online learning is quite passive and urgent due to having to deal with the COVID-19 epidemic. The main factors are unavailable psychology, internet-connected devices, and the timely support of teachers and service staff. In addition, the traditional teaching and learning habits of teachers and students have also affected learning efficiency in a fully online environment. Therefore, to implement online learning entirely for students requires preparation not only in terms of system, and technical infrastructure but also investment in readiness for learners and teachers. The Ministry of Education and Training of Vietnam also needs to take into the indigenous cultural factors of ethnic minorities, and natural and economic conditions to design programs to reduce the appropriate volume of knowledge. Accordingly, it is necessary to have financial policies to help with connected devices for poor students, reducing the gap in access to general education services.

RESEARCH LIMITATIONS

The study was conducted only at an ethnic school in Dien Bien province, a mountainous region of Vietnam. The study uses only the method of masmininity through feedback from students and teachers, school administrators, and education professionals. The results may not fully reflect the situation and causes of inequality among ethnic minority students. The results could be the foundation for another, more universal study if conducted with a complete analytical framework and the participation of many secondary schools in other localities of Vietnam.

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