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Supporting and Engaging Border Area Teachers in Online Learning
A Case Study in North Kalimantan, Indonesia

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ABSTRACT
During the corona pandemic, online learning is perceived as a way to continue teaching and learning activities. This technique, although agreed upon, is controversial. Teachers' readiness is required to teach with the ability to use effective and efficient learning technology. The facts in the field are that many teachers are still not yet proficient in using learning technology, particularly in North Kalimantan province. The purpose of this research is to support and engaging border area teachers in online learning. Survey research was conducted with 290 teachers in the districts of the province of North Kalimantan. Teacher questionnaire was given and analyzed qualitatively to reveal the problems faced by the teachers in online learning. The results show that almost all the teachers faced difficulty in online teaching; it was about their readiness in preparation, teaching, and learning process until the assessment. This result implies that the teachers must continue their professional development, especially in knowledge upgrading in online learning and technology-supported teaching.

Keywords: *Online Learning, Border Area Teachers, Professional Development*

1. INTRODUCTION

The world has been shocked by the Coronavirus (COVID-19) outbreak. It has infected almost all countries globally since January 2020. WHO has declared the world into a global emergency related to this virus. The learning model has been changed to virtual classrooms to comply with the government program, so the students still have their right to gain knowledge but remain safe at home. All schools in Indonesia have experienced the impact of the COVID-19 pandemic, and so far, there has been no evaluation related to online learning.

To address COVID-19 as an exceptional case, the government has taken steps by socializing the social distancing movement. The current pandemic condition requires educators, in this case, teachers, to innovate in changing face-to-face learning patterns into face-to-face learning patterns [1]. Another learning model that can be used by teaching staff as a medium for delivering knowledge, namely online learning and blended learning (a combination of two learning methods, namely face-to-face and online learning) [2].

Online or online electronic learning, and some call it online learning, are learning activities that utilize networks (internet, LAN, WAN) as a delivery method, interaction, and facilities and are supported by various other learning services. Online learning is useful for learning activities in class (classroom instruction), namely supplement, complement, and substitution. Online learning is a supplement if students have the freedom to choose whether to use online learning materials or not; there is no obligation for students to access online learning materials. Online learning is a complement if online learning material is programmed to complement the learning material that students receive in the classroom. Online learning materials are programmed to become enrichment or remedial materials for participating in conventional learning activities. Online learning is a substitute if online learning material is programmed to replace learning material received by students in the class [3].

Online learning is a form of learning model facilitated and supported by information and communication technology. The term e-learning is more precisely intended to transform learning in schools or colleges into a digital form bridged by internet technology. In the 21st century, e-learning is a modern model of pedagogy for learning. E-teachers are educational designers for e-learning, interaction facilitators, and subject matter experts [4]. E-learning is an open-source learning system that uses web applications that can be run and accessed

with a web browser. E-learning is an educational system that uses electronic applications to support teaching and learning using other computer network media [5].

Education is a system that develops a broad enough mission related to physical development, skills, thoughts, feelings, abilities, and social issues of belief or faith. So, whatever obstacles, education still go well. The obstacle, in this case, is the obstacle experienced by teachers during this Covid-19 condition; learning is carried out online and cannot be carried out face-to-face in class. This condition requires teachers to innovate in the learning process, especially learning online (in the network). The solution taken during the pandemic is to find a solution using network-based learning. Teachers are required to be innovative in using online learning models [6].

The teachers' role is to facilitate the classroom library, modules, textbooks, supporting books, and, most importantly, internet access and provide several computers for students who do not carry laptops. The form of e-learning (electronic-based learning) will continue to exist and continue to develop. As computer ownership is overgrowing in the world, e-learning is becoming increasingly developed and accessible. Internet connection speeds are increasing, and with it, opportunities for more multimedia training methods are emerging. The hope in learning with an online model is to become a solution that can help learners during the COVID-19 pandemic [7].

In online learning, several aspects need to be considered in online administration, including planning, measuring student needs, support systems, teaching competencies, design, materials, the right platform, and evaluating student learning outcomes [8]. Another opinion states that the aspects considered in online learning include: students, teachers, learning materials, technology or platforms used, and the learning environment [9].

On the other hand, almost all remote areas in Indonesia find it challenging to do learning at home independently, including the province of North Kalimantan. This province is one of the provinces on the northern island of Kalimantan, where the province has many districts separated by mountains, rivers, and sea. It can only be accessed via plane, speedboat, off-road, or foot from one district to the district. Geographic of this province is one of the obstacles in equal distribution of education quality, especially online learning implementation.

There are several obstacles in online learning. The first is the time management of parents who are also doing Work from Home (WFH). The second is the different technological abilities of teachers and students. The third is confusion in adjusting learning methods to be carried out by the teacher. The fourth is communication that must be well established by parents. The last is how the teachers assess students' learning outcomes every day and synchronize lesson plans made before Covid -19 with online learning state.

From the explanation above, this study investigates the evaluation results of online learning implementation in North Kalimantan province. The researcher tries to present this online learning evaluation from the teacher's perspective to be followed up by related parties to provide better support and approaches in implementing online learning in the province of North Kalimantan. This study's results are expected to implement teacher professional development regarding their readiness to teach online and blended learning (online and offline).

2. METHODOLOGY

Survey research [10] was conducted with 290 teachers in the districts of North Kalimantan. A teacher questionnaire was given to the teachers, covering student characteristics, technology, design, and content. The data were analyzed through a coding system and follow [11] stages start from exploring, describing, ordering, explaining, and predicting. The data were analyzed qualitatively to reveal the problems faced by the teachers in online learning.

3. RESULTS AND DISCUSSION

The purpose of this research is to support and engaging border area teachers in online learning. Survey research results with 290 teachers in North Kalimantan's districts were focused on student characteristics, technology, design, and content. The first focus was on student characteristics. It can be seen in table 1; the researchers focused on ten aspects as follows.

Table 1. Student Characteristics

No	Question	Percentage (%)				
		1	2	3	4	5
1	The use of E-Learning is more encouraging than traditional methods	5,9	10,4	39,6	30,7	13,5
2	Using E-Learning is more fun than traditional methods	6	12,6	35,9	31,4	14,2
3	The use of E-Learning facilitates learning more than traditional methods	3,4	10,2	28,8	42,6	15,1
4	The use of E-Learning allows students to complete assignments more easily than traditional methods	3	8,7	31,3	38,9	18,1
5	Use of E-Learning requires more assistance with applications than traditional methods	2,7	4,9	23,6	45,7	23,2
6	The use of E-Learning provides a more attractive learning environment than traditional methods	4,8	12,7	33,3	33,9	15,5
7	The use of E-Learning provides more opportunities to participate in activities than traditional methods	5,9	14,9	35,9	32,3	11,1
8	The use of E-Learning is more satisfying than traditional methods	6,2	14,7	40,8	27,9	10,5
9	The use of E-Learning improves learning performance	6,2	11,5	34,9	34,8	12,6
10	Using E-Learning is more fun than traditional methods	6,6	11,4	38,2	30,6	13,3

Table 1 shows that questions number one and number two have neutral perceptions in comparing e-learning with the traditional method and what they felt about it. The students agreed that they dominantly thought that e-learning could facilitate learning, allowed them to complete the assignment, assisting with applications, and attractive. A neutral situation also appeared in comparing participation opportunities between e-learning and traditional learning, students' satisfaction, learning improvement, and students' feeling.

Next, the second focus was on the use of technology during the teaching and learning process. It can be seen that five questions became crucial to be considered in selecting and using technology in the classroom. The details can be seen in the following table.

Table 2. Technology

No	Question	Percentage (%)				
		1	2	3	4	5
1	E-Learning is more difficult to use in the teaching and learning process	7,2	22,6	39,1	22,6	8,6
2	Having online E-Learning material is practical for the learning and teaching process	3,2	8,7	33,3	43,5	11,5
3	The E-Learning environment gave me the opportunity to participate in E-Class	2,3	4,7	34,9	45,7	12,6
4	Usually, I need help or training when using the E-Learning system for the first time	3,7	8,8	31,1	41	15,6
5	Overall, the infrastructure of the E-Learning environment is effective and efficient	3,3	7,7	42,2	38,8	8,1

From the table above, a neutral perception that e-learning would be more challenging to be used in the classroom. The teachers agreed that e-learning material would be practical and gave each student participation opportunities, although they needed training in using the e-learning system. They were neutral for the infrastructure would be effective and efficient because of the challenges in providing proper infrastructure for online learning.

The last was focused on the design and content. The questions covered the integration of e-learning, content management, content involvement, time and efforts in creating the content, content quality, and e-content availability for e-learning implementation. The exact percentage of the feedback can be seen as follows.

Tabel 3. Design dan Content

No	Question	Percentage (%)				
		1	2	3	4	5
1	The E-Learning environment is easily integrated with the teaching and learning process	3	8	42	38	9
2	Easy to manage and update my electronic content	2	6	39	42	10
3	In E-Learning students are more involved with content than traditional methods	3	9	41	38	9
4	The use of E-Learning content and materials takes time and effort	3	10	44	38	10
5	Overall, the E-Learning environment improves the quality of content, learning, and teaching processes	3	9	43	38	8
6	Availability of E-content is an essential point in the implementation of E-Learning.	0	4,4	22,2	58,5	14,8

There was a neutral thought on integrating e-learning in the teaching and learning process from the table above. They agreed that e-learning management was easier. They were neutral on students' involvement in e-learning, time allocation, and efforts to prepare e-learning materials and content quality of e-learning. They agreed that e-content is a crucial part of e-learning implementation.

E-Learning implementation and development can result in a flexible learning environment, bringing together different people from different locations and increasing access to information. Al-Adwan and Smedley (2012) supported the E-Learning benefits above because they show that E-Learning provides an opportunity to interact between teachers and students in any mode and from any source.

While E-Learning provides several benefits for educational settings that improve the quality of education and develop a learning environment, conversely, there are still many challenges that hinder exploration and exploitation of opportunities [13]. E-Learning projects' multidimensionality shows that various challenges hinder implementation and development [14]. For example, as Kwofie and Henten (2011) reported, E-Learning is expensive, involves conflict priorities, and requires technical and academic confidence, social support and motivation, technical skills and competencies, and stable technical infrastructure.

Implementing E-Learning requires an examination of the following essential factors: cost, time, technology, attitudes, management awareness, and support, and language [13]. Furthermore, E-Learning problems include ICT infrastructure, accessibility issues, quality and efficiency of E-Learning, technology usability, and pedagogical considerations [16]. Also, Bhuasiri et al. (2012) highlighted that the crucial factors of E-Learning include: characteristics and motivation of students, characteristics of instructors, E-Learning environment, quality of institutions and services, quality of infrastructure and systems, and quality of courses and information.

4. CONCLUSION

Forever the teaching profession will not be replaced by technology. Learning that is carried out without face-to-face cannot feel the teacher's soul's vibrations, with a language and behavior style with its characteristics. The role of teachers as motivators, innovators, must be put into practice in online learning. Because the teacher is the first and foremost person in education, considering that education is a place to produce the nation's generation. Therefore, several teacher roles are very urgent during this coronavirus pandemic to be applied in online learning.

On the other hand, teachers must also pay attention to students' learning mood to not be too stressed due to assignments, with various approaches. Teachers should teach online while still providing explanations to students. Not only by giving assignments continuously, because students also need explanations to understand the material being discussed. On the other hand, the teacher's job is not only to convey material. However, teachers as innovators need to be shown to students in the learning process carried out online. Teachers must be innovative in the media and methods used in learning. After the online learning process is carried out, the teacher must evaluate the shortcomings of online learning, problems that arise in students and during the learning process, and whether students receive the material well or not, and other problems.

AUTHORS' CONTRIBUTIONS

Arifin contributed to the literature review, writing, original draft preparation, review, and editing. Woro Kusmaryani contributed to data collection and data analysis.

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