# Radio as an alternative solution in pandemic covid-19

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#### ARTICLE INFO

#### **ABSTRACT**

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The government's efforts to control the spread of the Covid-19 virus by issuing various policies, one of which is learning from home. Schools were closed, and learning methods were changed using the online system. However, there are many findings in its application, such as facts on networks/internet quotas and teachers' readiness in online learning. One of the problematic areas is a school on the border of Sanggau Regency, West Kalimantan. Therefore, an innovative solution is needed to overcome this problem, one of which is radio use in collaboration with the RRI station. This study aimed to describe radio as an alternative in learning in the border area of Sanggau Regency in collaboration with RRI Station. The method used is qualitative, with interviews and literature study based on trusted news. The result of this research is that an alternative learning media using radio in collaboration with RRI as an alternative to Covid-19 distance learning is quite effective in solving difficult network solutions in border areas.

Upaya pemerintah dalam mengendalikan penyebaran virus Covid-19 dengan mengeluarkan berbagai kebijakan, salah satunya belajar dari rumah. Sekolah ditutup dan metode pembelajaran diubah menggunakan sistem online. Namun dalam implementasinya banyak ditemukan kendala, seperti ketersediaan fasilitas jaringan / kuota internet, kesiapan guru dalam pembelajaran online. Salah satu daerah yang mengalami kendala tersebut adalah sekolah di perbatasan Kabupaten Sanggau, Kalimantan Barat, oleh sebab itu perlu adanya solusi yang inovatif untuk mengatasi permasalahan tersebut, salah satunya adalah penggunaan radio yang bekerja sama dengan stasiun RRI. Tujuan penelitian ini adalah mendeskripsikan mengenai radio sebagai alternatif dalam pembelajaran di kawasan perbatasan Kabupaten Sanggau bekerja sama dengan Stasiun RRI. Metode yang digunakan adalah kualitatif dengan wawancara dan studi pustaka berdasarkan berita-berita yang terpecaya. Hasil penelitian ini adalah alternatif media pembelajaran mennggunakan radio yang bekerja sama dengan RRI sebagai alternatif pembelajaran jarak jauh ditengah pandemi Covid-19 terbilang cukup efektif dalam memecahkan solusi jaringan yang sulit di daerah perbatasan.

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## 1. Introduction

Corona or Covid-19 virus has spread to almost every country in the world since it first appeared in China in early 2020. This virus initially began to develop in Wuhan, China (Suara.com, 2020). Outbreaks of this virus are spread very quickly to various countries in the world. Director of Health Organization (WHO) Tedros Adhanom Ghebreyessus officially announced the Corona virus (Covid-19) as a pandemic, on Wednesday, March 11, 2020. The Indonesian government tried to control the spread of the Covid-19 virus by issuing various policies. One of the government's policies is work from home which also impacts the education sector. Schools are closed and teaching and learning methods are changed using online systems.

Learning in a network or commonly referred to as distance learning is an institution-based formal education where students and instructors are in separate locations so that they need an interactive telecommunications system to connect the two and various resources needed in them such as electronic learning (e-learning) or learning online is part of distance learning that specifically combines electronic technology and internet-based technology, and in this online learning system the government also provides learning programs through TVRI television stations ranging from early childhood education to high school to help students learn at home during the Covid-19 disease outbreak. This distance learning system experiences many problems, including not all children being equal in terms of ownership of facilities such as mobile phones; many of the students only have a mobile phone, but only a regular mobile phone, besides that even if there is a mobile phone, limited quota and less supportive networks are also obstacles. This obstacle is not only felt by students, but also teachers, many other obstacles that arise as when the online system is used. The material presented is not fully understood by students; students are confused in accepting the material delivered by the teacher. Teaching and learning activities can indeed be done using video calls, but still not as effective as imagined, besides that not all students are present when the teaching and learning activities take place, suppose it is caused by a network that does not support and can also because students feel bored with the system ineffective learning.

Learning online systems is also difficult to control the presence of children during teaching and learning activities, so that those who can participate in teaching and learning activities are children with good facilities. One of the regions that feels the constraints of distance learning is Sanggau District, West Kalimantan. Sanggau Regency is an area located in the middle and located in the northern part of West Kalimantan province with an area of 12,857.70 km² with a density of 29 people per km². Based on its geographical location, Sanggau Regency is located between 1 ° 10 "North Latitude and 0 ° 35" South Latitude and between 109 ° 45 ", 111 ° 11" East Longitude. Sanggau Regency has 2 sub-districts located in the border area, Sekayam sub-district and Entikong sub-district. Sanggau Regency is also an area that is quite isolated from urban areas and is one of the districts directly adjacent to Serian, Sarawak, East Malaysia.

Education in the Sanggau Regency region, especially in the border region, there are still problems such as inadequate facilities and infrastructure, the ability of human resources, especially teaching staff, which is classified as minimal. In addition, the application of learning is very limited to only lecture models and methods without any other application models and methods and there is even an area in Sanggau District that is still unreachable by signals or blank spots. Therefore, in the use of media such as mobile phones and other media related to signals or online can not be done in the region. So that elementary school teachers in Sanggau Regency, West Kalimantan, which borders directly with Malaysia, used Radio Republik Indonesia (RRI) as a learning medium during the Covid-19 pandemic because of the limitations of the region's internet network. The problem is how to develop an effective learning media using radio in the border area of Sanggau Regency, West Kalimantan. The purpose and benefits of this writing is to create an effective learning media in the form of radio as an alternative to distance learning in the Covid-19 pandemic in the border area of Sanggau Regency, West Kalimantan.

## 2. Metode

#### 2.1. Types of research

This research uses a qualitative approach. Case studies are one method of research in social science. According to Raharjo (in Hidayat, 2019:3) a case study is a series of scientific activities carried out intensively, in detail and in depth about a program, event, and activity, both at the level

of individuals, groups of people, institutions, or organizations to obtain in-depth knowledge about the event. In general, case study research targets are actual (live) and unique, not something that has been missed or past.

#### 2.2. Time and Place of Research

The location determined in this study is the Sanggau border area, West Kalimantan. The sampling technique for qualitative data is to use online interviews and journal analysis as well as actual and factual news. The study was conducted in October to December using online media access in the form of the internet, journals, web and online interviews using the WhatsApp application.

## 2.3. Research procedure

The research procedure is "the elaboration of the form of research, how the research is carried out and the data is obtained in what way, so the authors use procedures in data collection with data collection research instruments as previously known that this type of research is qualitative research, namely research that aims to describe phenomena or symptoms. -symptoms related to the research problem. Therefore, the instrument or data collection tool used by the researcher must be adjusted to the type of research. This research instrument was selected and used in order to collect data to make it systematic and simplified. The core instrument in qualitative research is the researcher himself, a researcher as a human instrument whose function is to determine the focus of research, examine information as a data source, perform data collection, assess data quality, analyze data, interpret, and draw conclusions on the findings. After the problem is clear, a research instrument will be developed that is equipped with a slice of data and compares it with the data found through observation and documentation "

## 2.4. Data analysis technique

Data collection techniques are techniques or ways that writers can use to retrieve or collect data. In this study using online interviews with several informants. While the data processing and analysis in this study are the results of data processing through online interviews and journal analysis.

#### 3. Results and Discussion

This study was conducted with the aim of creating an effective learning media in the form of radio as an alternative to distance learning in the Covid-19 pandemic. This study was conducted in Sanggau District, West Kalimantan. Sanggau Regency is a district that is geographically located in the middle of West Kalimantan Province with the capital of Sanggau, located in the north of West Kalimantan province with an area of 12,857.70 km² with a density of 29 people per km². Based on its geographical location, Sanggau Regency is located between 1  $^{\circ}$  10 "North Latitude and 0  $^{\circ}$  35" South Latitude and between 109  $^{\circ}$  45 ", 111  $^{\circ}$  11" East Longitude.

Because it is located in a border area, there are many problems faced both in the fields of development, economy, infrastructure, education and networking. Because of these diverse geographical factors, not a few border areas in Sanggau Regency are still untouched by the network (blank spots). At present there are 447 hamlets without a signal (blank spot). According to the head of the Sanggau Regency Communication and Information Agency, Yulia Theresia, Wednesday, November 15, 2017, explained that in 2016 in Sanggau District, 5 base transceivers have been built, which at first the location was still prioritizing the border of Entikong District. In 2017 the private sector also built 5 towers in Sekayam sub-district. While the Ministry of Communication and Information Ministry built 11 towers / BTS in Sanggau District, 166 BTS have been built in Sanggau District and in 2018 a survey was conducted in 83 blank spots locations (pontianak.tribbunnews.com, 2017).

Because of its location on the border and far from the urban center, the border community still uses the RRI radio network as a medium to obtain information and communication media. One important human need is the need for information. One way to obtain this information is through the media. The presence of this media is a human need to know everything that happens in the world. Mass media presents the reality of life in the form of information to the public. The emergence of awareness about the meaning and value of information makes people unable to escape from the information presented by the mass media, Sobur (in Cristiany Juditha and Josep, 2016: 23). The mass media, both radio and television, are the most effective and efficient instruments for distributing and penetrating dominant values or discourses in people's minds so that they become a

political consensus. Both of these relations show how the mass media, especially television and radio play a role in greeting, treating, influencing, and forming consensus, especially for people who are far from the central government and information center or at the border. Not only network problems are felt by border areas but there are many more complex problems, one of which is education. The condition of education in the border areas is really very poor. The existing schools were not built with a strong foundation so that many were damaged and unfit for use. This condition is very much different from neighboring Malaysia. In Malaysia, schools are well built and equipped with resentative facilities and infrastructure. While in the border areas there are no such conditions, so it is not surprising that many residents who live in the border area choose schools in Sarawak rather than schools in their own country. The condition of education of children who live in border areas is very paradoxical with the glitter of education in big cities. When students in urban schools are preoccupied with luxurious classrooms, education in border areas is only able to provide facilities that are far from enough. When students in urban schools are spoiled by various conveniences by access to education, students in border areas are still struggling with books that are not worth reading. Many children who live in border areas are poor because they cannot get a quality education. In some hamlets in the border area, children have to walk 1 to 2 hours for up to 6 km by crossing the forest and down the hill to get education at school every day. Not to mention the addition of waiting for 1 to 2 hours must wait at the front door of the class until their teacher arrives at school, even not infrequently the subject matter they expect to disappear because teachers do not come to teach.

So that the biggest problem faced by border areas is that there are still many blank spots and lack of facilities and infrastructure as well as supporting education media. The government has recently issued a policy on education for Covid-19 emergencies. Some of these policies include: online learning for school children, online lectures, 2020 national exams being abolished, UTBK SBMPTN 2020 postponed, and the implementation of SNMPTN is still under review. One of the policies felt by students or teachers in the Sanggau border area is online learning for school children where students are required to attend online learning by using media assistance such as mobile phones or laptops. However, because of the limitations of the media and regions that are difficult to reach by the signal so that the learning expected by the government cannot run optimally. Therefore, there needs to be innovation and creativity so that border students can continue to learn even in very limited conditions. An innovation emerged, namely radio, even though the media had long ago but was very effective and could be applied in the border area considering the border area was very difficult to get signal access.

According to Anwar Arifin, radio is a mass communication tool, in the sense of a general / open human statement channel and channeling sound waves, in the form of regular programs whose contents are actual and include aspects of the embodiment of people's lives. Radio is one of the mass media that is closely related to the needs of the community that can provide various kinds of information, entertainment, and education. Radio as an effective mass media in the dissemination of information and communication. Radio as a mass media continues to experience very rapid development. Starting from the Dutch era, the Japanese era, the era of independence and the New Order era. Starting from the broad segmentation of the radio, to those who narrow themselves in its segmentation. In the colonial era, radio helped young people and workers to find out the current state of the country, news about their economic development and news to gather if there was an event held by state officials. Broadcasting institutions (radio) are media of information and communication that have an important role in the distribution of information that is balanced and worth it in society, has freedom and responsibility in carrying out its functions as a medium of information, education, entertainment, control and social glue. In the use of radio in the past there were many limitations such as the radio station which was still small, the lack of facilities and infrastructure that supported the smoothness of broadcasting, as well as news that were presented only based on government needs. But at this time, radio broadcasting has been in great demand by various age groups, education and social classes as a means of connecting in everyday life very influential on social life. One example of a radio station that provides these services is Radio Republik Indonesia (RRI). RRI has the main duty as a public broadcasting institution regulated by Law Number 32 and PP 12 of 2005 concerning broadcasting, namely providing information, education, healthy entertainment, social control and adhesive services, and preserving the nation's culture for the benefit of all strata of society through organizing which reaches all parts of Indonesia. The 2012 broadcasting law article 3 states that broadcasting is held with the aim of one of which is to strengthen national integration. RRI is a radio station that is still in operation today, even RRI has been in several regions spread throughout Indonesia, one of which is RRI Entikong in Sanggau Regency. RRI launched the Learning program at RRI during the Covid-19 emergency response period. This program is to support the learning policy from the house issued by the government to break the chain of transmission of Covid-19. "For Sanggau District and its surroundings, we are collaborating with the Sanggau Learning Teachers Community as instructors. The program that we launched since March 30th, so students can still learn, even from home." said the Head of RRI Entikong-Sanggau, Budi Nugroho through his release on Wednesday, 8 April 2020. He said, the Government encouraged teaching and learning activities carried out online. But not all regions in Sanggau Regency have internet networks. "Through the radio these students can still learn, even in the internet blank spot area," he said.

"One of the educators stationed at the border school in Sanggau Regency, West Kalimantan on National Education Day 2020, on Saturday, October 2, 2020, shared her experience and her elementary school teachers who served in districts not far from Entikong - the Indonesian Border. Malaysia in the land of Borneo. The challenges are increasingly compounded by the condition of the Covid-19 pandemic which makes class impossible to do face-to-face. In a press conference broadcast via the BNPB Indonesia YouTube Channel, Titis told what efforts the teachers at the border had made to be able to teach students in the Covid-19 pandemic condition without making face-to-face meetings", Titis Kartika Wati said.

"Not all regions have internet networks. Lots of blank spots that can not access the internet. So online learning cannot be implemented." said Titis. But it did not hamper the idea of the teachers in Sanggau. "We are collaborating with RRI Sanggau and the community of learning teachers as instructors to conduct studies at RRI for 1 hour." Said Titis through the radio broadcast teaching activities carried out with joy.

"They are not required to teach backward material as specified in the curriculum. Teachers take turns teaching from Monday to Friday. All teachers can give material according to what they are good at." said Titis. "You don't have to pursue a curriculum. Can give lessons according to the direction of the Ministry of Education and Culture." he said again. The advantage of using broadcast on the radio as a learning suggestion turns out to be quite large. "First, RRI can reach all regions." said Titis. "RRI itself reaches four districts around Sanggau, even to Entikong. So that people who are in the internet blank spot area can follow the presentation of the material presented. Costeffective, because there is no need to issue a quota." said Titis. The purchase of a quota, according to him, added to the cost burden for parents, the majority of whom worked as farm laborers, oil palm workers, and traders. "If you use the internet it will be burdensome." said Titis.

One of the teachers at Sanggau 1 Public High School, on Tuesday, October 14, 2020. She said that RRI was active for learning when the Covid-19 pandemic began on March 30, 2020. The initiator himself was carried out by the KGB (Komunitas Guru Belajar) in collaboration with RRI which is voluntary in which the teacher is called to fill in the learning. According to Mulyani, there were no policies from both parties from the RRI and the KGB in the learning process, because RRI centrally conducted the program during the Covid-19 pandemic, while collaboration with the KGB was limited to mutual trust. Learning using Radio has a system where teachers are voluntarily recorded who want to teach on RRI via WAG KGB (WhatsApp Group Komunitas Guru Belajar). Not only that, regular schedules are made from Monday-Friday from 10:00 to 11:00 WIB, the teacher delivers the material and if there are interactive viewers (students/listeners) that are served via sms/telephone. "In learning, students are very enthusiastic especially for elementary school students." Muyani added. "Even so, in learning to use the radio system there are still obstacles such as the emergence of a sense of lack of attraction in learning to use radio." Mulyani said. Mulyani also said that learning through Radio could be carried out again even though the pandemic period had ended as long as it was consistent and programmed and well packaged and interesting so that it became a special attraction for students and generally for the community.

As the Principal of SDN 31 UP. V Jangkang District, Sanggau Regency, on Sunday, October 29, 2020. He said that radio learning media is very good and effective because for other learning media such as mobile visual media that use the internet or network access, it cannot be used at the border. So the use of radio media is the right solution in the border areas where there are still many blank spots. "Besides being able to reach to various points, the application of this way of learning is also

cost-effective. Schools or teachers no longer need to pay big fees to buy internet data packages. The innovation step by utilizing radio networks in border areas and collaboration between teachers, parents and students is the key to the success of teaching and learning activities from home. Without this collaboration, fun home learning is difficult to achieve." Said Yohanes. He hopes that the government will be more focused on investing in facilities and infrastructure, especially electricity and internet networks in the border areas, and he also hopes to make a special regulation on radio-based systematic and structured learning so that mentors or teachers are more effective in delivering the learning process.

On Sunday, October 29, 2020, one of the students' parents said that "in the border area it is not possible to have online learning via the internet, therefore radio is a very fitting solution considering the radio does not use internet packages or networks. So it is very easy and makes no cost for a penny to do the learning process. Provided that having a radio means you can access or follow the lessons." said Mardianti.

The steps of learning to use radio media are (1) before the listening process begins; (2) the teacher must already be in the radio recording studio, and after that the teacher sets the radio broadcast in advance according to the material that will be given; (3) the teacher leads the students to sing the song on RRI hatiku senang; (4) the teacher must order the class; (5) students are encouraged to pay attention and listen directly to the sound or recording they hear; and (6) the teacher must instill understanding and belief that listening has great value in everyday life to understand various information. Usually before listening to the teacher must tell some provisions that must be obeyed by students, such as recordings or talks will not be repeated, and tell how long the duration is 1 hour of learning with the material that has been prepared. One thing that needs to be understood is that the source of learning is not just a learning medium but in essence contains a broader and complex meaning. Therefore, everything that is predicted to support and can be utilized for the success of learning can be said to be a source of learning. In this regard, radio broadcasts are not only supportive but have even been used for learning activities so that radio broadcasts can be said to be one type of learning media.

The advantages of learning via radio. *Not using a quota*, meaning online learning through RRI is very different from other learning. Usually online learning uses a large quota and costs a lot to study. But learning through radio only utilizes radio that is sourced from analog signals. *Radio prices are relatively cheap compared to mobile phones in their use*, in this case economic factors are very influential for border areas whose income depends only on agricultural products such as palm oil, coconut, and others. Therefore the use of radio as a learning medium can be said to be effective because the price of its use is much cheaper than a mobile phone. *Can develop children's imagination*, imagination is very important in the teaching and learning process, therefore using radio that requires hearing makes the child's imagination and creativity be honed. *Can stimulate the participation of students or listeners in teaching and learning. The range is broad*, although only limited to analog signals that are not digital but can still be relied upon especially in border areas. Weakness of learning via radio is cannot see or meet directly between students and teachers, a broadcast that has already been played or broadcast cannot be played again, and demand concentration.

## 4. Conclusion

The conclusion obtained from the discussion above is that radio can be said to be effective in border areas because radio does not use quotas in its use, meaning that online learning through RRI is very different from other learning. Learning via radio only utilizes radio sourced from analog signals, and does not require a lot of cost in its use. The relatively cheap price of a radio compared to a mobile phone in its use, is very influential for border areas whose income only relies on agricultural products such as palm oil, coconut, etc., because the price of its use is much cheaper than a mobile phone. In learning, radio can develop children's imagination, thus, children need sharp hearing to make their imagination and creativity sharpened. In addition, the radio also has a wide range of signal coverage, although only limited to analog signals that are not digital but can still be relied on, especially in border areas. The presence of radios at the border also has a strategic value in managing national borders and border areas. One of the important things with education development in border areas is the availability of information. This information is a prerequisite as well as a great power if you want to develop an optimal border area. Here, the idea of radio-based learning in the Covid-19 pandemic was raised. By utilizing radio whose information was conveyed

by RRI, my parents made it possible to learn from distance. This learning takes place for one hour from Monday to Friday and is filled by teachers from the professional learning teacher community so as to allow learning to occur between teachers and students optimally. Although radio learning is not as effective as direct learning done face-to-face or through media that display faces like smartphones (requires quotas and signals), it can at least be a solution in areas that are blank spots or so as not to incur quota costs. It is hoped that radio-based learning in border area schools can be an alternative learning solution both during the Covid-19 pandemic and a learning media solution that can be used at any time in the future. In addition to being a learning medium, radio in the border region is also expected to be able to voice a variety of voices from the border, including problems in the region so that it is included on the national agenda or at least appears in the national discourse. Border areas are often neglected, even though this area is the frontline in interacting with neighboring countries. Optimizing the function and role of RRI and community radio in developing border areas is not a simple problem given the complexity of the problems faced. Even though it has great potential, radio at the border still has to face a variety of general problems, including institutional issues, facilities and infrastructure, programs, human resources, and finance. Therefore, the border issue becomes a concern and priority for sustainable development that must be encouraged and considered by the government

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