

# Stories of Public-School Students on Radio-Based Instruction

Anfanna Krizza G. Quibod, MAEd<sup>a</sup>

<sup>a</sup>anfannakrizza@gmail.com

<sup>a</sup>Currently Teaching at Caraga National High School, Teacher III, Department of Education, Davao Oriental, 8203, Philippines

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## Abstract

This study employed qualitative and narrative research design. This sought to explore the experiences of public-school students on radio-based instruction amidst the COVID-19 pandemic, specifically to narrate and draw insights. It was conducted through in-depth interview and focus group discussion to collect data from the participants. Purposive sampling was used to determine the participants of this study. There were six students of public junior high school and six parents and/or guardians who were identified as research participants. It was administered among the schools of the Municipality of Caraga utilizing Radio-Based Instruction as one of their alternative learning delivery modalities. The nine elements were observed to establish ethical standards and to provide safety among the participants. The data from the interview transcription were analyzed using thematic analysis. Based on the results, most of the essential responses that were related to their stories during the radio-based instruction are categorized into technical, student behavior and instructional issues. Insights were drawn based on their narrative stories such as good alternative delivery mode, supplementary materials should not be taken for granted, accessibility to radio is necessary, being attentive in listening, and parents should be cautious during radio lesson. This study delves into the stories and insights that can broaden access to education by bringing it to the learners' location as a sort of distance learning through the transmission of radio lessons.

*Keywords: Radio-based Instruction; distance learning; technical issue; student-behavioral issue; instructional issue.*

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## 1. Introduction

Radio, as means of communication, is part of the influence of people residing on an area of scattered population. Radio is used beginning in 1929 to educate and make people aware of the different tribal groups. It is used first as medium of instruction that is useful in developing a common language to the society before the advancement of technologies.

As the medical health emergency brought about by the Covid-19 Pandemic has triggered and forced the closure of the educational institutions building up the necessity to create other channels of learning that would not require the face-to-face engagements between the students and their teachers. Faced with this difficulty, the system has no choice but to pursue the academic year through the unconventional methods that are deemed viable for every Filipino student.

In this trying times, radio-based instruction was used as supplementary material in the teaching and learning process through live recorded broadcast. The whole institution undergoes different training and webinars to teachers involved in the program. Teachers prepared script and audio recorded lessons. Thus, radio station aired the lesson live on its scheduled time. It is an additional material to influence learning and promote motivation. With this new learning modality, issues arose in terms of its technicalities, manner of instruction and approaches of teachers to students. Also, learning through radio became a challenge because it

was not totally established to the regular learning environment and to the stakeholders.

As written by Sterling and Skretvedt (2018) radios was first heard in December 1906 from Massachusetts. As recorded, the school began operating their radio school in San Jose, California. McBurnie (2020), in the past, educational radio has been proven effective at supporting teacher-led learning. Jumani (2009) studied the effectiveness of such educational radio program and the various strategies it applied for rural education in Pakistan, and has found that the strategies of radio for rural education were appreciable because this infused mobility, widened horizons, and focused attention on the goals and problems of rural people, as it is also used to enhance literacy. The mode of instruction using the radios are proven and widely-used in the rural areas as the supply of electricity may fluctuate from time to time, making them dependent on acquiring information through battery-operated radios.

Pursuant to Article XIV of the Philippine Constitution on the promotion of the right of the citizens to quality education at all levels has developed the Basic Education Learning Continuity Plan (BE-LCP) to ensure that learners will be provided the learning opportunities despite the policy on social distancing. There are over 28 million Filipino learners across academic levels 22 million of which are from public schools who are affected by the closures, who have to stay at home and comply with the Philippine government's quarantine measures, (UNESCO, 2020). The Department ensured that the manner of learning shall ensue through different forms of delivery—in this case, the employment of distance learning approaches through modular, online, blended learning, television programs and radio-based instruction so that learners can continue remotely.

In the news report published by Metro News Central, Salustiano Jimenez, Regional Director of DepEd Region 7, and Dr. Reynato Arimbuyutan, president of the College for Research and Technology-Cabanatuan emphasized that with today's system, where internet is a prevalent mode of distributing and acquiring information, not everyone will be able to afford as well as utilize the advantages of being connected online because of such roadblocks in the learning schemes presented by the Department of Education (Cruz, 2020). Hence, the pursuance of the academic year cannot be a one- size-fits-all solution resulting to the inclusion of radio-based instruction as one of the distance learning delivery modalities.

In Davao Region, all Division offices offers Radio-based Instruction as part of the learning distance modality. There are region and division memorandum for teachers to participate in the webinar trainings to enhance their skills as radio teacher, radio host and technical applicators. In the Department of Education – Division of Davao Oriental Caraga School Cluster forged partnership through a Memorandum of Agreement (MOA) on August 31, 2020 with Mr. Romy Elusfa & Mrs. Lourdesima Pua-Elusfa of Joy FM for Radio-Based Instruction: School on the Air. It was participated by the school Division Superintendent and all secondary school heads of the Municipality of Caraga.

Due to the gap in the literature, as of the date writing there are still no published studies regarding the personal experiences of the public-school students and parents on how they tell their own stories on radio-based instruction. This has become a point of interest as there are still no reports on up to when the Corona Virus will be put to rest. Thus, it is necessary to know and inquire about the aspect on the experiences of the public-school students so the possibility of improving the program structures to accommodate their needs as well as develop new approaches to lighten the burden for both students, teachers and parents.

Moreover, I believed that the knowledge gleaned from the findings of this study could help the education sector to maximize the stakeholder involvement, such as that of parents and all sectors of the municipality, in revitalizing students' education in the pursuit of high-quality education amidst the pandemic.

In addition, changes to the School Learning Continuity Plan may be made to address the challenges and issues that the whole institution faced.

### *1.1. Literature Review*

This section presents the literature that is deemed necessary in the understanding of the views on distance learning particularly on radio-based instruction, as juxtaposed on the lens of the students. Other researchers related to this topic are also explored to provide a strong reference for the grounds of this research.

#### *The Birth of Radio*

Radio was first determined and studied by Heinrich Hertz, a German physicist in 1886. Radio developed in the 20th century and primarily it unravels very few listeners (Sarmah & Lama, 2017). According to EFA Global Monitoring in 2012, radio is widely available, with at least 75% of families in developing nations having access to one. The Department of Information Communication and Technology (DICT) conducted their first-ever National ICT Household Survey (NICTHS). The survey ought to address and report on the gaps in ICT statistics by collecting and data from households and individual respondents, thus, results showed that less than half of the households or 47.1% have communal radios out of the 43,838 sample households (Department of Information and Communications and Technology, 2019).

More so, radio communication is utilized in a variety of fields including radio and television transmission, cell phones, two-way radios, wireless networking, and satellite communication. Radio is a communication technique that uses radio waves. According to the statistics presented by UNESCO and Philippines DHS Survey, 87% of the Filipino households have radio coverage in 2013 while in 2017, it was reduced to 51%, 49% of which come from the rural households. The survey also shows that 38% of the adolescent women listens to the radio at least once a week (UNESCO, 2013). This data emphasizes that even with the propagation and continued evolution of the digital age, there is still a continued utilization of the conventional means of acquiring the necessary information through the air waves. Central to this occurrence are those that are not easily reached by means of television and internet signals such as those in the rural areas. Though there is an evident reduction in the percentage of radio users as specified by the organization and Philippines DHS, the number still remains significant.

#### *Shift of Philippine Educational System in the Philippines during this Pandemic*

On this plight, a lot of things drastically changed the normal way of living of all people in the world and the educational system is not safe to the change. The Department of Education has issued the Policy Guidelines for the Provision of Learning Resources in the Implementation of the Basic Education Learning Continuity Plan also known as DepEd Order No. 18, s.2020. The said guidelines are anchored on the principle that is inculcated within the 1987 Constitution, Article XIV, Sections 1 and 2, viz: Section 1. The State shall protect and promote the right of all citizens to quality education at all levels and shall take appropriate steps to make such education accessible to all (Department of Education, 2020). On Section 2, it elaborates the

establishment of supporting education for all even though there is pandemic. The State shall establish, maintain and support a complete, adequate, and integrated system of education relevant to the needs of the people and society; and establish and maintain a system of free public education in the elementary and high school levels. Thus, flexible learning in all levels will continue because everyone reinforce the continuous education.

The rationale of the DepEd Order stipulated that the public health emergency brought about by COVID-19 calls for the Department of Education (DepEd) to be innovative and resourceful in delivering quality, accessible, relevant, and liberating education. In response to the emergency, DepEd developed the Basic Education Learning Continuity Plan (BE-LCP) to ensure that learning opportunities are provided to our learners in a safe manner, through different learning delivery. For this reason, the Department has set Flexible Learning Options (FLOs) which includes alternative delivery modes and its corresponding learning resources that are responsive to the need, context, circumstances, and diversity of learners. The standards and mechanisms adopted by the Department has paved way for the application of both distance and blended learning schemes.

In a 2020 report by the Philippine Information Agency, the Department of Education has clarified the difference between blended and distance learning as the two new methods of learning have varied modalities on how they should operate (Department of Education, 2020). In a virtual press briefing, DepEd Secretary Leonor Briones emphasized that some of the lessons will be transmitted through different platforms and some activities will be done at home. To secure the continuation of the academic year, the need to resume learning through the avoidance of face-to-face interaction. DepEd offers both blended and distance learning modalities by using printed or digital modules, online learning resources, and radio and TV-based instructions.

According to the Department of Education (2020), distance learning refers to a learning delivery modality where learning takes place between the teacher and the learners who are geographically remote from each other during instruction. This means that the designated classroom instructions will no longer be operational, rather, the teacher-learner relationship will only be pursued through other means as the instructions cannot be held in the classroom set-up. The Department of Education added that distance learning has three learning modalities, namely: modular distance learning using self- learning modules that are printed or in digital format; online distance learning uses the Internet in downloading learning materials and uploading homeworks; and radio/TV based instructions to those who have no Internet connectivity.

Cruz (2020) cited in his news report that according to Salustiano Jimenez, Regional Director of DepEd Region 7, and Dr. Reynato Arimbuyutan, president of the College for Research and Technology-Cabanatuan, there are several considerations that hamper distance learning in the new normal. First, the deployment of distance learning combined with in-person learning. Second, the limited learning access for schools and the dilemma of tech use in creating a resilient educational environment for continued learning. Third, the insufficient learning gadgets and equipment for both students and learners. Fourth, the lack of e-learning facilities with compliance to health protocols. Fifth, the solid curriculum designed for distance learning as well as sufficient training for teachers. Lastly, the lack of strong and reliable infrastructure that will help facilitate this new mode of learning.

Additionally, internet access has more than ever become a valuable commodity, and it is up to the government to step up and accelerate the country's transition to digital transformation. In the present situation, internet is a common means of spreading and obtaining information, not everyone will be able to

afford or enjoy the benefits of being linked online due to blockages in the Department of Education's learning schemes (Cruz, 2020). Hence, the pursuance of the academic year cannot be a one-size-fits-all solution. The options must be tailor-fit to the needs of the public-school students as their circumstances varies.

### *History of the Development of Distance Learning in the Philippines*

The form of distance learning that is currently applied in the Philippine setting has been a product of four generations of Distance Education (DE). According to Bandalaria (2007), the early development of the distance learning in the Philippines – which were radio programs designed, developed, and implemented by Filipinos for the Filipino people – consisted of informal, non-credit courses offered in the area of agriculture.

In her study entitled “Impact of ICTs (Information and Communication Technology) on Open and Distance Learning in a Developing Country Setting: The Philippine Experience”, Bandalaria discussed the developments. There are four generation stated. The first generation is the earliest documented effort of ODL in the Philippines was the Farmers’ School-on-the-Air (FSA). As such, radio can be viewed as the first-generation distance education in the Philippines. The second generation is recognizing the potential of distance learning for continuing education of various professional groups, many traditional universities started offering their graduate degree programs via distance education methods, which relied mostly on print-based instructional materials supplemented with occasional face-to-face tutorials facilitated by a university-trained tutor.

Furthermore, Bandalaria (2007) added that the third generation is when the Philippines saw the convergence of several key factors such as growing need for flexible learning, anytime, anywhere, increased availability and access to new ICT and growing demand of geographically dispersed professional groups seeking access to flexible, lifelong learning opportunities. To address these emerging societal demands, instructional contents were primarily delivered in print-based formats (where instructional design is essential), supplemented with lesson components typically delivered in convenient audio and/ or video formats. Finally, the fourth generation can be aptly described using terms e-Learning (electronic learning), m-Learning (mobile learning), and u-Learning (ubiquitous learning). The fourth generation can also be viewed as an ‘empowered phase.’ For teachers, the use of ICTs helped enhance their skills and knowledge.

The evolution of distance learning has proved itself a viable alternative for teaching and learning. It can be an alternative tool whenever there will be a national emergency crisis. Schools will no longer be worried on how to continue learning because there are already alternative learning modalities discovered. However, it has taken its toll as the Department of Education has shifted involuntarily to accommodate the students whose learning was interrupted by the pandemic.

### *Radio in Education*

Radio has been used already for educational purposes since its emergence. Though advancement of technology and the usage of Internet are continually arising, one cannot deny that radio broadcast in the field of education is already present. The term educational radio refers to the medium's employment in formal learning institutions, whether in elementary or secondary schools. It is commonly used to distribute course materials and is frequently combined with other forms of engagement, such as in classrooms, discussion

groups, or over the phone. Sarmah et al. (2017) puts that radio as a preferred channel of mass communication as it is easily understood by the lay persons and the scholars. It serves as an important instruction tool, as it can transcend the distance barrier and potentially accommodate the wider audience.

In year 2020, the expert consultation on the radio-based education in the Philippines have characterized educational radios into three different forms: classical educational radio broadcasts; interactive radio instruction and; interactive radio instruction (Mokwetsi, 2020). First, in the classical educational radio broadcasts, the learning scheme is dependent on pre-recorded audio materials such as stories and lectures. The key aspect in the delivery of the audio-based content is without any interaction as the students will only get to listen to materials. Second, in the interactive radio instruction, the delivery of the content is facilitated by the guide facilitators. In this type of radio instruction, the students will be led to certain interactive activities. Finally, the interactive audio instruction. In this mode of instruction, the listeners need to complete the activities that were given through SD cards, MP3 players and CDs. In the Philippines, the effectiveness of educational radio as supporting self-directed learning is still unclear. Hence, this study will explore how radio-based instruction affects the public-school students' education amidst the pandemic through tapping their narratives on their experiences, challenges and/or difficulties, coping mechanisms and insights.

Furthermore, in the study conducted by Sarmah and colleagues (2017), they cited countries such as Thailand, India, Mali, Columbia, Nigeria, Mexico, Kenya, Nepal, Bangladesh, Nicaragua, Sri Lanka, Botswana, South Korea and etc. Among these countries, educational radio remained prominent because of its effectiveness that it brought to their audience. They concluded that radio has the potential to harness in the field of education specifically in open and distance learning (ODL) and has the power to sustain its relevance because of the immediacy, simplicity, and accessibility of the medium itself. In South Sudan, the Speak Up Interactive Radio Instruction (IRI) programme has assisted 7,500 out-of-school children enhance their literacy, numeracy, and English language skills (McBurnie, 2020). This example validates the findings of an earlier Education Development Centre (EDC) study of 15 IRI projects between 1975 and 2000.

Another study conducted by Rahman Ullah and Prof. Dr. Altaf Ullah Khan in Peshwar, Pakistan. The study sought to identify the role of FM radio in providing education through different programs in their daily broadcasting. The findings of their study showed that majority of the listeners overall think that skill development issues are generally covered by these FM channels. Radio broadcasting in education improves the promotion of literacy and offers information on different topics to facilitate listeners in informed decision-making, ranging from skills development, formal education, informal education, understanding of social issues, religious instruction, and many other fields (Ulah & Khan, 2017).

However, the promising positive results of radio instruction is contradictory during the break of Ebola virus in 2014 in West Africa. Radio instruction may not be beneficial to poorest students as they have not radios or even batteries. McBurnie (2020) added that whenever children have the opportunity to listen the broadcast, some may not focus or struggle to comprehend radio teachers due to famish and teachers radio-broadcasters who speak a distinct language from theirs.

*Radio-based Instruction as a learning delivery modality*

Since then, radio is already existing the field of education to provide instruction to areas who needed it the most. One of the learning delivery modes utilizes by the Alternative Learning System (ALS) Program is Radio-Based Instruction (RBI). Radio-based Instruction is alternative learning delivery mode using radio broadcast to deliver the ALS programs (Department of Education).

As a form of distance learning, its primary goals are to provide feasible delivery system for basic education and to boost access to quality education by taking it where the learners are. It gives sustenance and provides instruction to out-of-school youth and youths who cannot finish school due to reason. Furthermore, the Department elaborated radio-based instruction as an instruction that uses local community broadcasting station to transform learning modules into radio scripts which later produce for public broadcast.

There are three broad categories of educational radio namely classical educational radio broadcasts, interactive radio instruction and interactive radio instruction. McBurnie (2020) described the classical education radio as a delivery of audio-based instruction where lectures are pre-recorded, and learners listens intently to the radio. Second, interactive radio instruction is a learning content on radio guide facilitators and learners through interactive learning activities. Thirdly, interactive audio instruction is described as an audio-based learning with interactive learning activities which learners or listeners should finish said interactive activities through SD cards, MP3 players and CDs.

### *Implementation of Radio-Based Instruction*

Countries such as United States, Canada and Australia holds a record on having a strong background on implementing education through radio (Haworth & Hopkins, 2009). These three countries developed “school of the air” which has the one aim that is to provide education in distance.

Acido and Oyzon (2013) mentioned that radio broadcast was also used in Kenya to assist teachers and pupils in learning and improving their English written and oral skills. Odera (2011) notes that radio technology is viewed by Kenyan teachers as a useful tool for teaching and learning languages like English, French, German and Kiswahili at all levels of education.

In the Philippines, there are also programs that provide radio programs on education. In an article written by Teacher Ariel Canete (2016), RBI program was launched on 4th of November 2004 which provided opportunities to for the OSY and Adults to gain more knowledge, attitudes, values and skills needed to enhance their quality of life and upsurge the level of their involvement in community activities. One of which is the newly implemented DepEd TV and DepED Radio. Department of Education secured an ally with National Telecommunication Commission to seek support from them to fully implement radio-based and television education this school year as health crisis strikes (Department of Education, 2020). Undersecretary for Administration, Alain del Pascua, strongly stated that the Department is strong-minded to intensify education delivery through television or even on radio broadcasting stations.

Furthermore, in Davao del Norte, the School Division of Davao City also launched their city’s radio-based instruction and television-based instruction (Division Memorandum No. 385 s.2020). These initiatives by the national and local governments on education lead to a fulfillment of a continued education despite the pandemic. This kind of momentous event is therefore needed to be celebrated simply because learning will be

made available to all to have fulfilled education for all. Moreover, radio-based instruction is already made available in municipality of Caraga, Davao Oriental where most household relies on radio broadcast.

In order to optimize resiliency on quality education beyond the threat brought by COVID-19 pandemic, the Department of Education (DepEd) is recommending the implementation of the “DepEd TV” and the “DepEd Radio” as a permanent program and long-term plan in education (Hernando-Malipot, 2020). The Department eyed television and radio education as a permanent program not just a solution in this trying time but also for future education. On an interview, Pascua assured that all television episodes aired on partnered TV stations has subsequent radio-based lectures that are meant to learners whose television is unavailable.

### *Advantages and Disadvantages of Radio-Based Instruction*

**Advantages of Radio-Based Instruction.** In the advent of pandemic, radio became one of the educational instructions that is enlisted in the BE-LCP of the Department of Education. This pandemic greatly affects the educational system not just in the Philippines but also globally, radio-based instruction is known to be one of the best ways to reach learners.

The advantage of using radio in instruction highlighted by Rashid (2010). First, economically, the material from radio can be prepared and recorded for a long period of time. The materials used in the recording can be used as many times as possible and revised it when needed. Second, a large audience can be targeted over a wide distance depending on the frequency that the radio station. Third, the programs from the radio can be heard inside the home and in any place where radio is available. Fourth, programs can be used as instructional material and can be integrated into face- to-face classes or it might be a combination with distance education.

Dr. Muhammad Amjad Ali (2015) elaborated and concluded in his study four reasons where radio is economically attractive for educational purposes. First reason would be radio is cost-efficient. He stated that radio transmits the cost of education provided in the classroom setting. Second, radio does not have any rivals. Moreover, compared to a typical classroom setting where instruction is limited because of the number of people who wanted to participate within a given amount of time whereas in radio, listeners does not limit and compromise instruction for another. Third, geographical areas where formal education is not feasible, he described that radio has the potential to cover all far-flung areas and dispersed populations. Finally, rural families are reluctant or incapable to send their children to school, which involves time and money (Ali, 2015).

Furthermore, Education Development Center Director, Rachel Christina, stated that radio broadcasting makes it feasible for everyone to obtain access to broadcasting (Christina, 2020). She also elaborated that interactive audio is recorded and the radio educator directs them through the lessons, parents or guardians can assist without experiencing the full burden of home education for their children (Christina, 2020).

On the other hand, radio-based instruction gives us a leeway to address restrictions on face-to-face interaction. However, it also creates negative implications or even limitations on the learning process of listeners.

Ali (2015) cited the highlighted disadvantages of radio in the instruction. First, students on listening radio can lose interest quickly and there are interruptions during the airing. Second, there is no student feedback even if there is an assessment before and after the airing. Third, radio programmes have no visual instructions and there are limited lessons to be taught. Fourth, programmes are unsupported in disciplining students.

Another study presented by Chander and Sharma (2003) about the limitations of radio for instruction purpose. They enumerated the following drawbacks; it intrinsically lacks interaction and collaboration between teachers and learners, instructor feedback and clarification are generally unattainable, instruction cannot be interrupted or reviewed by students (unless it is tape-recorded), the pace of the lesson is fixed, note taking is tough for some, and lastly, period or duration for reflection is minimal.

In the findings of Rapid Evidence Review (RER) of EdTech Hub puts radio as audio-based format of instruction which makes it difficult and impossible to students and teachers who are deaf or have other special educational needs (Damani & Mitchell, 2020). Other intrinsic educational limitations within radio as a broadcast medium are that it is short-lived (Bates and Bates 2005), has limited options for tailored repetition (Elliot & Lashley 2017; Christina and Louge, 2015) and only permits honest interactivity through additional facilities such as phone-in (Bates and Bates 2005) or social media (Gavaza & Pearse, 2019).

#### *Views on Radio-based instruction*

Variety of study related to this study is already studied. Each of them has its own distinct findings. On a research study entitled, Instructional Radio Delivery Mode on Academic Achievement of Distance Learning Students' in Computer Science, Olakulehin (2016) unearthed that students' who were taught with instructional radio achieved slightly higher scores in the Computer Adaptive Test (CAT), test scores contrasted to the students taught applying the lecture method. It is reported that the use of educational radio enable students to make use of their cognitive capabilities in the teaching and learning process (Olakulehin, 2016).

More so, on this the same study, findings revealed that there is no significant difference of treatment (radio instruction and lecture method) on students' academic performance in Computer Science subject. It describes that learners taught on radio instruction and lecture method are not significantly related with each other. Thus, Olakulehin (2016) recommended radio instruction as means of learning specially working students so that their work will not be interrupted as they pay attention during the radio broadcast and radio broadcast should be improved in open and distance learning to achieve efficiency in learning.

Yelkpieri, Kweku and Kwesi (2011) contradicts Olakulehin's (2016) findings. Students in Ghana preferred educational programming on television instead of educational programming on radio. This explains that students are into television because it is a combination of visual and aural. Additionally, the Rapid Evidence Review (RER) elaborated four key findings in response to the novel COVID-19 and to highlight insights on areas that are applicable to unravel educational responses so that school will continue its operation. First finding is radio, specifically IRI approaches, can be utilized not only to directly facilitate learner- centeredness and interactive pedagogical approaches in the classroom but also, to

negotiate better pedagogy for educators unable to access trainings. Both authors describe that due to present pandemic, educational radio might be utilized by students in informal contexts such must be engaging to stimulate learner's active participation in their respective homes. Thus, it a necessity to look into considerations that when using radio-based instruction, it must be interactive and learner- centered (Damani et al., 2020).

Secondly, radio is most prominently utilized in numerical and language related subjects. Based on the summary of Damani et. al (2020), evidence suggest that radio is apt to be more effective in teaching linguistic-related topics rather that math especially among young ones. A medium like radio can assist students think in a more focused manner on language without the 'distraction' of imagery. They added that radio-instruction is more feasible, effective and worthwhile if it is supplemented with printed materials and use of technologies.

Thirdly, educational radio is a reasonably cost-effective option for long-term delivery of learning content especially in communities with scare resources such as but not limited to connectivity, digital literacy, electricity, unreachable learners in rural areas and where there is a scattered population. Thus, during the present pandemic, educational leaders must take into account the cost-effectiveness and feasibility of the distribution of printed materials or even technologies that can supplement learning. Finally, issues on data storage and data privacy. It will be necessary to decisively consider data privacy among clientele. It is also elaborated that critical reflection is needed in preparation (Damani et al., 2020).

Findings revealed that students who give preference to radio do so because: it is more inexpensive than television, it is often easy to use with batteries and independent on electricity, it can be listened by learners while doing other activities, it is highly portable, and it has lots of relevant educational content (Yelkpiieri et al., 2011). This simply illustrate how radio is accessible and convenient to each student.

Osorio, Muñoz and Bohórquez (2019) also delve into Colombian students' perceptions of educational radio, exclusively when applied as a strategy to develop English speaking skills. They discovered that students commonly had a positive and definite perception of the radio programme they participated in and finally, found it engaging and entertaining while they are in the comfort of their homes. With this, radio is beneficial globally.

Furthermore, Acido et al (2013) exemplified that the education sector makes use of various media to respond to the call of empowering families in their efforts to become the primary support of their children's education. Television shows on literacy and numeracy are being launched, many of which make use of the children's mother tongue for better transfer of learning. Radio is also used for this purpose, as it is considered one of the cheapest, yet effective, educational technologies available for education and development purposes in developing countries. However, the problems that have been predominantly evident in the digital age has allowed schools in the far-flung areas to consider and continue to utilize the radio to bring about instruction to the public-school students who could not afford the necessary materials.

### 1.2. Research objectives

This study sought to explore the experiences of the public-school students on radio-based instruction. Specifically, it will answer the following objectives:

- To narrate the stories of public-school students on radio-based instruction
- To draw out insights of public-school students on radio-based instruction

### 1.3. Theoretical lens

In this study, I looked into different theories such as Transactional Distance Theory of Michael Moore, Social Cognitive Theory of Albert Bandura and Multiple Intelligences Theory, specifically Musical Intelligence of Howard Gardner. The researcher believed that these theories to be pertinent to the present study.

This study can be anchored to the Transactional Distance Theory propagated by Michael Moore. The theory focuses on the relationship between the teacher and learner amid an established distance (Moore, 1997). Moore, exemplified that distance education is not simply a geographic separation of learners and teachers, but, more importantly, is a pedagogical concept. Students and teachers in distance education utilizing radio-based instruction with this theory have special characteristics because it affects both teaching and learning. With the separation there is a psychological and communications space to be crossed, a space of potential misunderstanding between the inputs of the teacher and those of the students.

Through this theory, it is relevant to distance learning using the radio-based instruction because it will see how much a student is developed in the course or subjects of the mandatory blended learning scheme. Even if there is a separation between teacher and students, radio is a means of communication where learning through radio will continue.

In addition, this study can be also studied using the theory of Social Cognitive theory of Bandura. He highlighted the role of cognition in the capacity of an individual to construct reality, to regulate themselves, to encode information, and to act. Also, it helps people to think abstractly or symbolically in the media as an important source of information to promote observational learning and improve self-efficacy in the performance of certain behaviors. In response to the theory, it presents a perspective from which students can analyze the effect of mediated content on attitudes and behaviors. Therefore, students must pay attention to the attractive lessons using the mediated radio to perform relevant behaviors.

Another theory that supported this study is the Multiple Intelligence of Howard Gardner. Gardner (1983) advocates the eight multiple intelligences and one of these is Musical Intelligence. Students who are inclined to music are called music smart or sound smart. It highlights students who have potential for thinking in music; for hearing, recognizing, and remembering patterns, as used in singing, identifying sounds, and in remembering melodies and rhythms. Also, musical intelligence has an emotional impact and affects student mood because they can hear and replicate rhythm patterns and pitch. Students with a high musical intelligence find it easy to learn to play an instrument. They also have a great long-term memory and can play entire pieces without having to read the score.

Therefore, in this research study, using radio-based instruction promotes high chances of learning aside from the self-learning modules, activity sheets and other learning materials received. Along the way, listening skill will develop smoothly, and improved to those students who are musically inclined. Knowing that through listening in radio is helpful in the transfer of information and learning which is beneficial in distance learning.

## 2. Methods

### 2.1. Research design

This study utilized a qualitative paradigm. This design was characterized as a way of exploring and understanding the significant meaning an individual or a group attaches to a particular social issue (Creswell, 2013). The research conducted is qualitative in paradigm and narrative research in design. Hence, the method will be acting on the stories of public-school students on radio-based instruction and it will be scrutinized further through the employment of the narrative research design.

Narrative research design, as defined by Bleakley (2005), is a form of qualitative research in which the stories themselves become the raw data. According to Lieblich (1998), this approach has been used in many disciplines to learn more about the culture, historical experiences, identity, and lifestyle of the narrator. In this account the researcher will delve on the stories of public-school students on radio-based instruction. Hoshmand (2005) posits that amongst the examples of inquiries that yield narrative data include interviews that solicit stories or oral histories, or written autobiographies and biographies.

Additionally, the narrative research, according to Salkind (2010), strives to examine and conceptualize human experience as it is portrayed in textual form. Its goal is to delve into the meanings that people attribute to their experiences. To gather rich and free-ranging conversation, I had to engage with small samples of participants in this technique of research. The study's focus is centered on storied experience when this method is used. Conferring to Salkind, narrative research typically includes interviewing people about a particular topic of interest, but it can also include document analysis.

### 2.2. Participants and sampling

In this paper, I made use of purposive sampling in selecting the participants. Purposive sampling is a non-probability sample that is selected based on the characteristics of a population and the objective of study. This way of sampling is also known as judgmental selective or subjective sampling (Crossman, 2017). Using this technique, the samples were selected based on the criteria. This study identified three secondary schools in the Municipality of Caraga. In each school, the researcher gathered two student participants for in-depth interviews and another two parent participants for focused group discussion. All in all, there were six participants for the in-depth interview (IDI) and six participants for focused group discussion (FGD). The participants were purposively selected and possessed the following criteria: For the in-depth interview shall fall in the following criteria: must be a public junior high school student; and have experience in radio-based instruction. For the participants in focused group discussion shall fall in the following criteria: must be a parent of the students' interview.

### 2.3. Research instrument

To unearth the necessary data that has to be collected in this study, the researcher used semi-structured guide questions. Semi-structured guide questions are a good research instrument in allowing the researchers to develop in-depth accounts of experiences and perceptions with individuals (Cousin, 2009). This research instrument focused on qualitative textual data that will give balance between the flexibility of an open-ended interview and a structured interview. The researcher believed that this instrument can be a helpful tool in covering rich data on the stories of public-school students on radio-based instruction.

In addition, I used focus-group discussion. Focus groups were originally called focused interviews or group depth interviews. Anderson 1996 (as cited in Birmingham & Wilkinson, 2003) defined focus group discussion as a carefully planned and moderated informal discussion where one person's ideas bounce off another's creating a chain reaction of informative dialogue. Its purpose was to address a specific topic, in depth, in a comfortable environment to elicit a wide range of opinions, attitudes, feelings or perceptions from a group of individuals who share some common experience relative to the dimension under study. The product of a focus group was a unique form of qualitative information which brings understanding about how people react to an experience or product. In order to check the alignment, accuracy, consistency and quality of the research instrument of the study, the semi-structured interview guide, and the research objectives was validated by experts who have significant experience in the field of research and social sciences.

### 2.4. Data collection

In order to gather and collect accurate data for this study, I took meticulous precautions and conducted a careful evaluation. In addition, I followed the methods in this study to assure accurate results. Data collection is an organized way of obtaining observations or measurements, according to Bhandari, Birinci, McGrattan, and See (2020). Whether conducting research for commercial, government, or academic purposes, data gathering aids the researcher in obtaining first-hand knowledge and early insights into the research topic.

In the collection of data, the researcher secured a permission letter to conduct the study duly signed by the Dean of the Graduate School of Holy Cross of Davao College. Next, submit the requirements needed Research Ethics Review in order to proceed on data gathering. Another permission letter was sent to the Department of Education, Division of Davao Oriental specifically the office of the Schools Division Superintendent requesting to conduct interview of selected public-school students and parents of the students interview for the conduct of the study and followed by another permission letter for the school head of Caraga National High School, San Luis National High School and Pantuyan National High School.

However, Caraga National High School was the only school who approved to conduct the study because the two schools mentioned above were not implementing radio-based instruction (RBI) as their focus delivery modality. Then, the selected participants were given an informed and assent consent approved by the Research Ethics Committee attaching their parent's consent given that participants are still minor and followed by the schedule and venue of the data collection. The informed consent encapsulates the conditions on the rights and responsibilities as well as the consequences once the respondent chose to stop the data gathering at the middle of the process. Lastly, I provided a week for the response of the selected participants. Also, I reminded the participants to bring their own ballpen, wearing of facemasks, and bringing their

personal alcohol disinfectant and/or hand sanitizer is highly observed to help limit the spread of the virus during the interview. If they missed to bring their own, I can provide such.

Since there was an absence of vaccines for COVID-19, during the collection of data, the minimum health protocols such as the washing of hands, practicing two-meter away physical distancing, wearing of facemasks and of face shields and twenty-seconds rule in applying alcohol disinfectant and/or hand sanitizer is highly observed to help limit the spread of the virus. The rooms were appropriately selected and chosen based on the guidelines of the health organization that is following the minimum health standard protocols that is an open-area where air can circulate well. The informed consent was duly signed by the participants. I had an in-depth interview and focus-group discussion that has leading and probing questions that led the participants in giving elaborated answers. The participants of the focus-group discussion were divided into two sets considering the vicinity of the parents of the students' interview. I allowed the participants to ask questions or clarifications with regard to the interview. The participants are given no time limit in delivering the responses and processing the questions in order to avoid miscommunication. The conversation proper must be recorded through a tape recorder or cellphone recorded. The participants were provided with information about the study.

According to Dörnyei (2003), oral instructions must include what the study is about, why it is important or socially useful, the organization responsible for administering the study, emphasizing that there are not right or wrong answers, requesting sincere answers, promising confidentiality and expressing gratitude by saying gestures. The schedules will be set up in convenience of the participants. The participants will be provided with background information about the study. I provided assurance to the respondents of confidentiality as no authorized persons would have access to their answers. I was fully aware of the importance of enabling the informant to be at ease so as to obtain a high rate of participation. As a technique to record the answers, the interviewer wrote down the responses immediately.

I collected the data, followed by a transcription. According to Assens (2018), transcription is a qualitative analysis that provide a written account of verbal words. Then, coding of names was applied to easily facilitate the data. Coding of names in qualitative research is a word or short phrase that symbolized the participants identity, and salient data in the transcription. Afterwards, the encoded data was reviewed by the participants.

## 2.5. Data analysis

The data were garnered through the process of in-depth interview and focused- group discussion where the participants were asked about their specific stories on radio-based instruction and from the parents of the students' interview. I immediately transcribed all the participants' recorded answers from the in-depth interview and focused-group discussion. In the study, the data analysis procedure followed the thematic analysis and triangulation method.

After transcribing, I proceeded to thematic analysis. This tool can be of help in understanding and making sense of seemingly unconnected data. It can be utilized to analyze qualitative information and to systematically acquire data about a person, an interaction, a group, a situation, an organization or a culture (Nowell et al., 2017). In this paper, thematic analysis was used to give a deeper understanding on the stories of public-school students on radio-based instruction and would undergo different stages of collecting data, coding data, code validation, themes identification, information consolidation and finalizing theme names.

Another method to be utilized was the triangulation method. It involved the use of multiple data sources to cross validate the information that has been acquired in the study. Moreover, this method ensured the richness, comprehensiveness and sufficiency of data that were collected in research undertakings. In this paper, the researcher made use of in-depth interview and focused-group discussion on the stories of public-school students on radio-based instruction.

### 3. Results and Discussion

The narrative stories of the Public-School Students on Radio-based Instruction vary individually but during the collection of data with them, they have shared the common experiences. The students were asked to narrate their stories during the airing of lesson on radio-based instruction. Their stories were life-changing and had an adverse impact on their learning development process. Most of the essential responses that were related to their stories during the radio-based instruction are categorized into three themes: technical issues, instructional issues and student behavioral issues.

Technical issues are unanticipated problems and breakdowns that make performing and/or achieving a desired action and task. In the field of education in this new normal set-up, radio-based Instruction is an innovative idea of the Department of Education as to continue learning amidst pandemic. This is considered as the first posing challenge of radio-based instruction among the participants because they have shared common struggles and opinions. Considering that in the new normal education, radio-based instruction is new. They have a lot of problems as they adopt the instruction while they are at home listening the aired lessons together with their parents as their facilitator. In the narrative stories of the participants, during the instruction, students have really the difficulty in engaging and receiving the type of learning. Moreover, under the technical issues are limited time aired lessons; complexity on the use of radio mode instruction and interferences of radio aired time.

One of the issues that surfaced based on the narratives of public-school students on radio-based instruction is the instructional issue. Instructional issues are hindrances or impediments that prohibit students from creating a meaningful learning experience and attaining learning goals. In determining instructional issues, it helps teachers and educational institutions devise effective instructional strategies to cater to the differentiated learning styles of students and students' learning requirements. Instructional challenges can be in the form of failure of teacher's monitoring of student's progress, choice of preferred teaching method, and many more. Furthermore, the instructional issue is one of the common problems of educational institutions because the demands of the clients change from generation to generation. Learning needs become more arduous and challenging on the part of the teachers because it is essential to promptly address so that it will not keep on piling up. Hence, under instructional issues are the following responses that emerged from the participants, namely teacher-centered direct instruction, difficulty to encourage student's participation, and feedback gap between teacher and student.

It is noticeable that human engagement in a classroom differs between traditional learning and alternative delivery modes, especially radio-based education. Student's attitude toward people and toward the discipline has shifted. This has become an issue especially to the new educational set-up of continued learning and adapting radio-based instruction. In this new way of delivering learning, it is also essential to consider the behavior of the students. It is necessary to know how they perform at home during radio-based instruction. As

a result, the following themes were generated: loss of interest to radio lessons, development of auditory skills and lastly, productivity of students while listening.

The use of radio-based instruction compounded many problems but realizations are made up after its utilization as a supplementary material during the prohibition of face-to-face classes. This learning tool made possible by the initiatives of the school – the Caraga National High School through the support of the different sectors and stakeholders in the municipality. These realizations shared by the participants allowed the students and parents to express their own potential and transform into the person they desire to be. As they described their experiences, they successfully turned their challenges into insights. Despite of the challenges of radio-based instruction as a learning tool, they have garnered a good amount of understanding in their learning process.

Transactional Distance Theory by Moore (1997) which is relevant to students experiences with distance learning using the radio-based instruction. This allows students to see the improvement of the mandatory blended learning scheme. Also, it provides another way of learning by actively and attentively listening on the radio while they are answering their modules. More so, parents explained that their children can learn well because it is being accompanied with their modules.

Cojti (2021) posited that in todays generation, radio stations that have gained access to the internet are now broadening their coverage, engaging a wider audience, and expanding their range. Also, radios are taking advantage of mobile applications which enable users to utilize and interact in radio. The stories of the participants depict that even if there is a social class, radios are very accessible. Teachers and students can connect and interact at a distance through listening to the radio with the assistance of their radio programs.

As radio as a supplementary material, Gower et al. (2005) mention that audio is a good source of spoken language and a very important instrument used in the classroom by teachers to help students improve their listening skills. Moreover, Harmer (2001) said that audio materials are beneficial for students because they help them develop extensive and intensive listening skills. Teachers employ supplementary materials to aid children's learning and to encourage them to study in a constructive and meaningful manner.

Furthermore, according to Spratt, Pulverness and Williams (2005), supplementary materials are utilized to offer learners with additional practice by providing something that the module lacks, as well as to suit the learners' requirements and interests. As a result, learners can add variation to their learning process and improve their listening, speaking, reading, and writing skills.

## Findings

For theme number one is the narrated stories of public-school students on radio-based instruction, which include three major themes: technical issues, student behavioral issues, and instructional issues. Technical issues are unexpected equipment issues, such as hardware breakdowns or software defects, make performing a desired operation difficult or impossible. In this case, technical issues comprise of limited time aired lessons, complexity on the use of radio as a mode of instruction, and interferences of radio time aired.

Secondly, under the instructional issue, there are three sub-themes presented. These are teacher-centered direct instruction, difficulty to encourage student's participation, and feedback gap between teachers and students. Instructional issues dwell more on the teaching-learning experience of the student. Finally, under the student behavioral issues are loss of interest in radio lessons, development of auditory skills, and productivity of students while listening. This category highlights the observable attitude of students during

radio-based instruction.

Furthermore, the challenges felt by the participants while they are narrating their stories turned to insights. The insights of public-school students on radio-based instruction cited by the students and parents include four significant themes: it is a good alternative delivery mode; accessibility to radio is necessary; parents should be cautious during radio lessons; being more attentive in listening; and supplementary materials should not be taken for granted. These insights reflect that amidst the covid-19 pandemic, radio-based instruction provides an opportunity for students to continue their learning.

## Conclusion

Based on the findings of the research, the following implications are drawn and presented in this section:

The narrated stories of public-school students established technical issues, student behavioral issues and instructional issues on radio-based instruction, which creates a gratifying remembrance on their end as stakeholders of the process. First, technical issues obtained limited time aired lessons, complexity on the use of radio as a mode of instruction, and interferences of radio aired time. Undeniably, students are promptly disturbed from listening to the radio with household chores assigned to them by the parents. Since their school is their home in this pandemic, one's attention and time are divided by household chores and radio instruction. It poses a negative experience in just doing the household chores alone. These challenging problems develop a sense of urgency to improve the implementation of radio-based instruction specifically on radio-based instruction as to give equally important on the use of module. Limited time aired lessons pose an unpleasant experience. The airing of the lesson is limited, which is uncontrollable. It cannot be repeated anymore because there are still subjects of different grade levels beginning from kindergarten to senior high school subjects. This results in students not able to listen. Living in a remote area where electricity is sometimes interrupted poses a negative experience. Students who have battery-operated radios are fortunate enough to still go on in listening even if there is an interruption. However, it is a challenge for students who relied so much on electricity in turning on their radios. Electricity interruption can be a barrier to continuing learning.

Moreover, instructional issues is one of the narrated themes under the narrative stories of public-school students. It focused on teacher-centered instruction, difficulty to encourage students' participation and feedback gap on teacher and student. The gap to provide immediate feedback between teachers and students resulted in learners answering confusion on their own. Students are left unclarified and force to research on their own. This reflects that radio-based instruction is more teacher-centered. Students are obliged to follow what the radio teacher is saying and cannot be given a chance to interact with their teacher.

Finally on the first objective is the student behavioral issues. Student performs uniquely and distinctly on radio-based instruction since they are at home learning. These were obtained on loss of interest to radio lessons, and development of auditory skills, and productivity on student's multitasking. Students can be productive even while they are handling various tasks. It is evident from the study that they can still learn their lesson if even they are doing different chores at home. They can participate in the questions thrown by the radio teacher, which are effectively shown if they obtain a correct answer. Students can manage their time efficiently and be time-conscious about how they will finish a task successfully. During radio instruction, students are actively involved. Students' active involvement is measurable once they can achieve the desired goals for each aired lesson. They can answer their self-learning modules, check their learning progress and engage themselves in the activities prepared by the radio teacher. Actively involved students are described to perform well for they can participate and interact during the learning process. In this kind of delivery mode, listening skills entail listening comprehension on the aired lesson, resulting in a positive outcome.

On the other hand, insights drawn-out focused on positive insights such as suitable alternative delivery mode, accessibility to radio is necessary, more family time, and attentive listening. Radio-based instruction is considered to be an excellent alternative delivery mode that can augment printed modules. It imposes excellent assistance in continuous learning in this pandemic. It provides an equal chance to obtain an education at a distance. Learners can learn and understand their lessons while staying at home. As radio is concerned in pursuing radio instruction, it involves access to the radio. In a remote area, radio is not a problem because almost every household has radio at home may it be battery-operated or not. Having radio access provides all learners to be at the same pace even if not in the same place, for radio is simultaneously played as long as the radio frequency can reach it. Since learners are staying at home, it offers to spend more quality time with the family. It serves as one of the recreational activities of the family by listening and facilitating one another. While learners are learning, parents are learning at the same time. Parents are refreshed on some of the concepts which they have learned in their school days. Radio-based instruction emphasizes attentive listening. Attentive listening is a prerequisite in learning in this type of delivery mode. In order to understand the lesson, students are asked to listen attentively during the airing of the lessons. This can enhance student's ability to concentrate on their lessons for learning is transferred effectively.

## Recommendations

With all the implications as mentioned above, future directions are obtained and introduced in this section:

For the Department of Education, being the primary body involved in the planning, implementation up to evaluating the different alternative delivery modes, specifically in radio-based instruction, needs to focus on creating new improvement to lighten the burden of students and parents in the remote learning teaching dynamics. In order to come up with novel strategies to enhance students' learning at home, the home and school collaboration should also be strengthened. It also suggested that through the radio-based instruction can be means to navigate and operate as a new educational system whenever national emergency crisis will emerge. Moreover, through this study, the public schools will give more importance to giving and safeguarding a holistic educational approach fit for the quality of life, mental state, intellectual capacity, and circumstances of every public-school student. For the social studies teachers, they may learn from this study and prepare themselves as radio broadcasters. By being aware of the problems ahead, they are better equipped to meet the problems of being a teacher and at the same time as a radio broadcaster. It is suggested that they modify their evaluation and learning activities for their students to suit the needs of the radio-based instruction strategy, as this would assist them in correctly dealing with the challenges encountered by radio-based instruction end-users. For the public-school students may make adjustments in dealing with their everyday experiences in radio-based instruction. Moreover, their insights that resulted from this study maybe adapted by others as a guiding principle. The students may appreciate the beauty of radio-based instruction as a new alternative delivery modality to continue learning despite of the threat of COVID-19. This study will help them think of ways on how to shift their identified unpleasant experiences into their areas of pleasant experiences. Finally, students can be able flexible and adaptive at all times so that they are prepared in whatever challenges may occur during their learning experience. For the parents and guardians of students as the key contributors to the development of their children, may they impart meaningful thoughts and experiences and participate in the teaching and learning process of radio-based instruction. It is suggested that they should more involved in the learning process of their child so that they can facilitate learning at this time of pandemic since their child are home schooled through radio-based instruction. Lastly, future studies can be carried out to give a wider variety of findings and insights. For example, educational leaders may participate in a broad study scale to obtain more robust foundational views and experiences on radio-based instruction. Also, this study can be conducted in a quantitative method to present numbers with the given locale. Future researchers may explore the result of this study and conduct a more comprehensive investigation on the

stories of public-school students and parents on radio-based instruction to provide a broader view of this situation.

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