

Challenges Or Benefits? Adopting Online Platforms For Education Purpose In Rural Schools Of Rwanda During Covid 19

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Abstract – The pandemic of COVID-19 has emerged the prompt obligation to shift from physical to online classes. The education sector like many other domains of human lives suffered severely from the contagious pandemic of Corona Virus. Thus, to keep educational process running, the entire system was forced to use online platforms from primary to higher education. It is in line with such background that this paper seeks to identify whether the adoption of online platforms and social media for education was beneficial or challenging to rural schools of Rwanda, especially in Musanze district. Moreover, this paper will contribute to maintaining efficient teaching learning means throughout any other related endangering situation. Possible solutions will be identified and proposed to respond to the challenges in place. To collect data, the researchers used both qualitative and quantitative methods. The tools designed to facilitate data collection process include descriptive online survey, and interviews both structured and non-structured. 200 respondents were targeted including learners from primary, secondary, and tertiary education, teachers, parents, and other stakeholders in education. The findings have shown that e-learning and the use of social media in teaching-learning activities from rural schools was not efficiently responsive. In case of future similar crisis, Education stakeholders should take measures that prioritize educational inclusivity.

Keywords – Challenges, benefits, rural schools, Covid-19

I. INTRODUCTION

14th March 2020 dated the awful announcement by the Rwandan Ministry of Health regarding the out breaking pandemic on the land of Rwanda. The first COVID-19 tested positive case in Rwanda was observed in Kigali. The reported case was from the patient who arrived in the capital city of Rwanda from India (Mumbai) on 08th March 2020 and has tested positive for corona virus (COVID-19). Upon his arrival in Rwanda, he had no symptoms. Then, on 13th March 2020, after five days, he, himself reported to health facility because he was feeling unwell and immediately was tested positive (**Karim et al, 2021**)

World Health Organization (WHO) has managed to provide possible support as to restrain the spread of COVID 19 to many of African countries including Rwanda. The support was in multifaceted situations and forms like surveillance, community mobilization, and availing practical and material provision, testing coordination, personal protective equipment, and support in building laboratories, isolation centers, essential supplies for screening and handling suspect cases, medication capacity, thermometers, and risk communication to name few (**Binagwaho, 2020; Rwigema,2020; World Health Organization, 2020**).

From then, COVID-19 outbreak was declared to be a public health emergency internationally. Therefore, Rwanda had to fight against the spread of Covid 19 at any cost to maximize the safety of all citizens including education sector.



Fig.1.1: Some of Covid19 prevention measures in Rwanda

From the time, the Rwandan Government especially through the Ministry of Health was on alert taking precautions and measures to restrain the spread of Covid 19 including hands washing, supply of clean water stations, availing hands sanitizers, providing facemasks, observing social distancing, and avoiding social gatherings among others. However, the number of positive cases increased from time to time and the Government of Rwanda emerged the rigid measures that started by total lock down (Ndishimye et al, 2020, Ngamije, 2020).

Moreover, Education sector like other fields of social lives has suffered from the outbreak of Covid 19. All schools from elementary to higher education closed their gates. Both staff and learners were advised to go and stay inside their homes temporary until further communication by the government of Rwanda. All students and parents remained together in their respective families. Teachers remained in their families as well. No one was allowed to cross out of home gates (Mugiraneza, 2021; Ngamije, 2020)



Fig.1.2: Covid-19 and Total Lock down in Rwanda
Source: Photo internet

Consequently, physical classes (face-to-face teaching and learning) have been banned countrywide. As a solution finding option, learning institutions and schools have adopted to shift to the use of social media platforms as to maintaining the teaching learning process. Some schools got to use e-learning platforms like moodle, zoom, Microsoft teams, google meet, while others chose to use whatsapp groups, messenger on face book, skype conferencing, and video calls through any of these learning forms. Besides, there are schools that used mobile conference calling. Furthermore, the ministry of education through its affiliated

agencies has booked some teaching learning sessions weekly on Radios and TVs within the country both private and public to offer continuous training amidst the pandemic (Nsengimana et al, 2021; Uwizeyimana, 2021)

It is against, such background that I came up with this research paper to study the case deeply, and identify whether this practice (conducting classes by adopting online platforms for education purpose in Rwanda during COVID-19. Was it a Challenge or benefit to rural schools? Thus, this study aims at getting the answer from the beneficiaries during that critical period. The contribution of ICT will be looked at to know its relevancy in education beyond normal situations.

Problem statement

The inspiration of this study was from the fact that when the physical classes were resumed, the teachers faced an extraordinary imbalance between students who come from urban areas (cities and towns) and those who come from rural schools. Some were advanced in the courses that were delivered online during total lockdown crisis whereas many of remote schools candidates seemed like starting from scratch. Two groups were involved. One has accessed on the learning materials while the next one was unable to access on them. Another big problem is associated with general misbehavior adoption such as teen pregnancies, drug abuse, family conflicts... connected with idleness out of schools (Ngamije, 2021; Uwizeyiman, et al, 2021; Ngamije, 2020).

Study Objectives

- Identify challenges faced by rural schools students during lockdowns and the crisis of Covid 19 generally
- Explore the benefits of teaching-learning activities through online platforms to rural schools students
- Propose recommendations for future practice in similar situations

II. LITERATURE REVIEW

This section aims at gathering relevant evidence on the outcomes, challenges, and opportunities of e-learning and e-teaching in the era of the Covid-19 pandemic in Rwandan rural schools. The literature presented a number of learning and teaching challenges faced by Rwandan rural schools.

The Covid-19 pandemic led to demoralizing socio-economic sectors around the world. To deal with the spread of covid 19, many countries have imposed restrictive measures to reduce the spread of the pandemic and encourage social distancing. This involved the closure of colleges and many schools shifted from traditional classroom-based teaching and learning to a virtual approach (Pham & Ho, 2020).

In order to respond to Covid-19 and manage its spread, the countries including Rwanda have set and implemented rules and regulations against it. In addition, most social and economic activities have been suspended, including educational institutions to fight this pandemic (Sahu, 2020). The rapid spread of Covid-19 caused a major challenge to the educational settings at all levels especially in rural areas where they were forced to close and try to find other alternative approaches to teaching and learning (Liguori & Winkler 2020). Therefore, rural educational institutions in Rwanda have been pushed to cope with online learning, as traditional class-based learning was unfeasible during Covid19 crisis (Ratt en, 2020)

2.1. Students' attitudes and motivations toward on line learning

Rwandan students, especially those in rural areas, most of them were not able to attend their classes online due different problems. Those who had this chance they were not mentally well prepared to the use of ICT tools where they used their study period as a relaxation period and a social interaction.

Some researchers reported that students' previous experiences of ICT use may influence their attitudes towards online learning (Stephens & Creaser, 2004; Spiceland & Hawkins, 2002). However, other researchers reported that previous ICT experiences did not have a significant impact on students' attitudes towards online learning (Buzzetto-More & Sweat-Guy, 2006). This distraction more likely to leading to bad habits. It was proved by a big number of unwanted pregnancies among teen girls during Covid pandemic.

Deci & Ryan, (1985) pinpointed that motivation in learning ranges from intrinsic to extrinsic, based on self-determination theory. Students can be intrinsically motivated by interest, excitement, confidence, and the learning activity itself. The students

who were more motivated intended to be more positive about learning in an online environment. In Rwandan rural schools, there is a lack of motivation due to a number of things like the lack of electricity, electronic devices, food security in lockdown, and access to internet connectivity, among others.

Ryan & Deci (2000) added that students can also be extrinsically motivated by various external factors such as pressure, guidance from other people. On their side, **Paechter, Maier & Macher (2010)** have described the influence of motivation on students' online learning attitudes

2.2. Parents attitudes toward online learning

Rwandan parents were worried about their children's education because they do not have all the tools they need to study well. Consequently, they were always complaining about the behavior of their children and wanted their children go back to school even if it was in critical conditions.

Not a small number of literatures have discussed the attitudes of parents towards the use of online learning mode. Many of them were worried about the dangerous online content and the risks of unrestricted digital use. They were concerned about the impact of digital use on children's social and health development (**Jiang & Monk, 2016; Lepinic & Samec, 2013**). More recently, due to the rapid growth of screen technologies, parents have expressed doubt about whether mobile devices could be beneficial or harmful to their children and how these mobile screen technologies can be adopted (**Erogan et al., 2019**). Parents with higher incomes and higher education have employed a wide range of practices and strategies to manage restrictions on the use of digital devices and have endeavored to encourage offline activities for children while limiting digital activities at home. (**Livingstone, 2015**)

Some parents have set rules and limits on the frequency and duration of digital device use, but failed to recognize the importance of their role and involvement in supporting young children's technological engagement (**Plowman, 2012**).

2.3. Schools expectation towards online teaching-learning

Educational institutions faced the challenge of continuing the educational process remotely due to the COVID-19 pandemic. This prompt shift took over without readiness and preparedness to both teachers and students. In addition, the schools were not well prepared for the online teaching because of the sudden Covid 19 pandemic. They needed to quickly develop online educational skills (**Hattar et al., 2021**). The Covid-19 pandemic has had a major impact on the educational need to change their curriculum from hard to soft content. It was a major challenge to develop students' technological skills in a very short time as to use e-learning (**Doyle, 2020**).

Those prompt changes alert that Rwandan students mostly those from rural areas may be vulnerable to satisfactory and effective online education during COVID-19 because they are still developing their self-regulation and attention control skills and are unable to independently deal with technological problems and other emergencies (**Gallagher and Cottingham, 2020**).

2.4. Government expectation toward online teaching learning.

The government has a responsibility to help its people in difficult times and to find solutions to both local and national emergencies. The unpredicted outbreak of the Covid-19 pandemic paralyzed various sectors of the economy and every single component of human life, not only in developing countries but also around the world (**Johnson et al., 2020**). While every country is being affected by this pandemic, most developing countries were expected to be severely affected due to a lack of coping mechanisms such as health facilities, infrastructure, and technology (**Blundell et al. 2020**). This would increase more inequalities among countries, regions and even communities of the world (**Jegede & Deborah, 2020**). In Rwanda especially in rural areas, the lack of internet connections, electricity, and infrastructure that support online learning hinders virtual learning (**Drane et al., 2020; Owusu et al., 2020**). Learning inequalities arise when some areas of a country and population groups have better access to education than others (**Caoa et al., 2020**).

III. METHODOLOGY

To collect data in this study, researchers have used both quantitative and qualitative approaches. Research tools that were mainly used are questionnaires (hard and soft) for quantitative data while interviews, observation, and documentation were focused for qualitative data. The respondents in this study were learners from primary, secondary, and higher education. Since we

could not afford reaching out to all schools located in Musanze district, we have managed to contact one primary school, three secondary schools, and one remote higher learning institution, all from Musanze. Generally, the respondents were 200 people including 130 students, 30 teachers, 30 parents, and 10 stakeholders. Fortunately, the observation was done at one higher learning institution that situated in remote area as well. The researchers of this study work on this higher learning institution. Data interpretation was done through combining question thematically.

IV. DISCUSSION OF THE FINDINGS

This section embodies the discussion and interpretation of the findings. The discussion was done under each question

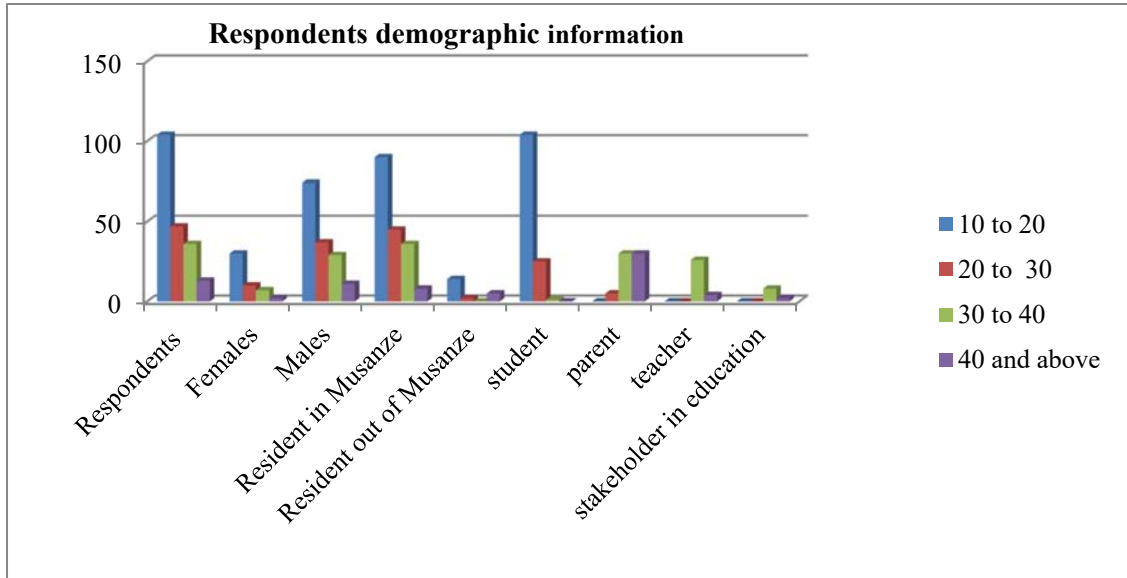


Fig. 4.1: Demographic information of the respondents
Source: primary data.

As per the Figure.4.1, the biggest number of respondents involved in this study is mainly youth ranging from 10 to 30 years old which form (75.5%) of the sample size. Whereas the smallest number is made up of people aging from 40 and above (25.5%). The data from this figure demonstrate that the majority in this case counts the youth. As the primary beneficiaries of education, their plead should be heard while planning t5eaching and learning activities as to avoid education process breakout.

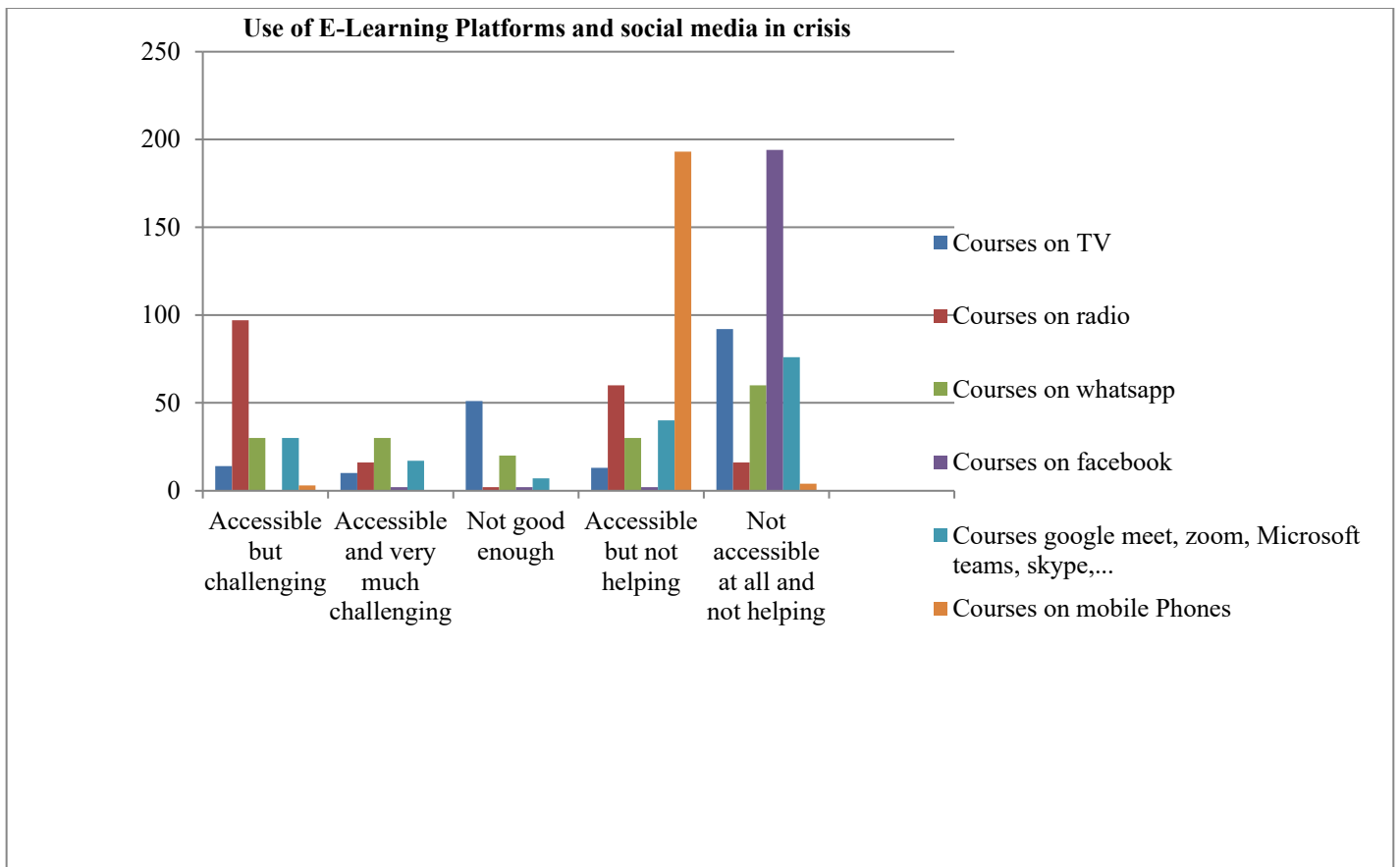


Fig.4.2: Access and use of E- Learning resources

Source: Primary data

The findings show that a big number of respondents declared that e-learning and the use of social media in teaching-learning activities from rural schools was a very big challenge because many of the candidates have no relevant access on learning materials and resources. Only 30 (15%) respondents answered that e-learning was helping during covid-19; while over 190 (96.5%) respondents claimed that schools from rural areas have never accessed teaching and learning through the use of e-learning and social medias resources. The interview with respondents revealed that the reasons behind include but not limited to lack of e-learning supportive devices, poor infrastructures like electricity, digital divide among users, to name of few of them.

Therefore, basing on the data in Figure 4.2, it should be noted that rural areas have special concern regarding virtual learning. For instance, it was observed that during general school closure, a big number of students have been involved in bad behaviorism. To sort such situation out, there should be inclusivity while planning the ways forward against any general crisis. Thus, Policy maker should consider it cautiously as one of the ways that can fight against school dropout rate, teen pregnancies and other forms of disruptive behaviors among youth.

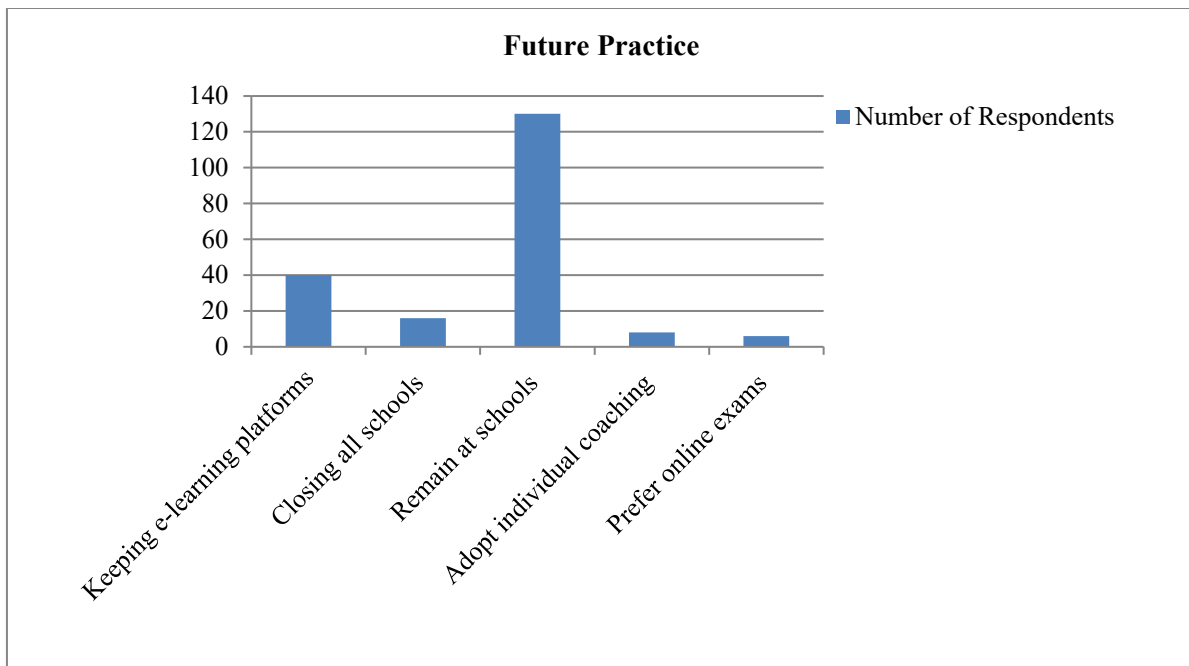


Fig.4.3 : Measures for Future Crisis
Source: Primary data

Regarding the attitudes of respondents vis-à-vis similar future situations, bigger number of our sample size 130 (65%) proposed that it should be better if students and school management remain at schools and keep running teaching-learning activities until the situation gets better. The respondents highlighted education sector should refer to the practice from security organs like army, policemen, and detainees ...remained together until better situation. On the other hand, 40 respondents (20%) supported the use of e-learning platforms and social media during similar crisis.

Basing on the data in Figure 4.3, support that during general crisis, education should not be interrupted until closing the doors. Rather, students and the management team should remain at schools and teachers can provide learning materials. At school, it is easier to access on common e-learning materials and resources than individual based remotely.

V. CONCLUSION AND RECOMMENDATIONS

The footsteps of Covid-19 have shaped peoples’ minds and left them sharp. The entire world has learnt a lot from the devastating pandemic. For instance, countries including Rwanda have leant how to observe strict measures which help in controlling the spread of Covid-19. Some of them are mainly : putting on face masks, high hygiene (washing hands from time to time), avoid unnecessary social gatherings, remaining in isolation once tested positive, and keeping relevant social distancing to name few of them.

Whatever terrifying the situation may sound, still people remain in a need of surviving. They need to communicate, food, drinks, do business study out of educational interruptions. It is in the same background that the government and schools have collaborated in adopting the use of electronic learning such as moodle, google meet, zoom, booking some hours on Tv and radio. All these were there to prevent the spread of Covid-19 among students and their teachers.

However, basing on this study’s findings, not all the students have benefited from the online teaching and learning by the use of e-platforms and social media, due to a number of factors. In light with this, there are schools located in remote areas and the students from those secluded places have no access on electricity, smart phones, laptops or any other supportive devices. Besides, such fact has created a clear and visible digital divide and the incompatibility between students who come from urban areas and those from rural schools in terms of accessing online classes.

Therefore, as recommendations, the following should be taken into consideration: In future, Education policy makers, government officials and other stakeholders should take measures that prioritize educational inclusivity. More importantly, both students from rural and urban places should have the same chance to learn equally during severe pandemics.

As mentioned in the last chat, top school management team should remain at workplace and follow the progression of studies together. The tangible and positive model was observed from the way security organs like army, policemen, and prisoners remained together until the time they were all vaccinated. So as they kept performing their jobs, it would be the same to students either learning online or face to face. They can stay together and keep their studies on going as they survived within their families.

Alternatively, local communities leaders can group together close families and supply them the learning devices to be on the same page with other learners. Possibly, the vaccination program should consider teachers and students among the first priorities because education sounds sensitive in a country's leadership and science. Other scholars are invited to keep on this study and fill its research gap in the essence of finding ways for people's brighter future and wellbeing. By interim period, the Government through the Ministry of education to develop all necessary predictive school infrastructures especially those located in rural areas ahead of any pandemic. Training teachers, students, and parents on how to access learning materials by the use of technologies. Provision of warehouses and store for emergencies. Establishing education recovery fund that can intervene during critical and urgent periods

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