

Media Education as a Resilience Factor of Ivory Coast's Education System in COVID-19 Pandemic

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Abstract

Facing the COVID-19 pandemic crisis, the education system of Ivory Coast has initiated media education as a response to the school closure. That teaching approach is based on traditional media such as radio and television on the one hand, and new technologies of communication and information such as computer and the internet in the other hand. Considering the advantages of media education as an emergency device, this study shows that it has proved to be a relevant educational alternative to the conventional education system of Ivory Coast. Therefore the study suggests a school resilience plan including media education at curricular, environment and resources management levels.

Keywords

Ivory Coast, COVID-19 Pandemic, Emergency Education, Media Education, Resilience

1. Introduction

Millions of children around the world are prevented from attending school because of conflicts and natural disasters. The situation is getting worse these recent years (UNESCO, 2020). The Education 2030 Agenda calls for action to make education systems more resilient and responsive to crises. In 2016, in the perspective of Sustainable Development Goal No. 4 (SDG 4) that guarantees access to education for all, education partners set up the “education cannot wait” fund, initially endowed with \$90 million. It aimed at achieving quality education for all in emergency situations by the year 2030 (Yonemura & Kallon, 2016). It is in that context the world has been stricken by the COVID-19 pandemic, considered now as an education crisis.

Actually, five months after the start of the COVID-19 pandemic, an estimated 290 million students worldwide were deprived from education. The temporary

closure of schools in most countries to stop the spread of COVID-19 pandemic is unprecedented (UNESCO, 2020). That new crisis was a threat for the right to education, a source of unpredictable challenges and a test for the resilience of education systems worldwide and particularly in African countries.

In Ivory Coast, from 16 March to 18 May 2020, about five million students have not gone to school due to the lock down measures. Facing that situation, media education proved to be an educative alternative. It was initiated by the ministry of basic and vocational education (MENETFP) with the support of its partners in March 2020 to continue school at home.

That study is an institutional evaluation of media education post COVID-19 in Ivory Coast. The choice of media education and education resilience topic was justified at two levels. First, media education is poorly known and rarely practiced in Ivory Coast. Second, the initiated media education actions were rather a response to a specific crisis situation than a part of an overall education system's resilience plan. Therefore, there is a need to discover media education as a resilience lever and to show its contributions to the reinforcement of the education system of Ivory Coast and poor education systems of Africa as well.

2. Method

In terms of space and time, this study was made in Ivory Coast from March to December 2020. Media education promoters and users were targeted by the surveys. Sampling process, data collection and data analysis are as follow:

1) Sampling type

The sample was made of the national official media education channels and private ones. Those media education channels were selected by the criteria sampling technique that is a targeted sampling technique based on the following criteria:

- being a media education channel;
- having a related COVID-19 pandemic's program;
- being located in Côte d'Ivoire.

2) Sampling size

The three criteria mentioned above determined the sampling size as follow:

- two public TV channels (RTI 1, RTI 2) with a national covering;
- two public radio channels (fréquence 2, radio Côte d'Ivoire) with a national covering;
- three private radio channels (Bayane, Media FM and Phoenix) located in Bouaké city;
- four websites (<http://www.ecole-ci.online>, <http://www.maformationenligne.cpntic.ci>, <http://www.eductv.ci>, <http://www.ecoleweb.mysonec.com>);
- three social media (facebook.com/pg/EducationTele/vidéos, YouTube EDUC TV, WhatsApp communities) initiated by both public and private actors.

Moreover, 109 subjects took part in that investigation process. They responses were collected by interviews, surveys and narrative bits. **Table 1** sums up the type and size of participants.

Table 1. Investigation participants.

Investigation type	Participant type	Participant size
Interviews	Media education teachers	11
Interviews	Media education promotors	07
Surveys	Media education users	53
Narrative bits	Media education experts	16
Narrative bits	Media education users	22

3) Research techniques

This is a mixt study that used both qualitative and quantitative approaches. Therefore, research techniques such as literary review (documentary study), indirect observation, interviews and narrative bits were used to collect data. Literary review permitted to collect general information relative to the covid-19 context and media education. Specific information on the process of media education was collected through indirect observation of the involved media. Interviews targeted the attitude of the actors of media education. Narrative bits provided information on the perception of the users of media education.

4) Data treatment

For achieving quantitative study, data were classified, related and compared through tables from excel program. That process permitted to sort out figures, percentages and proportions. Qualitative study was achieved by discourse analysis of the promotors and users of media education. For the text edition word program was used.

5) Data analysis

Data analysis was based on four approaches as follow: first, functional approach aimed at showing the function of media education in the Ivorian COVID-19 context. Second, comprehensive approach permitted to analyse, interpret and explain the actors' discourses for a better comprehension of their perceptions of media education. Third, comparative approach helped us distinguish the differences between conventional school and media education. Fourth, strategic approach allowed us to make out the strategies of media education's actors while reaching their goals.

3. Results

1) Concepts' definitions

a) Media education concept

Media education consists in using Information and Communication Technologies (ICT) for educational purposes. ICT refers to a wide range of services, applications, technologies, equipment and software, i.e. the tools such as telephony, the Internet, television, computers, networks, distance learning and the software needed to use these technologies (Makowski, 2019). Media education uses educational technology that consists of courses and scientific resources using information and communication technologies used for self-study. Its teaching re-

sources are available on the Internet CD-ROM and DVD (Campus France, 2011).

As a historical background, a large scale of tele education program (called PETV) was experienced in Ivory Coast during the decade 1971-1981 with the support of UNESCO and its partners (Grisay, 1983). That experience was running on primary schools for basic education. The program was suddenly interrupted. We could guess that it didn't reach the expected results of the education system. Now the COVID-19 crisis is giving a second chance to the implementation of that program with different means and circumstances.

b) Resilience concept

Resilience is an individual's ability to develop biological, psychological and social factors to resist, adapt and strengthen in a crisis situation for generating individual, social and moral success. The eight major processes that contribute to resilience are: i) defence-protection; ii) balance against tension; iii) commitment-challenge; iv) revival; v) evaluation; vi) significance-assessment; vii) self-positivity and viii) creation (Colchado, 2011).

From a psycho-social perspective, school resilience is the ability to achieve functional adaptation in adverse or threatening circumstances. It is also the fact that, in a circumstance of school maladjustment, some pupils who are initially exposed to school dropout finally succeed (Larose et al., 2001).

c) Resilience mechanisms in Ivory Coast

The resilience of the Ivorian education system is rather based on ad hoc mitigation mechanisms than a strategic and institutional risk management framework. It is incomplete and less operational (Gouvernement de Côte d'Ivoire et al., 2016). Actually, during both crises (civil wars of 2002 and 2010), ad hoc actions were initiated by stakeholders as a response to critical situations. Those actions include the "Back to School" campaigns, the presidential programme for emergency/assistance programme for basic education (PPU/PUAEB), the relay schools, special examination sessions, the integration of human rights and citizenship education and the creation of Peace Messengers clubs.

According to the Ivorian government's estimates of 2016, the absence of school resilience plan was evident at central, local or school level. Risk reduction notion has not been incorporated into teacher training curricula, and disaster response procedures has not been disseminated (Gouvernement de Côte d'Ivoire et al., 2016). Since then, in recognition of this inadequacy, the State of Ivory Coast has adopted fundamental international instruments that call for the assistance and the protection of vulnerable populations victims of conflicts and disasters. At international level, the following can be considered:

- the Convention on the Rights of the Child whose second objective is primary education for all;
- the Hyogo convention 2005-15, to strengthen the resilience of nations and communities in case of disasters;
- the Sendai convention 2015-30, for Disaster Risk Reduction, along with global climate change adaptation systems;

- the Economic Community of West African States (ECOWAS) Disaster Risk Reduction Policy Paper and Mechanisms.

Besides, the following legal measures have been taken at national level:

- the adoption of decree No. 79-643 of 8 August 1979 relative to the organization of disaster relief plan (ORSEC) at national level;
- the adoption of decree No 98-505 of 6 September 1998 relative to the sectorial emergency plan of accidents and disasters;
- the institution of an interdepartmental committee on disaster risk reduction (ICDR) in 2007;
- the development of the national strategy for disaster risk management, with an action plan in 2011;
- the institution of the national platform for conflict risk reduction led by the prime minister in 2012;
- the adoption of the national social cohesion programme in February 2012;
- the adoption of decree No 2012-884 of 12 September 2012 relative to the promotion of social cohesion through human rights and citizenship education in the school curriculum;
- the institution of a working group on the children protection and a code of best practices for education actors in 2014;
- the adoption of decree n°2015-102 of 10 February 2015 relative to the creation of an integrated crisis management coordination framework;
- the development of an emergency response plan for each ministry;
- the institution of the messengers of peace clubs, and the reactivation of the national education advisory board.

Though the measures had provided the country with some mechanisms to face emergency situations, they were not yet totally operational due to a lack of tools and resources for their implementation (Gouvernement de Côte d'Ivoire et al., 2016). Furthermore, they didn't include a specific resilience plan for education sector. Media education was launched in that context.

2) Presentation of media education in COVID-19 context in Ivory Coast

a) Context and general features

According to the government's estimates, Ivory Coast's projected economic growth rate of 7.2 percent in 2020 would be halved and reach 3.6 per cent in a perspective of the pandemic control by the end of June 2020. Africa, on the basis of the provisional data available, would experience a reduction in its growth rate from 3.2 per cent to 1.8 per cent. Moreover, at global level, a recession is projected. As a result, people are severely affected socio-economically by the pandemic. For a better outcome, social and economic partners launched an Economic, Social and Humanitarian support plan valued at CFA 1700 billion that to say five per cent of GDP (Primature, 2020).

In Ivory Coast, due to the COVID-19 pandemic, schools were closed on 16 March 2020. As a response, the Ministry of National Education has initiated media education through a program called "schools at home". It actually started

on 6 April 2020 and intended to stand for closed conventional schools. The targets were first students presenting the final exam of primary school, secondary school first cycle and second cycle (CM2, 3ème and Terminale). Intermediate classes were planned for later on. That would occur in June 2020. The channels used were SMS, radio, TV, digital platforms and social networks that were supposed to be free access (Wassimagnon, 2020).

The courses are scheduled from Monday to Friday to allow the students confined to their home to revise basic concepts in mathematics, French, languages (English, German and Spanish), history-geography and sciences (physics-chemistry or Biology). Parents are invited to guide or coach their children in that process.

b) Radio and television education

Media education schedule on public television and radio channels aimed at avoiding broadcast overlapping. Time-shifting procedure had three advantages for the learners. That's to say: the choice of media, the repetition of courses and a larger audience. Local private radios (Bayane, Media fm and Phoenix) were also used in Bouake education direction 1.

Public media education broadcast was scheduled in **Table 2**

c) Digital education

Four websites and many social media were set up for different programs. Besides saving classical media courses, those platforms also allowed students to interact with their teachers.

Courses were available on the following websites and social media in **Table 3**

Table 2. Media education broadcast schedule.

Public Channels		Time
TV	RTI 1	03 p.m. - 03.30 p.m.
	RTI 2	09 a.m. - 11 a.m.
Radios	Fréquence 2	03 p.m. - 04 p.m.
	Radio Côte d'Ivoire	08 a.m. - 08.30 a.m.

Table 3. Media education platforms.

Media types	Platforms
Websites	http://www.ecole-ci.online , http://www.maformationenligne.cptnic.ci , http://www.eductv.ci , http://www.ecoleweb.mysonec.com
Social media	facebook.com/pg/EducationTele/vidéos YouTube EDUC Tv WhatsApp communities

3) Media education implementation analysis

To make an institutional analysis of the process, five performance indicators

were taken into account. They are: teaching-learning process, human resources, material resources, programs and methods.

a) Teaching-learning process

Teaching in emergency situations has specificities because the actors themselves are in an unusual situation. These specificities require readjustments at the level of learning objectives, content, teaching materials, teaching languages, teaching methods, teachers' qualifications and assessment.

Media education actually started on 9 March 2020, but digital education has been operational since 6 March 2020. For traditional distance learning sites, courses were available long before that date. Though the reopening of the schools on 18 May 2020 in some areas of the country and later on (25 May 2020) in Abidjan, distance courses continued. The evaluation of the teaching-learning process focuses on the following variables: teaching goals, teaching practices and the learner's relationship to media education.

i) Teaching goals

The education crisis generated by the COVID-19 pandemic requires an emergency education strategy. In this regard, the standards of the Inter-Agency Network for Education in Emergencies (INEE) aim at learners' cognitive, social, emotional and physical development. That action could promote relevant and appropriate education quality for the crisis context. Therefore, specific knowledge, skills, values and abilities are provided to learners to develop resilience (Heninger, 2013).

The study showed that media education met only a part of the INEE standards those courses generally had only an academic scope, thus excluding psycho-social aspects which remained the exclusive field of psychology experts. The study revealed discrepancies between media education programs. For example, the national one called and the one developed by the Nayeba school group of Dabou through a WhatsApp communities, disseminated new lessons, while the local program in Bouaké education direction 1 aimed at "reinforcing learning achievements". Moreover, those programs associated the parents to supervise their children's learning process.

ii) Teaching practices

The study showed that the official teaching approach in the national media education programme is the proficiency approach (APC). It's defined as a teaching/learning/evaluation practice based on the development of knowledge, skills and operational attitudes that process of relating several resources for success in a learning situation is called integration. It's thereby called integration pedagogy (MENET/DPFC, 2014).

Besides, proficiency approach aims at developing the learner's ability to act. It's learner-centred and focused on the maximum success of the maximum of students. According to the study the national media education programme conformed the main steps of the proficiency approach namely: learning situation, introduction, development, application and evaluation situation. It is therefore

in line with conventional teaching practice in Ivory Coast.

Though its advantages, proficiency approach is not integrated by the local program initiated by Bouake regional education direction. That program used mixed teaching practices according the teachers. The latter were organized into a teaching board to implement a capacity-building programme that consisted in reinforcing the previous knowledge and aptitudes. The program was broadcast through four local radio stations that covered Bouaké city and its surrounding areas.

iii) Learners' relationship to media education

Media education in Ivory Coast appeared as a new phenomenon for students. Therefore, they reacted with mistrust and questioning. Their perception characterized by three key elements namely: interaction with teachers, teaching time and dissemination approach.

The study showed Teachers were perceived by 89 per cent of learners as strangers. That idea of the unknown was due to a comparison with the usual conventional teaching practices. In their opinion, "teachers talked too fast and learners couldn't interact with them". That view showed that the mind of the learners remained dependent on the conventional learning situation. That perception created a psychological blockage to their participation to media teaching. That attitude of the learners is in line with some education experts' thesis that points out the lack of "emotional feeling" in media education. In such a perspective, the distance of teachers from learners is both psychological and social.

According to the study, 95 per cent of the surveyed students met difficulties with media education courses. The main reason was teaching time constraint. According to them "class time was too short" Those students were not unaware of the possibility to revise the same lessons on the platforms of the ministry of education. As far as the method of dissemination is concerned, the variety of media types (TV, radio, the internet) and the difference in broadcasting times are undoubtedly a considerable asset. That procedure allowed a large scale of audience.

b) Resources

i) Human resources

Media education implementation requires both ICT and pedagogy expertise that is to say media technicians and teachers. However, a person may have both competencies. The teachers of the national media education program were civil servants. They were selected by skilful pedagogy counsellors. They had volunteer workers' status. Therefore, they didn't receive any salary except for an inclusive allowance granted by education authorities.

However, there were specific aspects at local level. In Bouake regional direction, volunteer teachers received an allowance of CFA F 100,000 for teaching from March to June 2020, (three months). Only 1/3 of that amount could be recovered at the end of the project due to cash shortages. For the local education officials that situation was due to the lack of financing from sponsorship and central administration.

Digital platforms also presented internal and external differences. For the first ones, teachers don't have the same digital qualification. For the second situation, compared with other media teachers, digital ones are more accessible through discussion communities. That is illustrated by national and local platforms. Considering the national platforms which pre-existed to COVID-19 crisis, their administrators were accustomed to the task thanks to their daily practice. However, the study didn't enquire about their exact profile.

As for the specific cases of the WhatsApp community initiated by the Nayeba school group in Dabou, teachers were not unknown to learners. They were rather the school's teachers who maintained school at home. Their profile is already known to the institution. Although the study didn't allow to estimate their salary and allowance, the basic principle remains volunteerism, which appears to be a harmonious arrangement between the school's managers and the platforms' administrators to preserve or reinforce academic achievements.

ii) Material and financial resources

In terms of education resources, the actors used both classical and contemporary ones. The first ones consisted of boards, books and any other conventional educational resources. For the second ones, there were radios, televisions, websites and social networks' platforms. For radios and televisions, pedagogical audio-visual aids were produced and disseminated day by day. Websites and platforms were available on the internet and permanently accessible at any time. The list of those resources was published by education ministry before starting the program. However, their access depended on the digital connectivity.

To implement national media program education ministry was supported by technical and financial partners such as UNICEF and UNESCO. Contrariwise Bouaké regional education direction was based on self-funding. That approach was an obstacle to the durability of the program. It was therefore interrupted due to a cash shortage. Subsequently the programme that was planned for six months finally ended after three months. It can be assumed that the reopening of classes on 18 may 2020 also favoured that interruption.

Another case is the programme of the Nayeba school group of Dabou. It met Bouaké's local programme implementation conditions except for its simplicity, accessibility and affordability. It was based on WhatsApp communities and the users just needed an Android or smart phone to have access to the courses. Since most students could not afford to buy that type of phone, the project relied on the support of their parents.

c) Programs

The targets of the program were both learners and parents. It was made of the conventional input for students and other themes of interest for parents. That goal was reachable throughout the national media education program used the proficiency approach. In that perspective, knowledge was made more useful through life skills lessons.

As for the local "skills reinforcement" program of Bouaké education direction

1, the input was based on a broad revision of the previous lessons. At the end of the course, an address was made toward parents to urge them to coach their children. Likewise, learners were invited to continue the courses on telephone contact with the teacher. The same principle was used in the programme of the Nayeba school of Dabou. Through a WhatsApp community, the year 2020 official curriculum was executed in terms of reinforcement or continuity. Parents were thus given the possibility to supervise their children learning process on mobile phone.

At the level of educative platforms that pre-existed to COVID-19, the programs included the themes of the class as well as additional relevant themes. The objective was to provide learners with necessary civic education. Our study did not check whether those programs were validated by education ministry. Nonetheless validation remains fundamental to the compliance and harmonization of current programs in basic education sector of Côte d'Ivoire.

4) Teaching practices

a) Televisions' teaching practice

For Televisions, audio-visual aids were produced in advance and broadcast later on. The timing of the course varied from five to 30 minutes depending on the target. That approach required audio-visual techniques' training for teachers. For national media program, after a hard start up with conventional resources, methods and materials have gradually improved. Thus, simple blackboards were replaced by attractive colourful frames.

b) Radios' teaching practice

For radios, conventional radio education techniques were used. They were made of sequences of courses with an intermediate break for advertising or musical relaxation. Those sequences consisted of introduction, development, conclusion, application exercises and homeworks. The corrections of the exercises were also available. In Bouaké regional education direction one, students received a transversal program that included all the school levels. The courses were first evaluated by teaching counsellors before dissemination in ten minutes. For grammar schools, each subject required a teacher for both first and second cycles. Different teachers participated into the primary schools' program. Each session started and ended with messages on COVID-19 and the teacher's telephone contact for learners' potential questions.

c) Social media's teaching practice

Social media's education practice is based on WhatsApp communities of the Nayeba school. It consisted of five-step organisation as follows: i) design of the courses by the teacher, ii) evaluation of the course in the teaching board, iii) integration of corrections by the teacher, iv) sharing of the courses with the parents, v) sharing of the courses with the students. Students received the Courses according to their class program. Sixteen WhatsApp communities served that purpose and the courses met the proficiency approach standards (introduction, development and assessment).

The whole process was launched by an steering committee with the assistance of a direction committee. The actors were first trained on the use of the social media namely WhatsApp. During the process, they had to solve difficulties related to level and subject for profile constraints. For the former, a distinction was made between intermediate classes and examination classes. For the latter, literary, scientific and other subjects were distinguished. This approach gave learners an unlimited access to teachers for evaluation feedback. It contributed to the reduction of the proportion of missing students and helped parents supervise their children's work.

d) Digital platform's teaching practice

Digital platforms' teaching platforms were based on the internet connection. The courses consisted of audio, audio-visual, and written documents. For usual platforms, the courses were available regardless of proficiency approach since they had a variety of targets such as students and free auditors. The courses were based on selected themes of interest for the users. For the national program, the teaching practice was different. The audio-visual aids were posted on the platform without any change. The practice was based on proficiency approach. However, both teaching practices allowed an unlimited access to teachers and teaching resources.

4) Media education achievements in Ivory Coast

Within three months, media education has achieved some performances as follows:

a) Education opportunity

Media education was another learning opportunity that involved all education stakeholders, particularly parents. The case of the Nayeba school is a relevant example That required the parents' commitment in the learning process through WhatsApp communities. Audio-visual broadcast through radio and TV also gave that opportunity. Both students and parents were learning in the same time. That practice met sustainable development goal 2 that guarantees education for all.

b) Conventional education system alternative

It is now possible for the Ivorian education authorities to propose to parents an alternative learning approach to the conventional one they have experienced for decades. However, the popularization of media education is necessary for a massive adhesion of education stakeholders. It has already been experienced through the virtual university of Ivory Coast (UVCI). It could be extended to the whole education system.

c) Educational resource reinforcement

There are some material advantages of media education as follows: there's no need of room; there's less teaching materials and the teaching aids are accessible all the time as soon as they are recorded. Moreover, with few human and material resources, a larger target is reached depending on the media and the digital connectivity. The national education media education program was thus broad-

cast throughout Ivory Coast and even beyond thanks to the websites of the national television channels (RTI 1 and RTI 2) and digital platforms.

d) New pedagogy lever

Media education promoted differentiated pedagogy and montessorian pedagogy. They are teaching approaches that meet the specific needs of the learners facing learning difficulties. Although legitimate, the implementation of those new pedagogies in the conventional school system has always met difficulties related to classroom management and school knowledge sequences. Media education is proposing a way out.

e) Better interaction

Digital platforms were a real interaction tool whereby learners share their learning difficulties with the others. Learners were exposed to the ridicule of their peers while exposing their concerns. The national media education program was a perfect illustration of that interaction. It was broadcast on TV and radio and then posted on digital platforms. Thus, it allowed learners to communicate with teachers online.

f) Better education monitoring

The experience of media education with tv, radio, social media and digital platforms in Ivory Coast proved to be the appropriate means to reinforce school attendance, community participation and teaching supervision. Actually, media education doesn't require the physical presence of the learners at a specific moment, to a greater degree, they have unlimited access to the courses. Second, parents' contribution to the learning process at home is required to back students in terms of material resources or time management. Third, the lessons were submitted to other teachers or education counsellors before dissemination. The three factors contributed to a better education monitoring.

4. Discussion

The results of the study presented media education as a new education opportunity and an appropriate instrument for education quality evaluation. Those results confirmed its status of reinforcement agent of the conventional education system by creating motivation interest of the learners (Dirk, 2020). Nonetheless there are some weak points related to inaccessibility of media and inadequacy of resources. Others are related to the stakeholders' maladaptation and curricular inadequacies. Based on those strong and weak points this discussion also deals with practical resilience measures related to media education.

1) Limits of media education

a) Digital fracture

Digital fracture is low coverage of the mobile network and the internet. It is due to the limited access to media and electricity on the one hand and the high cost of the internet connection on the other hand. The study showed that 77 per cent of the learners interviewed admitted that they had less access to internet connection although they had a mobile phone due to its expense. That result

goes along with general estimates.

UNESCO actually estimates that some 56 million learners live in areas not covered by mobile networks, almost half of them in sub-Saharan Africa, where 89 per cent of learners don't have access to family computers and 82 per cent don't have access to the Internet" (UNESCO, 2020). According to other estimates, in Africa, most students don't have the means for regular connection. In sub-Saharan Africa, only 20 per cent or less of households have neither access to internet connection nor to a computer (UNESCO, 2020).

Moreover, it is generally admitted by experts that digital fracture increases the gaps between learners from different socioeconomic strata and areas. Therefore, wealthy people and urban areas could have more connectivity opportunity than poor people and rural areas. Another drawback of digital fracture is the risk of school dropout increase that is confirmed by UNESCO report (Touteurope.eu, 2020). Thereby, digital fracture contributes to increase education access inequalities.

b) Poor connectivity

Poor connectivity is the discontinuity of the internet connection. It reduces users' connection time. According to the study, 98.78 per cent of the learners surveyed admitted that they had already been victims of poor connectivity although the connection was prepaid. In Côte d'Ivoire, the phenomenon is mostly due to under-equipment of the company in charge of digital management. Sometimes, it happens when the network is overcrowded. Another reason is the destruction or the robbery of materials or equipments.

c) Human and material resources inadequacies

Media education in COVID-19 crisis faced great challenges in terms of human and material resources. The first one stands on the fact that there was a lack of experience for teachers. Actually, though some teachers had received accelerated training, it remained insufficient. Few teachers had proven experience in media education namely in digital field. That is confirmed by a survey in Bouaké education direction where teachers received no specific training related to media education except for instructions for radio broadcast.

The second challenge stands on the conversion of the existing teaching materials to media education format. It remained a major challenge for education stakeholders since conventional education is not digitally based in terms of equipment. To find a way out, stakeholders had to base their projects on the materials of existing distance courses or they had to imagine appropriate new materials.

d) Learners' maladaptation

Students had two types of learning difficulties. The first one was less student-teacher interactivity. Actually, the majority of learners reacting to audio-visual broadcast expressed their need to exchange with the teacher during the learning process. That opportunity is delayed for the radio and TV. The second difficulty is the Lack of motivation strategy. The study showed that 88.02 per

cent of the learners interviewed affirmed that they didn't attend the media because they had difficulty in following the rhythm of the presentation. Therefore, they couldn't understand the lessons. Those difficulties caused learners' demotivation.

e) Curricular inadequacies

Curriculum inadequacies were expressed through five elements: timetable inadequacy, lack of coordination, the gaps between the traditional programme and the media programme, assessment inadequacy, planning inadequacy.

For the timetable inadequacy no precision was referring to the quantity of time for each level programme. Only the broadcasting time was the essential element. The message should be broadcast in 10 or 20 minutes. As far as the lack of coordination is concerned, there were discrepancies between the objectives of the different programmes. While in Bouaké, the programme aims at maintaining the level through the former courses, the MENET programme and that of the Nayeba school group rely on the continuity of the school curriculum. For the gaps between the traditional programme and the media programme, not all the conventional themes are covered in the media and additional themes appear.

Coming to the assessment inadequacy, the study showed that although application exercises existed in media education, the procedure for assessing students through TV and radio was not clearly determined. For digital platforms the assessment conditions would better be improved. For planning inadequacy, the study showed that the audio-visual aids were often repeated on the same media as learners expected new courses. This could be justified by the unavailability of a new audio-visual aids. That was due to the context of emergency situation that justified media education implementation.

2) Practical measures for sustainable media education

The study proposed three orientations for media education sector to guaranty sustainable school resilience based on media education. They're about: i) media education integration in curricula; ii) media education environment management iii) resources management.

a) Media education curricula

Henceforth, media education should be integrated in the Ivorian school curricula likewise conventional education. Working out a media education curriculum consists in defining teaching objectives, contents, methods, techniques, teaching materials, methods and means of evaluation. The process should be supported by the production and the dissemination of education resources and the training of the stakeholders namely teachers.

b) Environment management

Media education enforcement conditions are based on four environmental elements of the stakeholders. First, at the learning process level, appropriate measures should be taken to facilitate access to the media. That could be done through the improvement of digital technology and the involvement of the stakeholders such as learners and their parents. Second, at the learner's motivation level, the study showed a low level of audience for media courses. Parents'

support and their involvement in the programs generated “extrinsic motivation” that refers to anything external that can reinforce the child’s behaviour at school (Vianin, 2007).

Third, through a differentiated pedagogical approach, additional learning opportunities could be given to students that met learning difficulties. Therefore, more imaginative and local teaching techniques could help education stakeholders in a perspective of school resilience. Fourth, the practice of life skills in media curricula could also contribute to school resilience throughout activities that promote the learners’ personal development in an hostile environment.

c) Resources management

First, Human resources should receive an appropriate initial training for both conventional and media education. Second, material resources should comprise both conventional and media teaching resources that must be accessible to education stakeholders. For radio and television, media education could have its audio-visual production centre following the example of television education program of the 1970s in Ivory Coast. Financial resources are the last elements that sustain the first two resources mentioned above. An efficient fund-raising strategy with education partners could help develop media education program.

5. Conclusion

The results of the study showed that media education in Ivory Coast is an educative emergency disposal relative to the COVID-19 crisis. It’s also a high-performance educational alternative to conventional education system. It’s a relevant disposal because it has proved to be an appropriate tool for education continuity and physical distance measure requirements in the COVID-19 pandemic context.

However, likewise any other new phenomenon, media education’s implementation in Ivory Coast had shortcomings such as material inaccessibility, human maladaptation, curriculum and resources inadequacies. Those difficulties reflected a weak resilience level of the Ivorian education system in an international crisis context. Therefore, education system’s resilience reinforcement requires better media education curricula integration, better management of both crisis environment and existing teaching resources.

That study has practical interests at socio-economic and education levels. Socially, the study showed that we can use media education to break social distance and create new social and economic motivations since lucrative activities and social links can be preserved thanks to it. In terms of education interest, the learning process continued thanks to media education. As Dirk said, using media engages students and we have to involve the latter by the creation of their own media through social media. That’s a great opportunity of learning for them (Dirk, 2020). With regard to media education’s achievements in terms of resilience, the perspective of this study will be measuring their impact on a poor education system like Ivory Coast’s.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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