

# Impact of the COVID-19 pandemic on teaching-learning in schools in the region of Vina, Adamaoua-Cameroon

(Impact de la pandémie du covid-19 sur l'enseignement-apprentissage dans les établissements scolaires du département de la vina, Adamaoua-Cameroun)

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## Abstract

The arrival of the new aerial and enveloped virus called Covid-19 in Cameroon since March 2020, has significantly impacted the schooling of thousands of Cameroonian learners and modified traditional teaching methods by moving from face-to-face to remote. Indeed, this fragile but rather particular virus with a transmission and propagation rate higher than that of other corona viruses, has led to the closure of schools and the adoption of new teaching-learning methods based on the use of ICT tools thus translating a new standard of education. This new standard highlights the importance of data in this health crisis which affects almost all human activities, including education. The Cameroonian government, with regard to the operational planning of its education system, had planned recovery plans in the event that any crisis affected education. But no one predicted that this crisis was going to be covid-19, which has gone from epidemic status to pandemic status due to the globalization of this phenomenon. The Cameroonian government has opted as a response to this pandemic, to accelerate the process of digital transformation of teaching. This option has become a necessity. However, the eco-digital and eco-digital divides in the Adamawa region, more specifically in the Vina region, have not made it possible to efficiently deliver digital education. We will therefore assess the effects of the covid-19 pandemic on school activity in the region of Vina, analyze the efficiency and effectiveness of the support measures taken by the Government, and propose palliatives to better support the efficient implementation of this policy. The material poverty of parents on the whole to offer each child a tablet or a computer, the degrading salary of teachers who find it difficult to ensure their daily living conditions to the point of affording these digital tools which are essential in their practice education, the mixed and politicized supervision of the State concerning the provision of these tools, etc., are among other evils that have been enumerated by our target population made up of two hundred and sixty teachers and learners.

**Keywords:** Covid-19 pandemic, schools, online education, eco-digital and eco-digital invoices, Vina, Adamaoua, Cameroon.

## Résumé

L'arrivée du nouveau virus aérien et enveloppé appelé Covid-19 au Cameroun depuis mars 2020, a considérablement impacté sur la scolarisation des milliers des apprenants camerounais et modifié les méthodes traditionnelles d'enseignement par le passage du présentiel au distanciel. En effet, ce virus fragile mais assez particulier avec un taux de transmission et de propagation supérieur à celui des autres corona-virus, a conduit à la fermeture des

établissements scolaires et à l'adoption de nouvelles méthodes d'enseignement-apprentissage fondées sur l'utilisation des outils TICs traduisant ainsi une nouvelle norme d'éducation. Cette norme nouvelle met en exergue l'importance du data dans cette crise sanitaire qui touche presque toutes les activités humaines, y compris l'éducation. Le Gouvernement camerounais, au regard de la planification opérationnelle de son système éducatif, avait prévu des plans de relance au cas où une crise quelconque affecterait l'éducation. Mais, nul n'avait prévu que cette crise allait être le covid-19 qui est passé du statut d'épidémie à celui de pandémie vue la mondialisation de ce phénomène. Le Gouvernement camerounais a opté comme riposte face à cette pandémie, l'accélération du processus de la transformation numérique des enseignements. Cette option est devenue une nécessité. Cependant, les fractures écono-numériques et éco-numériques dans la région de l'Adamaoua, plus spécifiquement dans le département de la Vina, n'ont pas permis d'assurer de façon efficiente les enseignements via le digital. Nous allons donc évaluer les effets de la pandémie du covid-19 sur l'activité scolaire dans le département de la Vina, analyser l'efficience et l'efficacité des mesures d'accompagnement prises par le Gouvernement, et proposer des palliatifs pour mieux accompagner la réalisation efficiente de cette politique. L'indigence matérielle des parents dans l'ensemble à offrir à chaque enfant une tablette ou un ordinateur, le salaire dégradant des enseignants qui ont du mal à assurer leur condition de vie quotidienne au point de s'offrir ces outils numériques indispensables dans leur pratique pédagogique, l'encadrement mitigé et politisé de l'État concernant la mise à disposition de ces outils, etc., sont entre autres des maux qui ont été énumérés par notre population-cible constituée de deux-cent-soixante enseignants et apprenants.

Mots-clés: Pandémie du Covid-19, établissements scolaires, enseignement en ligne, fractures écono-numériques et éco-numériques, Vina, Adamaoua, Cameroun.

## Introduction

Long before the advent of the infamous covid-19, the Cameroonian education system was often described as sick by some observers given the drop in the level of learners and poor school governance. If indeed education can contribute to improving economic growth, reducing the level of poverty and improving the general standard of living of the people, it is because there is a right to hope that Cameroon can emerge from its lethargy of underdevelopment through an education open to the masses and qualitative. But today, the situation is more worrying with covid-19, of which the closure of schools from March 18, 2020 is one of the social distancing measures (Declaration of the Prime Minister, 2020). In addition, inequalities in the teaching-learning activity appear and weaken poor learners and teachers by demotivating them (Michaelowa, 2000). This corroborates the words of the Secretary-General of UNESCO: "The covid-19 pandemic has caused unprecedented disruption to education with 1.2 billion students and young people affected by school closures. schools around the world. Clearly, this pandemic has had great direct and indirect repercussions on the actors of various schools in Cameroon in general and in the Region of Vina in particular. Studying the extent of its impact on teaching-learning interests us here and motivates us to propose innovative solutions that

will help reduce the devastating effects of this pandemic on the quality of education. In other words, the alternative teaching-learning measures online via the internet connection connected to one of the digital tools such as the android phone, tablet, laptop, smartphone, mobile computer, radio, television, etc., has not been obvious to all teachers and learners in the region of Vina, Adamaoua-Cameroon.

Hence the title of our article: "Impact of the covid-19 pandemic on teaching-learning in schools in the region of Vina, Adamaoua-Cameroon". Indeed, teachers and learners in the schools surveyed generally claim to have had difficulty coping with this sudden change from teaching in the classroom, that is to say face-to-face, to education provided remotely, i.e. online, during the confinement period. Before the educational crisis caused by the covid-19 pandemic, the use of IT tools came more from the personal experiences of teachers (Dakpo et al. 2008) and learners themselves and from relative supervision by the public authorities. The introduction of computer courses (Education Orientation Law, 1998) in schools is not effective, because either there is no computer teacher, while the school has a few computers, or there are no computers while there is a computer teacher who therefore limits himself to giving theoretical lessons. In addition to this innovative change in the method of teaching and learning, there is also the

difficulty of assimilating the lessons given by this new channel, which did not previously enter into their school mores. As for the low level of learners, collective promotion has accentuated it and covid-19 could make it worse.

There is therefore the problem of the impact of the covid-19 pandemic on teaching practice and learning activity in schools in the region of Vina, Adamaoua Region-Cameroon. Therefore, how do teachers and learners in schools in the Vina region experience this transition from formal education to digital-based education during the period of confinement due to the covid-19 pandemic?

In other words:

- What are the impacts of the covid-19 pandemic on teaching practice in the Vina region? What are the difficulties encountered by teachers?
- What are the impacts of the covid-19 pandemic on learning activity in the Vina region? and what are the difficulties encountered by the learners?
- What palliatives are proposed to the Government to further support the measures undertaken and ensure qualitative E-learning training for learners in schools in the region of Vina?

### **Objectives of the study**

The general objective is to show the impacts of the covid-19 pandemic on teaching practice and learning activity in the Vina region. And the specific objectives are to demonstrate that our target population suffers from eco-digital fractures and eco-digital fractures. In other words, it is:

- to analyze government measures and the difficulties encountered by teachers and learners regarding distance teaching and learning;
- to propose alternative and endogenous measures adapted to the socio-cultural realities of this region.

### **Determination of dependent and independent variables**

The independent variable of our subject is the covid-19 pandemic which is the exogenous parameter imposed on us more or less by nature. This independent variable will allow us to explain the dependent variables which are the quality of the teaching practice and that of the learning respectively of the teachers and the learners of the schools of the region of Vina. These independent variables constitute the parameters which vary according to the impact of the independent variable which is here, the COVID 19 pandemic. Indeed, the modernization of education has suddenly imposed itself on the teachers and learners of this region and therefore requires a readjustment of teaching methods and practices with the use of technological media. We will therefore in our work show the influence of the independent variable on the dependent variables from the data collected from our target population.

### **Presentation of the target population and boundaries of the study**

One of the ten regions of Cameroon, Adamaoua is made up of five regions: Mbéré, Mayo-Banyo, Faro-et-Déou, Djérem and Vina. This last region is the subject of our present investigation and constitutes the spatio-temporal delimitation of our work. Our choice fell on Vina because of its great representativeness of the other regions. Also, with regard to our sampling, we selected two hundred and sixty teachers and learners belonging to more than fifteen primary and secondary establishments of this region like the public school of Mbideng, the public school of Djackbol, the public school of Martap, the public school of Marza, the public school of Application of Sabongari, the public school of Bamyanga, the public school of Application of the Residential district, the public school of Sabongari, the Classic and Modern high school of Ngaoundéré, the Protestant college of Ngaoundéré, the bilingual high school of Ngaoundéré, the high school of Martap, the high school of Sabongari, the high school of Burkina, the high school of Ngangassaou, the high school Beka Hosséré, Ngaoundéré Technical High School, Mardock Technical High School, Ngaoundéré Mardock High School, Wassandé High School, etc.

It should be noted that our target population is all the actors, teachers and learners (Table 1), with whom we exchanged and collected data in order to respond to the problem of our present research concerning the impact of the pandemic. of covid-19 on teaching practice on the one hand and on learning activity on the other. This target population, during the period of confinement imposed by the Government, found themselves in urban, agglomerated or rural areas; electrified or non-electrified. This allowed us to collect quantitative data through the questionnaires that we developed and sent electronically or physically. Also, we collected qualitative data through interviews, direct communications or oral-individual interviews. We have avoided crowds and respected the distance measures of at least one and a half meters between us and the person we are interviewing.

The target population is made up of 260 people, i.e. 70 teachers and 190 learners, corresponding to 27% teachers and 73% learners (Table 1). Women were the quickest to respond to our questionnaires, hence their higher percentage (60 and 55%) compared to men (40 and 45%) in the entire sample. Those of teachers aged between 25 and 45 were the majority to answer (80%) our questions. And as far as learners are concerned, those aged over 20 were the majority to satisfy (45%) the questions we submitted to them.

Regarding their level of education, more than half of the teachers in our sample have secondary level (67%) with diplomas such as the BEPC, the Probatoire or the Baccalaureate. And some of them who have the baccalaureate have enrolled in university to improve their diploma training. As for the learners, we exchanged more

with those who are at the secondary education level (65%) and in the exam classes (3rd, 1st and Terminal). These are the classes designated by the Cameroonian Government to follow tele-education. on the other hand, with regard to

primary education, only the middle class 2 (CEP) was concerned by tele-education and radio-education, hence the remaining 35% of learners with whom we exchanged.

**Table 1:** Presentation of the target population of this study

Sample	Number	Sex (%)		Age (%)			Education level (%)	
		Female	Male	≤ 25	]25-45]	>45	Secondary	University
Teachers	70	60	40	8	80	12	67	33
Learners	190	Female	Male	≤ 15	] 15-20]	>20	Primary	Secondary
		55	45	15	35	45	35	65
<b>Total: 260</b>								

**Source:** Compilation of collected data.

In terms of thematic delimitation, our work is in the field of digital-pedagogy. Among the palliative measures adopted by the Cameroonian Government, we have the limitation of movements and the prohibition of gatherings as well as the incentive to use information and communication technologies for E-education. This is a new method of teaching and learning based on digital tools to ensure the continuity of the educational service during the period of confinement. We are talking here about E-learning or distance education. In view of the difficulty in providing quality teaching online because of the lack of training of trainers in the pedagogical use of these digital tools which are essential without warning them; or simply to provide distance learning due to the lack of appropriate technological and pedagogical tools to support teachers in their teaching practice and learners in their learning activity, it is appropriate for us to present the theoretical framework of our subject before developing these difficulties.

### Theoretical framework

The theory of active pedagogy makes the learner actor of his learning. In other words, the use of digital tools in education puts the learner at the center of their learning. He co-constructs his training with the teacher and the teacher is no longer the only one to hold the knowledge as in the traditional theory where the latter transmits the knowledge in the empty head of the learner. This is no longer the case with active pedagogy. Here, the teacher becomes a guide who accompanies the learner in his training. Presence in the classroom is no longer an obligation for the training and pedagogical follow-up of the learner. This constructivism helps the learner to develop confidence, self-confidence and intrinsic motivation in his studies. He searches for courses on search engines and has access to the same information as his teachers. Thus, with the theory of active pedagogy in the digital age, the learner does not learn only in the academic or institutional framework, but, he learns through

his own experience, of which certain authors speak of experiential learning, collaborative, by project or by problem. It is the learner's ability to solve a problem or anticipate a situation that is sought here during his training.

### Study methodology

The methodology we have adopted is that of the case study. As we have underlined, this case study will be based on the analysis of the data collected through the written response to the questionnaires or through the oral responses such as the interview / interview with our target population.

### Literature review

Our literature review focuses on the impact of the covid-19 pandemic on teaching practice and learning activity in schools in the Vina region, Adamaoua region in Cameroon. Since the appearance of covid-19 and its significant impact on the African education system, writings relating to it have multiplied. We cite among others Noah (2020), UNESCO (2020), Davis et al. (2020) and Ntap (2020) who have written interesting articles on covid-19 and the educational changes based on online courses. This means that at the sub-regional level, there are many scientific publications and surveys on this theme. However, at the local level, that is to say at the level of the Adamaoua region, more specifically at the level of the region of Vina, these publications are not so numerous. Among the understated publications in this region we have our publication on "the urgency of a change in teaching practices by primary and secondary teachers in the region of Vina" which relates to the degree of pedagogical integration of ICTs by primary and secondary teachers in the Adamaoua region in general and in the Vina in particular (Aicha, 2020).

We have authors like Saga (2006) and UNICEF (2020), who analyze the impact of COVID-19 on education systems. The pedagogical obstacles encountered in the use of digital

tools in education translate into digital and eco-digital divides as well as the late integration of developing countries. It is time to present the results obtained from our data collection.

## Results

The response of the Cameroonian Government to COVID-19 was the immediate adoption of new pedagogical approaches based on the use of technological tools to teach during the period of confinement. This is how distance learning was imposed overnight on teachers and learners of primary and secondary education in the region of Vina. Our questionnaire includes questions addressing digital equipment and the pedagogical use of information and communication technologies by teachers and learners in primary and secondary schools in the Vina region during confinement due to the covid-19 pandemic. Indeed, in the agglomerated and urban areas, the learners of the examination classes follow the lessons on national television where teachers of various disciplines explain the lessons to them. On the other hand, in remote urban areas

where electrification is non-existent, or even almost non-existent, it is the radio that is used with the battery or a solar plate as a recharging tool. In this case, the 15% of teacher-volunteers (Table 2) give lessons on the local radio, record it and hand it over to the village chief. The remaining teachers (85%) do not make this effort because they say that they themselves find it difficult to take charge of themselves and afford ICTs, how can they assist their learners.

Indeed, when the Chief of a village receives these radio-educational recordings, he gathers the learners around him, on a specific day of the week to have them listen to the recorded educational program. A minority (45%) of primary level learners in these remote villages claim to feel reassured about their continuing education when they listen to the voice of their teachers on the radio, while a large proportion of learners (55%) find opportunity to drop out of school (Table 2). They thus abandon their studies to play, to devote themselves to work in the fields or to be forced into early and forced marriages, hence the aggravation of school dropouts and dropouts among young learners in these remote areas.

**Table 2:** Importance of educational radio in rural areas

Teachers/Learners Apprenants	Parametres	Responses (%)
Teachers	Teachers voluntarily preparing pre-recorded radio lessons	15
	Teachers limited to government instruction	85
Learners	Learners benefiting from radio education and appreciating the voices of their teachers	45
	Learners not benefiting from these educational programs via the radio; hence the dropouts and dropouts	55

Source: Compilation of collected data

It should be noted that, when these learners have questions, they write them on a sheet which they give to the Chief of the village to give to the teacher of the discipline concerned. The latter comes at the end of the week to collect the questions that he takes the trouble to answer in writing and gives them to the Chief of the village for delivery to the learner concerned. Here is one of the methods used in some villages of the region of Vina in the educational exchange between teachers and learners. These are private initiatives of a few teachers concerned about the well-being and the future of their learners who cannot take advantage of the training given on national television and who take advantage of other multimedia services such as searches on search engines from a laptop or desktop connected to the internet.

In fact, at the level of urban and agglomerated areas, the government response measures, the application of which is ensured by the Ministries in charge of education through the effectiveness of educational television and the use of WhatsApp forums, have made it possible to continuity of teaching in a difficult pedagogical-educational context created by the Covid-19 pandemic. Regarding the possession of technological tools (Android phone, laptop,

desktop, mobile or smartphone), 45% of teachers and 60% of learners have them and 55% of teachers and 40% of learners do not (Table 3). They make personal uses of it like calling, messaging, watching movies, etc. and very few of them use them as teaching tools. Clearly, 30% of teachers and 15% of learners are familiar with educational software and are already using these ICT tools personally long before the onset of covid-19. They also claim that the internet connection is not fluid and the purchase of speeds to easily surf is expensive, financially speaking. This economic divide in digital access is one of the major obstacles to the efficient execution of e-learning in this region.

As another obstacle, we have the fact that 95% of teachers do not master the vocabularies and postures of online courses (Table 3) and this is the case for the majority of learners (97%). Clearly, E-learning has its own vocabulary such as granulation, learning unit, grains, sequences, pedagogical scripting, etc. In addition, very few teachers (10%) know that they have the digital right on their courses that it is wise to protect them. For them, it is appropriate to do the courses synchronously or asynchronously on platforms which have secure servers,

such as Moodle, whose access to the courses requires passwords, this, compared to WhatsApp fora which are not secure and not allowing the protection of their intellectual property.

Many teachers (90%) are not interested in this digital innovation which seems to be in competition with the traditional teaching method which they master so well. What

should be remembered from the collection of data collected from teachers and learners constituting our target population is that the methods of implementing e-learning in the region of Vina have exposed the gap digital and socio-economic access to the Internet. Poverty is a great obstacle to the development of educational technology.

**Table 3:** Digital equipment and internet access for teachers and learners in La Vina

Variables	Teachers responses (%)		Learners responses (%)	
	Yes	No	Yes	No
Possession of one of the technological tools (Android phone, computer, tablet, smartphone, etc.)	45	55	60	40
Knowledge of educational software.	30	70	15	85
Fluidity of internet connection (eco-digital divide and eco-digital divide)	Lack of fluidity		Lack of fluidity	
Knowledge and mastery of E-learning vocabularies	5	95	2	98
Knowledge of their digital law and the protection of their online course	Yes	No	RAS	
	10	90		

**Source:** Compilation of collected data

In terms of understanding the lessons given from WhatsApp forums and national television (CrTV) during the confinement period, 75% of primary and secondary learners in the Vina region say they did not have very good understood the teachings (Table 4) and say that it is better face-to-face. On the other hand, a small proportion of them

(15%) claim to have understood these teachings very well, which are more constructivist and adequate for the profile of a cultured man open to the world that the Cameroonian State wants to form. Unlike the two previous groups, the remaining 10% opted for neutrality by avoiding answering the question.

**Table 4:** Learners' understanding of online courses

Parametres	Responses (%)
Not having understood the courses given remotely during confinement	75
Have understood the courses given remotely during confinement	15
Without response	10

**Table 5:** Level of course continuity by teachers.

Parametres	Responses (%)
Teachers who have not completed online courses	60
Teachers who have gone all the way with online courses	40

**Source:** Compilation of collected data

Before closing this section on the recommendations, we believe that it would be appropriate for the Cameroonian Government to link primary and secondary teachers to ICT tools by offering them computers to support their teaching

practice. He must insist more on primary education which is like the foundation of a house because, if the latter is solid, the rest of the building will certainly be. Clearly, it is necessary to start introducing learners to the use of ICTs

from primary school onwards, for example by offering digital tablets to learners and by requiring all Publishers to have school books accompanied by digital media.

## Conclusion

We have reached the end of writing our article on the impact of the covid-19 pandemic on the teaching practice of teachers and on the learning practice of learners in schools in the region of Vina. Indeed, the State has put in place teaching and learning continuity programs broadcast from national television (CrTV), national radio station and online. There have been private initiatives by some teachers who are in isolated rural areas where their learners cannot benefit from the lessons provided at the national and regional level. Also in our work, we have highlighted the fact that the non-use of technological tools in teaching-learning respectively by the teacher and the learner, is caused by the economic indigence to equip themselves with digital tools and the Government's inefficient supervision of the importance of these ICTs in education. The objective of our study was to understand the influence of this pandemic on the quality of the academic training received by learners from their teachers, where everyone must make use of information and communication technology tools. It is undeniable that they must align themselves with this digital age with regard to the globalization of education.

In short, the impact of covid-19 on teaching-learning in the region of Vina is real, as so easily illustrated by the closure of schools and the containment measures imposed by the Cameroonian Government in the continuity of the teachings. From all the above, we think it is wise for the Government to review its education policy, particularly the planning of its education system, in order to avoid surprises in the future. Despite these difficulties, learners and teachers each played their role at their level: the teacher taught and the learner learned.

## Recommendations

Most teachers; i.e. 60%, have not completed online courses (Table 5), on the one hand because they have not mastered this new method of distance learning, and on the other hand, because the Government has no endogenous training of trainers in the use of ICTs even in landlocked areas. As a recommendation, the resumption of teaching after COVID-19 must be centered on this training of trainers; maybe schedule two to three months of training sessions per wave. Remember that when teachers use technological tools well, through a ripple effect, they will lead their learners to use them efficiently. Also the government should find a way to reward the few (the remaining 40%) who ensured the continuity of the lessons. Regarding their lack of access to ICT tools, the Government should offer computers, modems, Internet connections and video projectors to primary and secondary teachers in the region of Vina.

## References

- Aïcha M. (2020). TICs et enseignants du primaire et du secondaire dans le département de la vina, région de l'Adamaoua: urgence d'une mutation des pratiques pédagogiques, *International Journal of Latest Engineering and Management Research (JLEMR)*, PP. 13-26.
- Chef du Gouvernement (2020). Déclaration spéciale du Premier Ministre du Cameroun, Chef du Gouvernement ce 17 mars 2020.
- Edward D. & Chris B. (2020). Atténuer les effets du COVID-19 et remettre les systèmes éducatifs en marche: les leçons de la Sierra Leone, in *Global Partnership for Education (GPE)*.
- Jules Ntap, E. (2020). Le Covid-19 révèle au grand jour le fossé numérique dans le système éducatif camerounais, *VOA Afrique*.
- Kouakep, T. Y. (2020). Education and digital contribution in the teaching of English language (north - center - coast - west) and mathematics (adamaoua - north): the case of WhatsApp for a, in *Ethic, pedagogy and didactics in secondary education*
- Michaelowa K. (2000). Dépenses d'éducation, qualité de l'éducation et pauvreté: L'exemple de cinq pays d'Afrique francophone, Document technique n°. 157, Centre de Développement de l'OCDE, Paris.
- Paul Bernard N. (2020). Pandémie de coronavirus, quel avenir pour l'éducation au Cameroun? *Nkafu Policy Institute*.
- Reliefweb (2020). UNICEF Cameroon COVID-19 Situation Report No. 17: 7-27 August 2020. Récupéré à <https://reliefweb.int/report/cameroon/unicf-cameroon-covid-19-situation-report-no-17-7-27-august-2020>.
- UNESCO (2021). Reconstruire en mieux: après le COVID-19, l'éducation doit changer pour répondre à la crise climatique. Récupéré à <https://fr.unesco.org/news/reconstruire-mieux-apres-covid-19-leducation-doit-changer-repondre-crise-climatique>.
- UNSECO (2021). Réouverture des écoles: quand, où et comment? Récupéré à <https://www.unesco.org/fr/articles/reouverture-des-ecoles-quand-ou-et-comment>.