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IMPLEMENTING FREE PRIMARY EDUCATION IN A CRISIS CONTEXT: COVID-19 AND EDUCATION REFORM IN SOUTH KIVU, DEMOCRATIC REPUBLIC OF THE CONGO

Jean-Benoît Falisse, Cyril Brandt, Jean Mukengere Basengezi, Sweta Gupta, Dieudonné Kanyerhera, Pierre Marion, Pacifique Nyabagaza, Ibrahim Safari Nyandinda, Gauthier Marchais, and Samuel Matabishi

ABSTRACT

In September 2019, the Democratic Republic of the Congo implemented a new policy abolishing tuition fees in primary education. A few months later, schools closed for 4.5 months due to the COVID-19 pandemic. How did the lockdown affect the implementation of the free education policy? Did it reduce or enhance its effects? This article examines the experience of schools and teachers in two districts in South Kivu that were affected by armed conflict. Based on a survey of 752 teachers and 637 parents, as well as 157 qualitative interviews conducted in 55 schools, we show that, supported by the free education policy, enrollment remained stable, and the relations between teachers and parents did not seem to deteriorate despite a near complete lack of teaching activity during the period of school closure. However, the hardships associated with the pandemic have made the financial circumstances of teachers on precarious contracts previously paid via tuition fees even more unsustainable. Their quitting the profession in increasing numbers threatens the stability of the school system. Thus, introducing free primary education is not a panacea in the context of a crisis. The sustainability of such reform requires an ambitious and comprehensive overhaul of human resources.

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INTRODUCTION

The measures taken by governments worldwide to combat COVID-19 have had drastic effects on education systems. An emerging body of research reports a decline in access to education across many countries, particularly those affected by violence, whose education systems were often already in crisis before the pandemic (Datzberger and Parkes 2021). To tackle this issue, free education reform has been proposed as a potential strategy to counteract the additional shock brought on by lockdowns and school closures (Hallgarten 2020). In several countries designated as "fragile" or "low-income," part of public education is provided by teachers working under precarious contracts with wages paid directly by parents and the local community (Dolan et al. 2012), thus undermining the concept of universal education. Free education reform has been described as necessary yet complicated, but could it be an answer to the challenges of access to education exacerbated by public health and other crises? What happens when such reform occurs amid a public health emergency coupled with a prolonged security crisis?

The east of the Democratic Republic of the Congo (DRC) has been affected by armed conflict for almost 30 years. Local schools continue to function as best they can while operating under very difficult financial circumstances characterized by the destruction of infrastructure, the deliberate targeting of school personnel by armed factions (Brandt 2021), forced population displacements, insecurity, and the militarization of public life. The obstacles are immense, and they are further exacerbated by chronic underfunding of the education sector, a problem affecting many countries. Chronic underfunding drives schools in the DRC to request large financial contributions from parents to pay teachers' wages and finance school infrastructure. To address this challenge, the DRC began reforming its education system in December 2019, banning tuition fees for public primary schools. While schools were destabilized initially due to an immediate spike in enrollment rates, less than six months after the implementation of the reform, the COVID-19 pandemic struck, and schools were forced to close for 4.5 months in 2020 and 1.5 months in 2021.

In this article, we analyze the combined effects of the free education policy and the COVID-19 school closures on teaching, parent-teacher relations, and the financial circumstances of teachers. Using quantitative and qualitative research methods across 55 schools, we aim to foreground the experience of frontline actors. The study region, South Kivu, is among the worst affected by the ongoing armed conflict in eastern DRC. Therefore, this study does not purport to represent the

DRC as a whole but aims to inform debates on education policies in the context of protracted crises.

The following section provides background information on the education system, the free education policy, and the COVID-19 pandemic in the DRC. We then detail our research methods in the methods section. The results section presents the ground realities of implementing the free education policy before detailing how the lockdown was experienced from the point of view of those affected. We then try to understand some of the mid-term effects (after a few months) of the combination of these two factors.

BACKGROUND

FREE PRIMARY EDUCATION AND SCHOOL FUNDING IN THE DRC

When the DRC (formerly Zaire) gained independence in 1960, primary education was free and guided by the ideal of universal access (Bongeli ya Eto 2015). Subsequent economic crises and structural adjustment policies in the 1980s changed this situation. Public finances collapsed and civil servants' wages were drastically cut, driving the government to "invite" parents to finance the education system starting in 1986. Soon parents were financing the largest part of the education sector; they took over its totality when, in 1992, the government of Zaire stopped paying any teachers' wages at all. Thus, in addition to covering monthly wages through so-called "motivation bonuses," parents now also financed the entire administrative apparatus of the schools. This new arrangement, which outsourced the maintenance of and investment in (formerly) public education to the private sector, led to highly unequal access to education (Poncelet, André, and De Herdt 2010). However, paradoxically, it has also been cited as a factor in the resilience of the education sector during the wars of the 1990s and the beginning of the 2000s (World Bank 2005). The partial stabilization of some regions of the country since 2003 also ushered in a gradual return of state funding. However, this funding remains limited. In 2015, households still contributed more than 1.5 times the state's contribution to the education sector, as calculated by Verhaghe (2017), who also identified no less than 130 different types of tuition fees imposed on parents (varying considerably both across and within provinces).

The ideal of free primary education, having never been fully abandoned, reappeared in the debates of the Sovereign National Conference between 1990 and 1993. Funders and partners of the DRC also applied pressure, as the absence

of de facto free primary education fits neither with the rhetoric of "education for all" nor with the country's Millennium Development Goals. After the Second Congo War (1998–2003), the 2004 Round Table on Education took up the idea, which was finally incorporated into Article 43 of the 2006 Constitution. However, over the next nearly 13 years, attempts to implement free education consistently failed. Finally, on August 20, 2019, the spokesperson for newly elected President Félix Tshisekedi announced the immediate implementation of free education in primary education, as well as in the first two years of secondary education.

With this new policy, parents are no longer expected to pay teacher premiums (the "motivation bonus") or fund operational costs for school and administrative offices. Even if, in practice, minor costs such as student insurance or registration for end-of-year exams persist, the reform's effectiveness remains indisputable. At least three million additional students were enrolled in primary schools across the country at the start of the 2019-2020 school year (Latif and Adelman 2021).

However, the implementation of the reform remains complicated. Between 2019 and 2020, spending on education increased from 20.8 percent to 24.5 percent of the country's national budget, with implementation rates lagging slightly behind (from \$3.1 to \$4 billion). At the end of 2019, the DRC increased teacher wages, paid wages to most of the 138,000 teachers who had been registered but not yet remunerated, and added 58,000 new teachers to its listings (CONEPT 2021). At the time of writing, however, the reform is still not fully funded. In 2021, the World Bank estimated that an increase of at least 160 percent over 2019 spending would be needed to cover the costs of the reform (World Bank 2021). Other major factors remain unresolved, including up to 132,000 unregistered teachers currently working (CONEPT 2021). The World Bank has committed to disbursing \$800 million over four years (for human resources in 10 out of 26 provinces), but the first disbursement of \$100 million, scheduled for December 2019, was postponed due to suspicions of corruption (World Bank 2021).

THE STATUS OF TEACHERS

This complex history of underfunding and reforms shaped, among other factors, by the increasing number of teachers working on-site in the 1990s and 2000s, as well as various forms of "real-world governance" in the education sector (Titeca and De Herdt 2011), has given rise to a range of informal or de facto statuses for teachers. In this article, we classify teachers into two main categories (for more details, see Brandt 2017). The teachers we refer to as working under a "favorable contract" are those who are said to be "registered" and "paid," that is, they are registered and

paid by the state. The state does not pay those teachers we qualify as working under an "unfavorable contract." These are so-called "registered" but "unpaid" teachers, "new hires" who are often not yet registered officially, or those "omitted" from the official register. Teachers working under an unfavorable contract often depend on direct payments from schools or parents. Like other aspects of the Congolese education system, the status of teachers is often politicized. Political support and sometimes even a payment are often required to access "registered" and "paid" status (Brandt 2017). Decentralization—which in the education sector has led to the creation of new decentralized educational administrative units, offices, and positions—has often served to distribute positions within networks of influence (Brandt and Moshonas 2020). Belonging to an ethnocultural group, regional origin (i.e., being considered as originating from a specific region), and political affiliation are key elements in obtaining the support of patrons for securing a position, registration, and career progression (Marchais et al. 2020).

Statistical yearbooks at the national and regional levels do not provide a breakdown of teaching staff into the categories outlined above, and the question of who is even counted as a teacher remains eminently political. In 2018, before the reform, the World Bank cited a figure of 540,000 primary school teachers, approximately 60 percent of whom were public-sector employees (World Bank 2020, 10), while the National Institute of Statistics report lists 460,937 teachers. In 2019, the first year of free education, the latest school directory available (2019-20) lists a total of 464,960 staff members in public primary schools: 392,526 teachers and 72,434 other staff (DRC/MEPST 2021). Our 2019 survey detailed in the methods section, while not being representative of the whole of the DRC, found that the state did not pay 36 percent of teachers (thus working under "unfavorable" contracts), 64 percent of whom reported they were registered with the authorities (thus being "unpaid" yet "registered").

THE COVID-19 PANDEMIC

When the COVID-19 pandemic hit the DRC, it found a context already marked by a long history of major epidemics, from the resurgence of sleeping sickness in the 1990s (Falisse and Mpanya 2022), several less deadly epidemics of cholera and measles (for example, in 2019-2020), to the recent outbreak of Ebola. Cholera outbreaks are quasi-endemic in the province of South Kivu. They have, however, never resulted in mass school closures or other government measures. The Ebola epidemic in North Kivu and Ituri (2018-2020) forced some schools to temporarily close their doors, but in a limited way and with significant international support to not interrupt teaching (Daems and Willemot 2018). These past public health

problems attest to a fragile health system, undermined by chronic underfunding and vulnerable to new pathogens, including COVID-19 (UNICEF 2020). However, when COVID-19 was declared a pandemic, the central government adopted a strong coordinating role. In particular, it reactivated the human infrastructure deployed in the Ebola response (Al Dahdah, Falisse, and Lurton 2021). It did so in a context still marked by fresh memories of the tensions between the population and the authorities, caused in part by the military enforcement of the Ebola-related public health measures (Congo Research Group 2021).

On March 24, 2020, when the country had officially counted 394 cases of COVID-19, among which were 25 deaths, President Tshisekedi declared a state of emergency, limiting movement and gatherings. This had a negative impact on the economy, household incomes, and employment. As in many countries, the Congolese government closed schools starting March 23, 2020. Shortly after that, the Ministry of Education published an Educational Response Plan (MEPST 2020), a modified humanitarian response plan to respond to COVID-19, including a section on education (OCHA 2020), as well as a plan specific to the humanitarian education cluster (Cluster Education DRC 2020). These plans highlighted the potential adverse effects of lockdowns and school closures on child welfare, including the increased risk of children undergoing forced recruitment into armed groups in conflict-affected areas, forced labor, violence, exploitation, child marriage, and various forms of abuse. They also emphasized the need to find ways to continue the educational process through distance education, specifically using "low-tech" solutions, such as radios. Our analysis shows that there was poor continuity of learning in the regions we researched, and plans such as those mentioned above generally remained unimplemented. Schools finally reopened on August 10, only to close again in January and February 2021. This article focuses on the first episode of closure.

METHODS

Our analysis is based on data gathered during the BRiCE research project, ran by the Institute of Development Studies (IDS) and the Institute Supérieur Pédagogique de Bukavu (ISP Bukavu) between 2018 and 2022. It forms part of a broader action research project that aims to better understand and improve the daily lives of teachers in settings affected by armed conflict. The project is funded by the European Union and implemented by Save the Children in Niger and the DRC. Our interdisciplinary research combines education with the study of armed conflict and includes qualitative and quantitative components.

The quantitative component of this study is based on two data collections carried out in 55 public schools in the territories of Fizi and Uvira, in the province of South Kivu in the DRC. The first data collection occurred in May 2019 and the second in October 2020, that is before and after the implementation of the free education policy and the first episode of school closures. The data covers 752 teachers (727 in 2020), 637 households with at least one child in primary school, and 55 school principals. In 2019, we spoke with 752 out of 804 primary school teachers, which is 94 percent of teachers in the BRiCE schools; in 2020, we interviewed 727 out of 819 teachers (89%). Table A1 in the Appendix gives more details on the students and teachers we sampled, Table A2 provides a profile of the schools in our study, and Table A3 contains descriptive statistics of the teachers' characteristics. Suffice it to note here that while teachers and parents were selected randomly, the schools we focused on were chosen, among other reasons, because of their location in a "safe" area that is accessible and covered by mobile telephony, and because they are economically viable. In other words, our sample centers, schools that are probably relatively advantaged. Thus, it is not fully representative of all schools in the territories of Fizi and Uvira and even less so of those in the province as a whole or the country. Our analysis is, above all, descriptive. The standard deviations for statistical tests are adjusted by school (clusters).

Data collection took place during the implementation of an educational project. Various precautions have been taken to reduce the social desirability bias inherent in any research touching upon an officially prohibited practice, in this case, parental contributions to remuneration. The surveyors were recruited locally and fully outside the structures of Save the Children. This ensured the independence of the research and the confidentiality and anonymity of the responses before starting the interviews. They asked the survey questions from various angles (which is why we sometimes use several variables referring to the same factor). Asking both parents and school principals the same question allowed us to verify the information teachers provided, particularly concerning parents' financial contributions. Follow-up methods developed in previous projects were used to reconstruct the background of the teachers concerning certain key variables (e.g., employment status, history of violence). In order to reduce errors, the follow-up period was short (one school year), time markers based on local history were used to situate events, and the dates and data from our own data were triangulated using other surveys.

The qualitative component of the study was based on two data collection phases lasting approximately one month each in the regions of Uvira and Fizi, in October-November 2019 and March-April 2020. The research was supplemented with

qualitative interviews carried out in July 2020, mainly concerning the context of the epidemic in the DRC. The research team of the ISP carried out a total of 157 qualitative semi-structured interviews with teachers, school principals, education inspectors, representatives of the state, traditional leaders, and local authorities. We use the abbreviation "Int" or "Int-Cov" followed by the interview number to refer to the additional COVID-19 survey interviews. The questionnaire was gradually adjusted to reflect the themes uncovered during the interviews. It included questions on the free education policy, the political economy of teacher recruitment, the impact of the COVID-19 pandemic and school closures on teaching, the relations between teachers and parents, and the professional development of the teachers. The qualitative data was analyzed by systematically mining for extracts relating to free education and the pandemic. We then tried to identify the main trends and link them with the quantitative data that constitute the backbone of our analysis.

RESULTS

In this section, we first describe the lockdown experience of the teachers based on the stories and analyses they offered during the interview phase of our research. In a second subsection, we supplement this description with an analysis of the medium-term situation three months after the (first) lockdown.

Before developing our analysis of the situation during the pandemic, let us note two important changes that had already occurred before the pandemic because of the implementation of the free education policy.

The first, as discussed above, was the unprecedented increase in students enrolled and attending school. It is important to highlight that our data also show that free education, in the sense of parents no longer paying teachers' wages, had indeed become a reality. In 2018-2019, 89.93 percent (CI¹: 84.40-95.45, n=715) of parents reported paying teachers' wages *each* month of the school year, and no parent (0.2%, CI: -0.11-0.67) had escaped this payment at any time during the year. The following year, only a small proportion of parents—10 percent (CI: 4.54-15.59)—reported having paid tuition fees at *any* point during the school year (in 1% of cases, parents reported that students carried out manual work for teachers, mainly agricultural work). As shown in Figure 1 below, some costs remained, especially those associated with school supplies (books and uniforms).

Confidence interval

Nevertheless, parental contributions to school operation costs and teachers' wages had been reduced to the minimum. However, it should be noted that these data must be approached with caution. Actual parental contributions are very likely to still be more substantial than our survey reveals. In 2020, only 57 percent of teachers on unfavorable contracts agreed to state their income, compared to 97.2 percent in 2019. At the same time, almost all teachers under favorable contracts shared this information with us at both times.

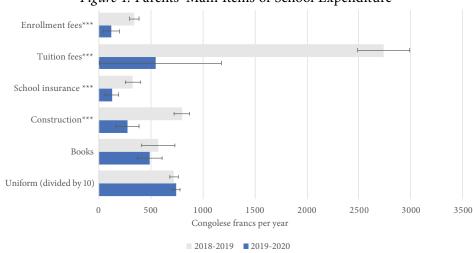


Figure 1: Parents' Main Items of School Expenditure

Note: *** Difference between the two years has a significance level of p<0.001. Error bars: standard deviation adjusted for sampling by school. N=715 parents of students.

The second change is the considerable increase in inequalities stemming from teachers' employment status. As our data from May 2019 show, teachers on favorable contracts were already in a better material position before free education was introduced (e.g., they were more likely to own items such as bicycles, motorbikes, water pumps, or to have access to electricity; they were also older on average—43.8 versus 31.5 years). This situation of inequality has been exacerbated by banning payments to teachers from parents. The state promised to gradually register and pay all teachers, but in practice the process is complicated, politicized, and lacks transparency: the status of most teachers on unfavorable contracts is, at the time of writing, not regularized. Our field survey shows that school principals without close ties to politicians, either because of party affiliation or being from the same ethnocultural group, have a very low chance of registering their new teachers (Int. 31, 36, 39, 45, 53). This explains both the continued payment of certain fees in schools and the maintenance of structural inequalities in the education system.

PERCEPTIONS AND EXPERIENCES OF THE EFFECTS OF THE PANDEMIC ON TEACHERS AND TEACHING

Even though the official COVID-19 figures in the DRC stayed low compared to many countries, the situation was alarming. More than three-quarters of parents and teachers reported that they were concerned or very concerned by the COVID-19 pandemic in October 2020. Protective measures (such as masks, social distancing, and regular hand-washing) were difficult to apply in schools due to overcrowded classrooms and poor sanitary infrastructure.

WHO SHOULD BE TAUGHT DURING LOCKDOWN—AND HOW?

In practice, the overwhelming majority of teachers –86.63 percent (CI: 82.91-89.78) – and principals interviewed indicated that they were not in contact with students during the school closure periods and did not provide students or parents with educational support, whether direct or indirect (e.g., homework), or emotional support. Almost symmetrically, 87.13 percent of parents (CI: 83.81-90.45) stated that their children did not study at all during the lockdown. However, there were certain exceptions (Int-Cov. 3, 8, 30), like this teacher who reports that she continued to teach at home, but only to certain students:

Yes, I stayed in contact with a few students during the lockdown, and I tried to support them concerning their education and morale, especially those close to me. Every day at 3 or 4 PM, I called the students to remind them of the subjects they had already covered, and they were very attentive when I was talking. They answered questions correctly. I even advised them on how to behave during this period. (Int-Cov. 3)

One school even reported having continued in-person teaching "while respecting safety distances" (Int-Cov. 12) for students preparing for the national primary school final exam (TENAFEP). The few improvised ad hoc practices that emerged arose when teachers, parents, and students were in a situation of physical and social proximity. Less advantaged children, including Burundian refugees, were more likely to miss out on such opportunities as many were enlisted for agricultural or pastoral work (Int-Cov. 15, 16, 17, 18, 31, 34).

The lack of directives, communication, and support from decentralized education authorities is foregrounded to explain the absence of teaching during lockdown (Int-Cov. 5, 6, 29, 33). The overall picture emerging from the qualitative and

quantitative interviews is one of the decentralized authorities (at the level of the education sub-provinces) generally remaining absent throughout the lockdown. The interviews paint a picture regarding limited access to distance learning methods deployed by the Ministry of Education. A minority of teachers interviewed explained that they were unaware of these tools (Int-Cov. 6, 26, 32, 35). Some noted that they were not able to receive radio stations broadcasting distance education (Int-Cov. 29, 30, 31). Above all, the vast majority of parents and teachers did not own a radio, and even fewer owned a television. According to our 2019 survey, 33.6 percent of households owned a radio and 18.5 percent a television. During the survey following the first lockdown, 70.2 percent of parents (CI: 64.66-75.17) pointed to the absence of schoolbooks as another major problem. More than half also pointed to the absence of radio, telephone, and internet connection. As one respondent explained:

Yes, some students have had it easier and others harder to study during the lockdown because some students who live in the city—their families have televisions and radios, and some students even have good phones to study with while those who live in rural areas do not. (Int-Cov. 3)

Unsurprisingly, high-tech solutions have not reached most Congolese students. Even low-tech solutions were not very visible in the schools we visited. This point reflects a very limited distance learning experience during the pandemic that was widely shared in other countries.

Even in the minority of cases in which the parents could free up time, the necessary conditions for learning were often not met. Thus (1) only 19 percent of students (CI: 13.19-25.07) attended preschool; (2) only 59 percent (CI: 52.82-65.7) of mothers and 77 percent of fathers (CI: 72.04-81.80) could read and write; (3) only 20.82 percent (CI: 15.37-26.27) of students had books at home; (4) only 62.47 percent (CI: 57.32-67.63) of parents checked whether their children were doing their homework, and (5) only 10.13 percent (CI: 6.75-13.5) of parents reported that they were in regular communication with the school. While our study highlights that major differences become visible when comparing poor and wealthy families, the numbers remain low overall. Ultimately, only 9.79 percent (CI: 7.08-12.49) of the parents in our sample reported having helped their children with schoolwork during the lockdown. This group was significantly wealthier than families who did not offer educational support to their children (an average of 5.88 versus 4.89 items on our 15-item asset index list; p=0.019).

Teachers reported that they did not fully understand how to enroll in distance education programs due to a lack of information, and that training and that distance education was sometimes not taken seriously as neither teachers nor parents were formally notified (Int-Cov. 7). It is clear that, in this context, there were very few learning opportunities during the lockdown.

The lockdown generated considerable anxiety and stress within families (see Table 1 later in the article). These feelings were mainly due to (1) financial uncertainty and hardship (Int-Cov. 2, 8, 24, 32) generated by a loss of income (particularly for families dependent on cross-border trade with Burundi, which was shut down by border closure; Int. 2) and (2) to the fact that children, deprived of the structure provided by school, were left "wandering" (Int-Cov. 2, 8, 14, 25, 28). Although parents recognized some teachers' efforts to support students during the lockdown, the general feeling was nonetheless one of having been left to their own devices.

TEACHING DURING LOCKDOWN: STATUS AND INCOME

While teachers struggled to make teaching possible in any form, the lockdown was also marked by significant material difficulties. Theoretically, the Congolese state guaranteed the payment of salaries to teachers during the lockdown, but, in practice, this did not always apply. While several teachers on favorable contracts reported delays (Int. 1, 27, 31, 34), teachers on unfavorable contracts were clearly the most affected, as shown in Figure 2. The increase in salary payment delays and failures in April 2020 coincided with school closures across the country.

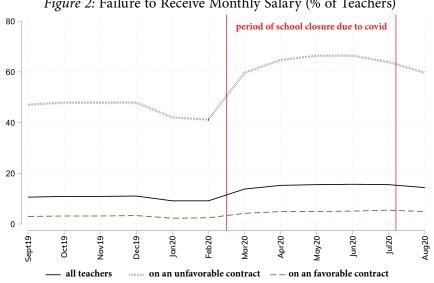


Figure 2: Failure to Receive Monthly Salary (% of Teachers)

Note: N=689 teachers

Interviews suggest that payment of "new hire" teachers by parent and management committees was frequently postponed (Int-Cov. 10, 11) or simply suspended (Int-Cov. 1, 16, 20, 22, 30). Although free education formally abolished payments by parent and management committees to teachers, (see Section 1B), Figure 2 shows that, in practice, around 65 percent of teachers on unfavorable contracts were still paid by the schools or parents prior to the pandemic. However, after the lockdown and school closures, almost half of the teachers on unfavorable contracts stopped receiving any form of payment or salary. The difference is significant (p=0.046; considering the cluster effect and controlling for the region). For teachers on unfavorable contracts, the proportion of monthly salaries not paid increased by 17.8 percent (CI: 10.05-25.02) during the lockdown period (March-August 2020, as compared to September 2019-February 2020), whereas for other teachers, it increased by only 2.34 percent (CI: 0.89-3.78). However, we must remain cautious for at least two reasons: (1) Figure 2 shows that a large disparity already existed before school closures, and (2) there was a very high rate of nonresponse to questions concerning salary among teachers on unfavorable contracts (43% as opposed to 1% among the others) which results most likely from the taboo around bonuses since the introduction of free education (however, even when interpreting nonresponses to mean that the respondents were paid their monthly salaries, the difference between the two groups remains significant).

For these teachers, the lockdown and associated shutdown of many business sectors meant there was very little alternative work. Fallback activities such as petty cross-border trade were impeded by the border closures between the DRC and Burundi, and with Rwanda (Int-Cov. 4), and several teachers indicated that they turned to agriculture, in fields belonging to them, their families, or other persons, for remuneration (Int-Cov. 16, 20, 30, 32). In total, nearly 34.57 percent (CI: 29.09-49) of teachers in our sample reported having taken up additional work during the lockdown. The absence of a significant difference (p=0.783) between teachers on a favorable contract and the others reinforces the impression that teachers had limited options.

TEACHER WELLBEING DURING LOCKDOWN

School closures affected multiple constitutive dimensions of teacher wellbeing. Nearly 59 percent of teachers reported being more stressed during this period, mainly due to the fear of COVID-19, salary and economic difficulties, and the loss of structure associated with the interruption of work that provided them with meaning. Several teachers also noted that the lockdown considerably increased tensions within their homes and with their neighbors and social

circles, particularly because no one is used to spending their days at home "doing nothing" (Int-Cov. 4, 24).

The interviews suggest a possible heterogeneity in this decline of wellbeing. Almost all principals and teachers interviewed noted that "new hires" were more stressed, as were those living in urban settings, where fewer activities generating complementary income and daily structure were available (Int-Cov. 9, 25). This was the case for women, who were more likely to gain additional caring responsibilities for children, but less likely to be able to fall back on or develop alternative work opportunities (Int-Cov. 9, 11, 30). While our quantitative data confirm that teachers on unfavorable contracts were more inclined to express concern about the health consequences of COVID-19 on their families (p=0.004), the idea of a very different experience of the effects of lockdown on daily life is not fully confirmed. Table 1 below summarizes the perceptions of the effects of COVID-19 and stress by teacher category. Even if teachers on unfavorable contracts had slightly more negative experiences related to COVID-19, the difference is minor. In fact, all groups, parents as well as teachers, men as well as women, and teachers on both favorable and unfavorable contracts, seem to have been affected by the pandemic (similarly, there is almost no difference between rural and more urbanized areas, except for a slightly greater loss of social activities in the latter).

Table 1: Negative Experiences Related to COVID-19 (% of respondents)

	Parents	s Teachers	Teachers by gender		Teachers by contract		
			Men	Women	Favorable	Unfavorable	
Loss of income	54.03%	50.89%	51.92%	48.11%	49.74%	54.03%	
Loss of access to market	20.38%	23.34%	23.60%	22.64%	24.43%	20.38%	
Inability to care for the ill	12.80%	15.69%	15.91%	15.09%	16.75%	12.80%	
Additional tasks	4.74%	5.99%	6.64%	4.25%	6.46%	4.74%	
Illness	1.42%	1.79%	2.10%	0.94%	1.92%	1.42%	
Mental illness	62.56%	57.02%	56.29%	58.96%	54.97%	62.56% +	
Loss of social activities	83.89%	77.55%	77.10%	78.77%	75.22%	83.89%**	
Catastrophic expenditures	16.59%	14.67%	15.73%	11.79%	13.96%	16.59%	
Respondents	715	784	572	212	573	211	

Note: October 2019 survey. Difference between the two groups: + p<0.15; ** p<0.05.

It should be noted that the lockdown also seems to have affected perceptions of security. Teachers and principals shared their fear of being targeted for still being paid a salary (Int-Cov. 10, 16, 17, 18), with some even expressing concern that their own "new hires" would come to "search them on the way home" (Int-Cov. 3) or "come at night to harm us" (Int-Cov. 9). In a tense and militarized context, professional conflicts can sometimes turn violent. The administrative and contractual status of teachers thus appears to be a key determinant of their social and emotional wellbeing and that could play out in dynamics of violence.

MEDIUM-TERM EFFECTS

In this section, we describe the development of the financial circumstances of teachers and education three months after the end of the (first) lockdown in October 2020 and compare it with the situation before the pandemic and before free education was instituted in May 2019.

STUDENT ENROLLMENT

A prominent concern among the teachers and school principals interviewed during the first lockdown was that certain groups of students would not return to school and that part of the achievement of free education would be lost. These include, in particular, girls who married and/or became pregnant during the lockdown (Int-Cov. 12, 16, 18, 30, 31), as well as children from poorer socioeconomic backgrounds (including refugees) and/or from rural areas, who were more likely to work within the household in various ways, such as subsistence farming or household chores (Int-Cov. 15, 24, 32). However, our data show no statistically significant decrease (p=0.668; n=49 schools) in the number of students enrolled between the start of the 2019-2020 school year and that of 2020-2021 in the region covered. This fact is all the more remarkable, given the significant increase (19.2%) in students between the beginning of the 2018-2019 school year and early 2020 (p=0.000; Figure 3).

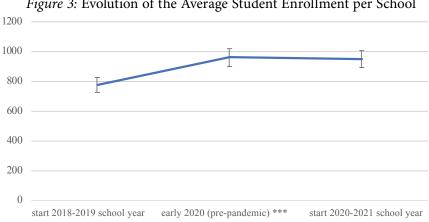


Figure 3: Evolution of the Average Student Enrollment per School

Note: N=49 schools for which information was available. Numbers as reported directly by the director. Error bars: standard deviation.

Concerning more vulnerable students, the number of children who are refugees or living with a disability remained stable between the May 2019 survey and that of October 2020, both based on the figures provided by schools and the profile of students we managed to track. The proportion of girls enrolled reported by the schools, far from falling, increased significantly between our two surveys, with the ratio rising from 0.98 to 1.23 girls per boy (p=0.000).

Most respondents interviewed during the first lockdown were concerned that teachers—especially new hires—might not return to schools when they reopened due to uncertainty about their pay. "New hire" teachers explained that it was unlikely that teachers under these contracts would return to school since they had not been paid regularly, or at all, since the implementation of the free education policy (Int-Cov. 16, 20, 21, 34). In practice, we did not observe any significant change in the average number of teachers declared per school between the start of the 2018-2019 school year (15.89) and that of January 2020 (16.1), whereas a slight drop without statistical significance (p=0.137) was observed at the start of the 2020-2021 school year (15.78). However, these numbers mask two inverse trends confirming the qualitative interview information. On the one hand, the number of registered and paid teachers increased slightly, by 4 percent on average (p=0.092), while the proportion of "new hires" and teachers under unfavorable contracts in general decreased, by 18.2 percent (p=0.049) and 14.75 percent (p=0.037) respectively. This is partly explained by the simple fact that 12.23 percent of the teachers on unfavorable contracts we met in 2019 (n=292) had moved on to a favorable contract. However, the significant drop is also likely linked to teachers

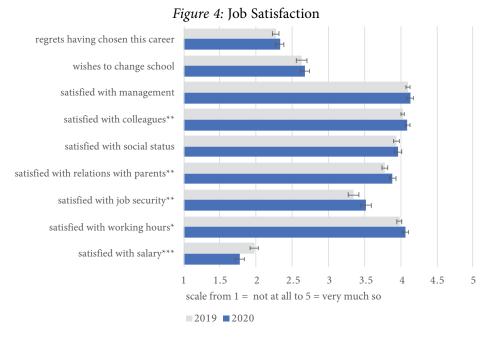
on unfavorable contracts who left their schools. The difference is striking: while we could trace 91.69 percent of teachers on favorable contracts surveyed from 2019 to October 2020, we could only trace 64.38 percent of teachers on unfavorable contracts (p=0.000).

We do not know exactly when these teachers on unstable contracts left the profession. The qualitative interviews suggest that the unsustainable working conditions imposed by free education, and the school closures and the absence of pay during the lockdown (Int. 4, 8, 11, 12, 34, 56), played an important role in the attrition of teachers. Other shocks beyond free education may also have accelerated this development, including, of course, the lockdown, but also the fall in the value of the Congolese franc in May 2020 (-16% against the dollar), which reinforced the perception that wages were too low (Int. 5, 34, 50).

TEACHER WELLBEING

The considerable shock caused by the free education policy and the lockdown precipitated significant malaise among teachers, especially those on unfavorable contracts. A strike demanding wages for "new hire" teachers was organized in October 2020 (Int. 2, 17, 37, 55), in which 36.96 percent of our respondents under favorable contracts and 77.01 percent of those under unfavorable contracts (p=0.000) took part. This led to tensions between schools, such as when teachers from a school staffed mostly by "new hires" on strike threw stones at a school that paid wages and hit two students (Int. 4). In this context, our interviews suggest that with free education, teachers paid by the state tended to see themselves as "real" state officials, as opposed to the new hires (Int. 4, 7, 36, 53), which fueled grievances and tensions (Int. 5).

Most of all, teachers complained about the effect of free education on their salaries. As Figure 4 shows, there was little change in other well-being indicators, except for job security and relations with parents and colleagues, which improved slightly.



Note: *, **, *** indicates significant difference at p<0.1, p<0.05, or p<0.01 between the two years. Error bars: standard deviation adjusted for sampling by school. N = 752 teachers in 2019; 727 in 2020.

Additional variables not shown in Figure 4 confirm the improvements in working relations. Two to three times as many respondents reported that relations between teachers and parents, students, or administrators had improved rather than deteriorated. The qualitative interviews also suggest that free education was a source of relief for many parents and had generally improved teacher-parent relations (Int. 2, 10, 47, 50). Beyond the obvious financial relief for parents, free education appears to have partially eliminated a series of distortions in school operations generated by tuition and the transactional relationship to education it engendered. For example, it restored transparency to student sanctions, such as expulsion for bad behavior (Int. 49).

However, we should remain extremely cautious about drawing conclusions from these results. The data were collected in October 2020, when a substantial number of teachers on unfavorable contracts—probably the least satisfied group—had already left the schools.

CONCLUSIONS

Our research shows that, despite the lockdown and continued violence, the ambitious education reform launched by the Congolese government in September 2019 has had a considerable impact on schools in the Fizi and Uvira districts of South Kivu. The significant increase in the number of students in school suggests that the reform is bearing some fruit by making access to primary education in the DRC more universal. However, undertaken in an already very difficult context, the reform is also struggling. The number of teachers has not increased in line with the student enrollment; this is due to sector underfunding, which is leaving teachers facing overcrowded classrooms with students at different levels. Before the introduction of the free education policy, the school system relied partly on teachers hired directly by the schools and paid by the community, in part to circumvent the difficulties of hiring new state-paid teachers. While the reform prohibited these practices, it did not lift the constraints on hiring. On the contrary, the regularization of unregistered teachers, while necessary to cope with the increased number of students, often comes up against the logic of politicized governance in the education sector, leading to strikes and tensions within the schools, as well as the informal perpetuation of some types of direct contributions from parents. It is also important to note that the financial shock for teachers on unfavorable contracts affected their wellbeing and identity.

While the "double shock" of free education combined with COVID-19 is unique to the DRC, to the best of our knowledge, this fact does not render our analysis irrelevant to the study of other contexts. The movement for genuinely free education is strong globally, and the risk of large-scale epidemics is greater than ever. For example, the Ebola and Nipah virus epidemics have already led to the closure of schools for many months. Other crises, such as intense heat waves related to climate change, also lead to school closures. A frequent recommendation for buffering the shock (epidemic or otherwise) during closures and immediately afterwards is to ensure that financial barriers are cushioned for students (see, e.g., Hallgarten 2020). Our study urges great caution and close consideration of the financial circumstances of teachers.

In the DRC, the free education reform seems to have both mitigated and exacerbated the effects of the interruption of schooling due to the pandemic. On the one hand, the effects were mitigated because, boosted by free education, school enrollment remained stable. Despite stated concerns, relations between officially registered teachers and parents did seemingly not deteriorate when comparing the pre-pandemic period to that a few months after the school closures. On the

other hand, the effects were also exacerbated as teachers, especially those not registered as civil servants, reported great uncertainty regarding employment and livelihood. This uncertainty was the combined effect of the payment restrictions imposed by the reform and the movement and teaching restrictions, acting as de facto employment restrictions imposed as part of the COVID-19 response. While other studies show an increase in stress and anxiety among teachers during the pandemic (Mahmud and Riley 2021), we demonstrate that, for many unregistered teachers already pushed into a precarious position by the reform COVID-19 has made the situation unsustainable and is driving them out of the profession. Note also that, like other studies (Asanov et al. 2021), we show that the level of pandemic time engagement with education is lowest among the most vulnerable students.

Our research highlights the potential and limitations of abolishing tuition fees in situations of prolonged crisis. Free education cannot solve all problems in a system still relying heavily on local arrangements managed directly by schools rather than at the (sub)provincial, let alone the national level. This concerns mainly the remuneration of "support" staff who are not recognized by the state but are nonetheless essential to keeping up with the workload. Such local arrangements allow schools increased flexibility, which is critical for facing multifaceted and prolonged crises (particularly acute in areas affected by armed conflict). However, the free education policy reform somewhat "re-centralized" the system, which diminishes the agility of schools. The issue of teacher conditions is intrinsically linked to the question of the education system's resilience throughout crises.

The limits of free education as a solution in times of crisis are also evident when looking at learning continuity. Without investment in things as fundamental as textbooks or means of communication (including radios), such continuity is almost impossible to maintain once in-person teaching has been interrupted. Finally, unless additional decisive measures accompany its implementation, the abolition of tuition fees does nothing to reinforce teachers' self-esteem, wellbeing, and motivation, all essential factors for their capacity to navigate crises such as COVID-19.

The COVID-19 experience was an unprecedented crisis for schools in the eastern DRC. It is risky to compare it with previous crises, which often remain poorly documented from a micro perspective and the teachers' point of view. In terms of the disruption caused, the comprehensive and lengthy school closures are comparable to the major teacher strikes recurring in the country, which cause "blank years" that have an impact on school enrollment (Nyongolo and Mbecke 2020). However, the comparison ends here. Strikes typically improve teachers' financial circumstances, and maintaining teaching activities while on strike is

out of the question. Outbreaks of violence also lead to school closures, but these are crises of a very different nature, and they are often more localized. Finally, school closures for public health reasons exist but remain the exception. When they did occur in recent years, such as during the Ebola epidemic in North Kivu, they involved a small number of schools for a limited period. The literature on these cases focuses on what was learned about disease prevention in schools and the need to implement follow-up measures to prevent students from dropping out (UNICEF 2019). Our study shows that, during the COVID pandemic, schools appeared to have learned such lessons in disease prevention but remained a long way from successfully maintaining some form of teaching.

The challenges facing teachers in the eastern DRC remain formidable. While free education may have reduced economic barriers to education exacerbated by the COVID-19 lockdown, key issues—such as the hiring and remuneration of teachers on non-permanent contracts—remain to be addressed. If not addressed, highly discriminatory parent-paid tuition fees risk reoccurring. Worrying signs are already observed in many schools nationwide and are detectable in our data.

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APPENDIX

Table A1: Second Round Sample

	Number	% Interviewed from First Round		
Student sample				
Girls	344	51%		
Boys	293	61%		
Total	637	56%		
Teacher sample				
Female	175	81%		
Male	448	84%		
Total	623	83%		

Our study focuses on 55 schools where Save the Children carried out education projects. They were not selected randomly, nor are they nationally representative. In the first round in 2019, we randomly sampled 752 teachers in these schools. Thirteen students were also randomly selected within each school (and based on gender). In the second round in 2020, our goal was to reinterview the teachers and students we spoke with in 2019 to obtain longitudinal data. Table A1 shows the number of schools, teachers, and students in the second round compared to the first. For students, the attrition rate was 44 percent. We used a panel with 623 teachers.

Table A2: School Characteristics

	Uv	ira	Fizi		
	M	SD	M	SD	
Accredited	1.00	0.00	0.96	0.20	
(Yes=1 No=0)					
Registered with SECOPE	0.87	0.34	1.00	0.00	
(Yes=1 No=0)	0.02	0.20	1.00	0.00	
The school is included in the public sector wage bill	0.83	0.39	1.00	0.00	
(Yes=1 No=0)					
Electricity	0.13	0.34	0.04	0.20	
(Yes=1 No=0)					
Average number of classrooms	16.13	6.77	12.54	6.25	
Average number of students per	984.18	367.47	953.12	517.98	
school before COVID-19 closure,					
March 2020					
Average number of ethnic groups	7.57	4.29	6.04	2.68	
per school					
Average number of NU/NM teachers	3.17	4.44	5.65	9.10	
at time of interview					
Average number of licensed but un-	1.04	3.39	0.23	0.86	
paid teachers at time of interview					
Average number of licensed and	13.70	9.02	9.50	4.01	
paid teachers at time of interview					
Average number of short-term teach-	0.26	0.69	1.42	5.89	
ers at the time of interview					
Average number of female teachers	5.78	3.46	3.85	2.74	
at the time of interview					
Average number of male teachers	12.35	5.31	11.15	5.58	
at the time of interview					
Average total teachers at the time	18.13	7.07	15.00	7.76	
of interview					

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Table A3: Teacher Characteristics

	Uvira		Fizi	
	M	SD	M	SD
Age	42.92	14.00	36.39	11.42
% Male	0.69	0.46	0.76	0.43
Average number of people in household	6.87	2.98	7.64	3.43
Average number of people in household younger than 14 or older than 60	3.63	2.17	4.61	2.28
Average number of rooms in the household	3.31	1.28	3.15	1.41
Teacher always lived in the village where the school is (Yes=1 No=0)	0.78	0.42	0.77	0.42
Teacher has a disability (Yes=1 No=0)	0.90	1.13	0.79	1.10
Teacher is an interim director (male, %)	0.03	0.16	0.05	0.21
Teacher is an interim director (female, %)	0.01	0.11	0.02	0.13
Teacher is on performance-based (short- term contract) in this school only	0.01	0.11	0.00	0.05
Teacher is on performance-based (short- term contract) in another school	0.00	0.05	0.00	0.05
Teaches as an 'act of service' (e.g., religious volunteer) (Yes=1 No=0)	0.01	0.10	0.00	0.05
Teacher is a NU/NM at the start of their career (Yes=1 No=0)	0.16	0.37	0.26	0.44
Teacher is a NU/NM who already changed schools (Yes=1 No=0)	0.03	0.18	0.02	0.15
Teacher is licensed but unpaid (Yes=1 No=0)	0.03	0.16	0.02	0.13
Teacher is omitted from the government database (Yes=1 No=0)	0.01	0.09	0.01	0.08
Teacher is licensed and paid (Yes=1 No=0)	0.75	0.44	0.69	0.46
Teacher is a volunteer (Yes=1 No=0)	0.00	0.00	0.01	0.08
Teacher is a trainee (Yes=1 No=0)	0.00	0.00	0.00	0.00