ORIGINAL RESEARCH ARTICLE

Impact of the COVID-19 pandemic on the 2020–2021 academic year at Fianarantsoa University: the use of Facebook as a mode to switch to online learning

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This study analyses the impacts of the COVID-19 on teaching and learning at Fianarantsoa University (FU) in Madagascar. Interview questionnaires with 50 participants were carried out at the university concerned. Results demonstrate that FU took care of its students during the lockdown by introducing various measures to prevent the spread of COVID-19 within the university. Distance learning via Gmail and Facebook, where teachers send course files to the mail group, was only found in certain parts of the colleges. Gmail was implemented to complete unfinished exams to avoid the White year. Controversial arguments were uncovered due to the complete cessation of teaching at the end of the distance exams without introducing alternatives to continue academic activities, though there are still three unfinished academic years. This study recommends the regular use of 'Facebook' as a device to shift to online teaching and learning, mainly if incidents occur that lead to academic disruption, such as the COVID-19 pandemic, national epidemic, natural catastrophe or others. Facebook is the most used platform in Madagascar, with 3.05 million users in early 2022.

Keywords: higher education; social network; Facebook; Facebook-enhanced online teaching and online learning; student engagement

Literature review

Since the outbreak of the COVID-19 in China (Munster *et al.* 2020), it has not only solely affected national higher educational institutions (Bao 2020) but also interrupted overall academic activities universally (Toquero 2020). The impact of COVID-19 on learners was reported as on March 15, 2021 that 154 608 989 students worldwide, from primary to tertiary education, were unable to attend school due to the massive closures of schools (UNESCO 2021). Many universities have rescheduled or canceled school activities, such as offline exams, workshops, seminars, lectures, sports and other activities (Sahu 2020). Universities are taking specific steps to prevent and keep students and staff from spreading infectious diseases (Wang *et al.* 2020).

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The use of social media has mainly been highlighted more than ever amid the school perturbation, and it is gradually used for multiple drives (Kumar and Nanda 2019a), particularly in the era of the COVID-19, which has expanded its uses for educational purposes (Sobaih, Hasanein, and Elnasr 2020). The global health crisis has stressed the vitality of proceeding studies in information technology and remote approaches as a channel for improving teachers' teaching skills and learners' learning expertise (Ali 2020). Various remote platforms such as Zoom (Mishra, Gupta, and Shree 2020), Tencent meeting, Ding talk (Huang *et al.* 2020b), Facebook, Facebook Messenger, Twitter, WhatsApp, etc. (Sobaih, Hasanein, and Elnasr 2020) have been primarily introduced to shift from traditional to virtual teaching and learning, as tools to strengthen distance collaboration (Bonilla Quijada *et al.* 2021), specifically amid the COVID-19 pandemic (Unger and Meiran 2020).

Although the original creation of some social networking was not originally for educational purposes, such as Facebook, drawbacks were discovered, and it is considered a source of distractions and distracts students' attention from learning and academic achievements (Xie, Siau, and Nah 2020). Nevertheless, various positive points have also been documented for its contributions to higher education (Bateman and Willems 2012), social learning development, providing more educational options, promoting educational equity, and improving educational innovation and academic achievement (Özmen and Atıcı 2015; Xie, Siau, and Nah 2020). Selwyn (2009) demonstrated that Facebook can (re)engage learners with their studies, is conducive to share administrative materials, can assist in communication and share views concerning social or academic lives with colleagues rather than fear that its application will compromise and interrupt learners' engagement in their traditional education. Likewise, Huberman *et al*. (2008) and Davies *et al*. (2010) underlined that operating social networks with lucidness can promote peer feedback and can be a potential device to contribute to knowledge construction (Kassens-Noor 2012). For informal learning, Facebook can be an application bridge to initiate and engage in collaborative classroom-related activities (Ractham and Firpo 2011) that students use to organise their classroom experiences (Lampe *et al.* 2011). So, Facebook is practically a supportive tool to enhance informal learning activities (Tower, Latimer, and Hewitt 2014).

The initial creative goals of Facebook have recently expanded from their primary goals, especially during the health crisis and lockdowns. So, the spread of COVID-19 worldwide has changed this planet into a virtual world and proven that social networks have become a dominant feature of daily life that human beings cannot live (Burkell *et al.* 2014). Therefore, the health emergency has left a reminder to the government and institutions across nations to improve and promote their existing technology to facilitate the virtual continuation of national programmes (Rashid and Yadav 2020). Because it is 'constructive for higher education institutions by providing them with important information on integrated ICT education, enabling them to strengthen their curricula to prepare better teachers to face the diverse demands of the COVID-19 pandemic' (Ali 2020).

The objective of this study

This research has aimed

(1) to investigate challenges that Fianarantsoa University (FU)'s teaching and learning faced amid the COVID-19 pandemic;

(2) to explore measures and decisions taken by the Malagasy government to support academic programs in FU during the educational crisis generated by the COVID-19 pandemic.

Research questions

The subsequent questions achieved this research:

(1) What challenges has FU faced in teaching and learning amid the COVID-19 pandemic?
(2) What measures did the Malagasy government adopt to support academic programmes in FU during the educational crisis due to the COVID-19 pandemic?

Methodology

This research carried out interviews and focus group discussions with 50 students at FU with different grades, that is, freshman, second- and third-year undergraduates. Gender equality has been considered for this study, in which 25 girls and 25 boys participants represent, which include nine girls and nine boys from the first year; eight girls and eight boys from the second year; eight girls and eight boys from the third year. Therefore, it conforms to the sample size of 50 participants. Their responses were used to assess the measures' effectiveness in maintaining academics amid school closures. A review of secondary data relevant to the issue also supported this research.

Findings

The public higher education experience in the midst of COVID-19

At the start of the country's official announcement from March 2020 to lock down universities to ensure students' safety, the academic year was strongly influenced and turned upside down, including exam periods. For several reasons, students were shocked to hear the announcement and reacted:

'We are surprised by the government's decision because we have not completed all courses and exams yet. We don't want to be late with our program because we wasted much time a few years ago because of teachers' strikes and students' strikes'.

However, the leaders were willing to continue and switch to e-learning, which would be beyond the impossible due to the high cost of internet in the country, particularly the lack of resources. Although,

'Madagascar has one of the fastest internet services in sub-Saharan Africa (Lijadu 2018), unfortunately, the cost is a barrier for most people accessing the internet. The penetration rates are much lower than in other countries, with a significant proportion of the population (65.9%) still not having access to the mobile network. With the estimate, if fixed broadband subscriptions reach the levels observed in benchmark countries such as Rwanda or Cameroon (i.e., from 10% currently to 18%), growth could be increased by more than one percentage point'. (Edmond 2019)

According to the group discussions analysis, at very first, students were worried about switching to online learning because of some logistical issues but later adjusted in order to end their exams promptly.

'We are worried about taking online classes because we don't have enough resources to overcome the challenges like lack of money to buy or use the internet. Some of our cell phones or laptops are not updated, old, and not suitable to face online classes. Moreover, we don't have good electricity to charge devices in our village'.

Findings analyse that the lack of time to prepare jeopardised many systems in the institutional area because of the sudden closure of schools. Public higher establishments in Madagascar were not prepared or ready for such a sudden switch – from offline to online education – because of its current distance learning environments, which hardly support this sort of learning experience. Most teachers have difficulty using technological devices, unlike students who found considerably improved in surfing. Nearly, all university students currently have smartphones, whether from poor, middle or wealthy families. Recently, the number of students possessing computers is progressing, unlike the previous class promotions.

From this part, the lack of adequate educational strategies to face such emergencies delayed school programs and led to school dropouts. So, having a practical approach is vital in preventing students from dropping out of school when circumstances like COVID-19 pandemic, national epidemics such as plague, malaria, etc., and precisely when natural catastrophes such as cyclones, floods, etc., hit the Island almost every year (Andriamanalinarivo, Faly, and Herman Randriamanalina 2019).

Realities impede FU academic activities in the midst of COVID-19

Higher education institutions rely on traditional platforms rather than social media that allow learners to facilitate their learning activities, connections to peers and social networks across time and place, asserted (Doğan and Gülbahar 2018). Such a traditional method still exists at the state institutional level in Madagascar. It requires an update, as universities worldwide are moving more and more towards e-learning because of the academic disruption due to the COVID-19 (Ali 2020), whilst the Malagasy educational system is still weak and lacks technological integration into its design. (Kumar and Nanda 2019b) stated that 'it is important to integrate mobile and emerging technologies into education through an appropriate evidence-based learning design framework'. Thus, university policies should integrate the most influential social networks in the country into the academic management system like other countries to improve the distance education experience (Salmon *et al*. 2015).

Despite the MESUPRES (Ministry of Higher Education and the Scientific Research) and COPRIES (Conference of the Presidents and Rectors in Higher Education Institutions) trying everything to preserve schooling amid the pandemic, it was not effective from the day of the official announcement on March 22 by President Andry Nirina Rajoelina ordering to close school and halt all school events. As a result, a total shutdown of all academic activities was reported from March to September 2020 to 2021 (Table 1), except in May 2020 to complete all remaining offline exams via Gmail. Howland *et al*. (2011) realistically acclaimed that 'involving teachers and students in the use of educational technology can affect how technology can support relevant teaching and learning'. The technological skills of teachers complicated the

Table 1. Closure status of tertiary education institutions in Madagascar due to COVID-19.

Academic status in Madagascar	Universities during the pandemic
22 March	Closed
06 April	Academic break
22 April	Partially open
01 July	Academic break
02 October	Partially open
26 October	Fully open

Source: UNESCO (2020–2021).

virtual transition, as most of them are elder and unable to use technological devices properly. Fortunately, teachers at Higher Normal School (ENS) and School of Management and Technological Innovation (EMIT) completed their programs through Facebook, Skype and other platforms when the physical teaching activities got disrupted, whilst other teachers at different departments could not.

Even with the high cost of internet in the country, it is imperative to keep students at home, during the school disruption, informed, engaged, motivated and interested in their studies even for a long time outside the traditional school. Regardless of the technological situation (Huang *et al.* 2020a), each nation has constantly sought a way to resume its schooling because 'education cannot wait', particularly because it is now in jeopardy. To deal with this, participants say, 'technical training for teachers is highly prerequisite to face any impending crisis that interferes with teaching so that they will be ready to switch to remote schooling at any time'. So, this pandemic period needs to be seized as an opportunity for changes and grassroots innovation (Bubb and Jones 2020).

Arundhati Roy (2020) expressed during the global crisis,

'pandemics have forced humans to break away from the past and imagine their world anew…It is a portal, a gateway between one world and the other…Short-term solutions are socially, pedagogically, politically, and economically necessary. However, the crisis is not the best time to make long-term political plans or investments in educational technologies. Instead, what is needed is a critical analysis of these issues'.

Limitations in terms of public higher education expenditures

Investment is crucial to develop a project, and the academic sector is no exception (Blanco-Ramírez and Berger 2014). Investing in education is equivalent to investing in human capital, which influences labor productivity, and is strongly linked to economic growth (Neamtu 2015). Low expenditure and low investment in the education sector are the biggest challenges in Madagascar, whose government is the sole provider (Government of Madagascar, World Bank, and UNICEF 2015). Since 2007, the total investment budget allocated to the higher education sector was 0.14%, and 0.4% for the scientific research (International Monetary Fund 2007), which remains the same in the present era, and practically negligible to advance all educational managements. In 2020, a researcher expressed during a live broadcast entitled 'the guest of the day' on Malagasy private television that 'scientific research is the extreme foundation that drives

innovation in the field of education; the more we invest, the more innovation acquired'. It is a tool to divulge reality in one aspect based on countless research and is indispensable to fostering innovation, understanding and progress economy (Basu 2020).

Regarding so, the majority of respondents affirmed,

'They have not much idea about the University's budget or expenditure'.
'The university leaders themselves determine its expenses, while some indicated that it is based on its annual revenue'.

All these incidences corroborate that the existing budget does not meet the national needs, even to enhance the current issue with technology, specifically to support public higher education during this educational crisis. So, it is impossible for universities to solve this technological situation because of the limited budget.

Limitations in terms of technology

In today's era, especially amidst the COVID-19 pandemic, technology has become like rice and water, more than ever interdependent in social, daily life and education (Farah & Li 2020). Possessing robust technologies can symbolise a nation's capacity. In terms of digital access, with the 1.9 million internet users out of 26.3 million inhabitants in Madagascar, 75.78% of the Internet connections are made via mobile phones, according to an in-depth study by Rija Randriamalalaniaina (2018), and this indicator is 51.75% globally. By 2022, it gradually increased to 6.43 million users (Kemp 2022).

This research revealed that this issue of technology is seen as one of the weak points preventing Madagascar from developing. Most public higher institutions, universities, schools, offices or classrooms do not equip with the internet. If equipped, only some offices and classrooms are set with connectivity that only teachers and staff can access. As for students,

'Our university could not provide internet source in our dormitory; it's impossible. We have no choice but to go to cyber café to access good internet and do school work', the respondents confirmed.

In recent years, many public institutions have elaborated development strategies to further integrate and progress technology into academic lives. In 2016, FU established various infrastructures such as the Kianjan'ny Serasera sy ny LMD (Licence-Master-Doctorat)[1] equipped with the internet, 150 laptops, 50 tablets and a virtual library. Also, FU constructed an e-atiala spot, a place of exchange and cultural events, and artistic and educational activities equipped with the internet. These sites are built mainly for learners and teachers to facilitate research for their studies. Despite these good intentions to make the academic experience more manageable, there is a lack of maintenance management. The participants said that,

'Now, we can no longer access the virtual library as before, we do not know the reason. The electronic devices are no longer within reach of use, not to mention the internet issue'.

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[1] It is named after the present tertiary education system. Kianja means venue; serasera= interact; LMD: the name of the present higher education system. So, it is a place to hold university events, a place for academic exchange, and a research area for teachers, students, and technical staff.

Table 2. Satisfaction rates of the measures taken amid the school closures.

Rates	Very satisfied	Satisfied	Very dissatisfied	Dissatisfied
Respondents	40%	20%	25%	15%

Source: Data collected.

Solutions proposed by the leaders to tackle educational situation amid COVID-19

Measures adopted to ensure FU students' well-being amid the COVID-19

During school closures, FU distributed daily items such as rice, oils, noodles, flour, sugar, masks, COVID-Organic (a preventive treatment), etc. to all students who stayed at the university. Meanwhile, the concerned responsible person checked the temperature of students individually to ensure their health.

During the interview, students straightly showed their emotions as 40% were delighted with the actions taken, 20% of the students were satisfied, 25% were very dissatisfied and 15% were dissatisfied because of the few things shared (see Table 2).

Solution introduced to complete exams at FU

Despite the lack of resources, settings and budgets that make it impossible to switch to e-learning, the school leaders at FU have decided to use 'Gmail' to conduct online exams for all students. Each teacher sends the exam papers to a particular Facebook group and gives students 2 weeks to complete the exam, and then students emailed the e-exam reports back to the respective teachers. Hence, academic exams were completed by August 2020, and exam results were issued at the end of October 2020. In the meantime, learners were delighted with the efforts put in to accomplish their final exams, as affirmed by respondents,

'Although we were happy to be able to finish our exams, we were terrified for the time being as only a few teachers confirmed and gave feedback affirming that the email was received or not'.

Measure adopted to continue FU academic activities during school closures

As expressed repeatedly in in-depth interviews:

'Students felt left behind amid the pandemic, which should not be the case because their rights and education are usually a victim and affected by all incidents that occur at the public universities, which most of the time one of the main factors delaying the regular completion of their academics. As for other students of the same grade as us, who studies in private universities have achieved their studies on time without any compromise like teacher strikes or others that we experience in public universities'.

With regard to the continuity of teaching activities, almost all respondents claimed that:

'No measures were introduced regarding teaching continuation amid the school closures after completing exams distantly because we were informed to wait for

the situation to stabilise and wait for notices from respective schools. The Covid-19 case is far from over in Madagascar or worldwide, even now, likely a blank year if schools were not paying attention'.

Still, in this part, they sadly revealed that:

'Alternatives were only taken for pupils from elementary to secondary level, for example, broadcasting teaching via national television; homework sharing to all pupils whether in public or private schools. Additionally, the responsible ministry highly sensitised parents to support and motivate their children to study at home. Notwithstanding, nothing for students in the tertiary level, which they rated as unfair'.

'We knew that teaching and learning would get severely damaged due to the pandemic. The shift to distance education, as in other countries, is undoubtedly a challenge for us. Looking for alternatives such as the Facebook platform to keep in touch with each other, then using it to continue education should be considered as soon as schools start to close, instead of taking breaks and waiting for the situation of Covid-19 to stop'.

In some colleges or schools at the FU, like EMIT, they still adequately maintained their instruction amid the pandemic through Skype, Facebook (groups) and Gmail. Learners were delighted because their academics were not disturbed compared to other students in different colleges. Accordingly, most of the students were satisfied with measures that the government provided whether materially or strategically, to preserve their education.

The involvement of Facebook as an alternative preserving academic activities amid COVID-19

The only way to keep forward during this challenging time is to study and benchmark other countries, despite moving from offline to online education being a huge barrier for most vulnerable countries. The gap is seen across the country, comprising Madagascar, which found that all learners neither have access to the internet nor can afford technological devices to attend online classes. This study clarifies, 'if the country is weak in technology and cannot continue with its schooling, then we can use the one we have, and the one everyone can afford, based on the country's context'. For instance, Madagascar is weak in technology; however, choosing Facebook will be practical as 'it is the most used online platform on this Island with 6.43 million users, which occupies the first place in the ranking of the most visited sites. YouTube and Google.com are in the second and third positions, respectively, and Google.mg is in the fourth position. Yahoo.fr, Myway.com, google.fr and Wikipedia.org are in the fifth to eighth place', respectively, based on the report of Rija Randriamalalaniaina (2018).

The Facebook platform was used during the academic perturbation to preserve academic activities at FU. Facebook groups were created depending on course names. Students were sensitised to help one another by joining and respecting the group rules. With this alternative, students felt encouraged to study again because this initiative has facilitated their learning during this hard time. Teachers distribute lessons or assignments in the group, with the potentiality of Facebook, which can simultaneously distribute content to a large number of students (Chugh and Ruhi 2018). The

majority of respondents stated, 'With Facebook, we have the advantage of managing our time and what to learn', that is, the process can be adapted according to the learners' needs and objectives of learning. Facebook can be a mechanism for a learning management system (Wang *et al.* 2011).

However, at Fianarantsoa University (FU), Facebook Live (FL) was not an option, although, in Madagascar, Facebook only requires 1000 ar for 7 days (equates to the US$0.26), which is sufficient to attend FL, watch videos and news on Facebook or even broadcast live on Facebook. The use of Facebook has promoted a new era of social learning, social presence and an alternative platform to foster online learning (Sobaih, Hasanein, and Elnasr 2020). Students were more interested in teamwork and collaboration, which has awakened their team spirit. Facebook taught them so much about academic life, such as webinar conferences, workshops, research publishing, etc., that they never knew before.

However, universities should take advantage of this sudden transformation of instructional delivery as an opportunity to upskill to a deeper level and reshape their learning management system. 'The e-learning will be continuous, and education will become more hybrid' (Adedoyin and Soykan 2020).

Student perceptions on the measures adopted to resume FU academic activities amid the COVID-19

Various meetings were held by COPRIES during school closures to find practical measures to help preserve academic activities. For instance, to avoid a 'White year[2]', they have implemented a strategy to complete the three consecutive school years of 2018–2019, 2019–2020 and start the new academic year of 2020–2021 before the end of 2020, which seems to be complicated to achieve. Ninety percent of respondents objected to the three consecutive academic years as they were not satisfied with the decision mentioned above.

Although many developed nations have conducted distance learning, which is perceived as very helpful to maintaining teaching, this distance learning would be challenging in certain African countries, especially in Madagascar, due to the high cost of internet and lack of sufficient resources. Respondents stated that:

> 'The measure introduced was not effective, it was not designed for a long-term solution but temporary one; not all learners have or can buy computers, tablets, or smartphones to resume their offline or online studies'.

Consequently, there are still students who are left behind. As an unfortunate fact, most Madagascar citizens still utilise devices, which are unable to use for online learning. Respondents claimed that:

> 'All university students, regardless of their social class, have operational (smart) phones to cope with online education. So, we hope that teachers will constantly share course files before teaching and assignments on Facebook or Messenger groups to prepare ahead and facilitate our studies, rather than solely using the old approach. For instance, lesson dictation as a fence to students' academic attainment because their numbers in a classroom surpass 300, overload, and noisy that the microphone and loudspeakers are not considerably cooperative'.

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[2]Missed or interrupted academic year due to the issues or circumstances that happened at a respective University.

Consequently, learners prefer to use 'Facebook', which is the cheapest and helpful to engage them with their learning. They are exhausted with the obsolete teaching method, which is only dictation, lessons by lessons and very fast or difficult to follow. Such a technique often produces confusion that sometimes we want to make a copy from other students, but is uncertain whether they followed the dictation correctly or not. Hence, they want to experience what other learners experience concerning online learning.

Although schools have successfully resumed from past October 2020, some classes were still held online through Skype and Facebook, especially for teachers who are out-of-town or in overseas. Some teachers consistently share course files, assignments and related materials on Facebook to facilitate students with their studies, though some of them are back to their old methods. Unfortunately, measures introduced to maintain education amid school closures were put on end once school got resumed, which should not be the case considering its effectiveness in engaging students in their learning.

Discussion

Online learning is a common and effective solution to overcome challenges irradiated by the COVID-19. Indeed, electronic devices were extremely used worldwide, including Madagascar. Computers, tablets and smartphones are increasingly used and have become a routine part of students' daily lives during the COVID-19 pandemic due to the shift to online learning. Our study showed that leaders had tackled problems immediately and proposed a solution – e-learning to pursue exams, learning and trying faceless schooling interruptions via Gmail and Facebook. The shift to e-learning through Facebook has affected the regular activity of students in certain aspects like doing schoolwork or focusing on lectures. Some students scroll the lesson or a task sent by teachers because of a lack of monitoring and evaluation, and others sit on and play with their devices and ask someone to help them with their school work or online exam.

Shifting to e-learning in Madagascar had messed up students' daily lives, especially their financial situation and academic calendar. MESUPRES in Madagascar has tried its best to tackle the challenges that COVID-19 brought, but because of insufficient resources, it could not fully satisfy the needs of the whole students. Theoretically, the implementation of the sudden transition to e-learning is considered more manageable, but, in terms of practice, it entirely depends on the resources and willingness of the government, the ministry concerned, the university and the students. In this study, some students were thankful for FU leaders' effective management of the pandemic crisis. Others were not satisfied; it might be because of the imbalance and inequity in resources or treatment. However, it was a period for students to learn more about technology manipulation and its implication. As for teachers, they were convinced and acknowledged the need to re-image the implementation of e-learning to avoid the sudden disruption they face now or after this pandemic. In addition, it is not only about the COVID-19 that the e-learning management system should be implemented but also for other upcoming inconveniences. As Madagascar is an Island that faces many natural catastrophes such as cyclones and floods, the implementation of e-learning is still an efficient solution to solve any problem of school disruptions.

Therefore, using Facebook as a priory tool to maintain education was seen as successful because this app was used and accepted by the majority of students. The benefits of having Facebook being the most used platform in Madagascar have facilitated the transition to e-learning; the challenges of COVID-19 have restrengthened the power of the virtual world in the sense of education.

Conclusion

The COVID-19 pandemic has massively transformed the physical world into a virtual world interconnected with technological features, mostly in education that demonstrated the prominence of science and technologies. Nowadays, this planet cannot live without them: no science, no discovery, no technology, no innovation and no creation. Without knowing technology is similar to illiteracy. Various social networks have grown progressively due to the academic disruption to preserve education from traditional to virtual. In Madagascar's public universities, the lack of preparation time, practical pedagogical approaches and lack of resources are the challenges that delay schooling due to the sudden closure of schools. Objections were observed due to the total cessation of academic activities after the official announcement to shut down establishments to minimise the spread of disease. FU adopted its own strategy to catch up with the unfinished exams with the help of Gmail. Controversial opinions were perceived because of the total cessation of academic activities once the online exams were completed and then later used Facebook to maintain education. That pause has lamentably caused disorder in the curriculum, delayed academic years and academic attainment, and cause student dropouts.

Despite these facts, the COVID-19 pandemic has positively influenced government and leaders' perspectives on the crucial role of technology in education and its direction. This research vigorously endorses them taking advantage of this situation to reshape the outdated system by integrating social media into the teaching/learning management system to facilitate the transition to distance education and be close to the international level. By incorporating Facebook as a backup plan, we can constantly support education without interrupting academic sessions amidst emergencies. So, its integration into the teaching/learning management system is the most straightforward, affordable and easy to use option referring to Madagascar'context rather than wait for the emergency to be under control and resume schooling. Indeed, further investigation needs to be conducted to measure students' thoughts and satisfaction after using the platform from school resumption until today.

Availability of data and materials

Not applicable.

Competing interests

The authors declare no competing interests.

Authors' contributions

Authors contribute equally and read and approved the final manuscript.

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