

Improving teaching quality in Rwanda in the context of COVID-19: challenges and opportunities

In July 2020, partners of the Mastercard Foundation's *Leaders in Teaching* initiative convened for a webinar to discuss the various ways they are adapting in response to COVID-19.

Leaders in Teaching responds to the opportunities that a quality secondary education represents for the African continent. Through a variety of programs, it supports teachers throughout their careers and prepares them to deliver high-quality, relevant education, with a focus on science, technology, engineering and mathematics (STEM) subjects in Rwanda.

Adapting programs to improve teaching quality to COVID-19

During the webinar, implementing partners listed a variety of ways they are rapidly adapting their programming to COVID-19.

Building flexibility and resilience. All partners are adapting quickly to the changing operating environment, recognizing that the situation will remain unstable for the foreseeable future. This has meant rapidly adjusting programming to provide continued support to existing cohorts, as well as long-term planning to build resilience into programs to ensure learning and teacher development can continue in a context of uncertainty.

Speeding up digitization and the transition to online/remote delivery. For some partners the crisis meant making the transition to remote learning faster than planned; others had to create a new trajectory altogether. To give some examples:

- **The African Institute for Mathematical Sciences: The Next Einstein Initiative (AIMS)** has initiated online training for over 500 teachers, including a course in English language proficiency, through a platform hosted by the Rwanda Education Board (REB).¹ Teachers are also encouraged to participate in online webinars and use social media platforms to engage with and learn from each other.
- **The University of Rwanda College of Education (UR-CE)** is speeding up the digitization of its digital teacher training modules and its support to teachers in using ICT and blended learning programs. In March, prior to the lockdown, 48% of their modules were online, while by the end of July, 77% of the modules were online.
- **VVOB Rwanda** has redeveloped its continuous professional development programs for teachers so they can be delivered online through narrated PowerPoint presentations and videos. It is maintaining its professional learning networks and communities through monthly live online sessions. In addition, as part of the Mastercard Foundation's [COVID-19 Recovery and Resilience Program](#), VVOB will also

¹ REB one of six agencies that falls under the Ministry of Education. It has national oversight for education delivery at pre-primary, primary and secondary levels, and oversees matters such as curriculum development, development and management of teachers, assessment, and promotion of the use of information and communication technology in education.

provide over 2,500 laptops, internet connectivity and additional batteries to schools without grid access by early 2021 to ensure they can access the material.

- **Inspire, Educate and Empower Rwanda (IEE)** is collaborating with REB subject specialists, teachers and the Rwanda Broadcasting Agency to enable learning to continue via television and radio lessons. Since the outbreak began, IEE has filmed and recorded 720 lessons for radio and TV as well as four live sessions. IEE also created a capacity for students to learn actively by completing online assignments based on the material taught in the broadcast lessons.
- **UNICEF Rwanda** and **Carnegie-Mellon University Africa (CMU Africa)** are exploring alternative options for on-the-job training of education officials in the use of the new Teacher Management Information System (TMIS) platform. TMIS is a national teacher database that enhances the management of the teaching workforce, to collect administrative data on the teaching cohort. Approaches to training education officials may include interactive online tutorials and stakeholder engagement tools that can be embedded into the platform if face-to-face interaction continues to be limited.

All implementing partners agree that blended learning is here to stay.

Leveraging new networks to support teachers. New networks to support teacher and student development are emerging. AIMS is encouraging teachers to use online platforms and social media to engage with and learn from each other, creating a community of practice that extends beyond school walls. For IEE, parents have emerged as an important resource in encouraging their children to continue learning and engage with remote lessons.

Reshaping the future of education. Many of these adaptations (e.g., on blended learning and teaching) will be vital beyond this immediate crisis phase. They are likely to be the reality for a period of time, and as a means to reshape the future of the delivery of education.

Emerging challenges

Building resilience in a time of uncertainty. Though significant work has already been carried out to rapidly adapt programming to the COVID-19 environment, the future remains uncertain. When students go back to school, the teaching and learning environment will be very different due to social distancing rules. The context of constant change means that programs must be resilient to future shocks so that learning can continue no matter the circumstances.

Ensuring inclusive learning. A shift to blended learning brings opportunities to reach many teachers and students at once. However, teachers and students in more remote areas are less likely to have access to the internet, or have TVs and radios in the home where they can access remote programming. Teachers and students who need extra support, such as those with disabilities or from disadvantaged backgrounds, face unique challenges in accessing remote learning content. In addition, parents may not always be able to support their children's learning. This is likely to be even more of a challenge for students studying subjects their parents may not have studied, such as specialized STEM subjects at the secondary level. Supporting these teachers and students is essential if existing inequalities in access to learning are to be minimized.

Equipping teachers with the confidence to use remote learning tools. One partner reported that even among teachers who accessed a specific online training program, there were striking differences in how comfortable they were interacting with the platform. Beyond ensuring access, it will be important that teachers have time to practice using remote learning tools so that they are prepared to support their students to do the same.

Lack of resources. The swift transition to online learning and digitization has been resource intensive for all partners. It can also be expensive, requiring investment in technology infrastructure as well as expertise in new subject areas (e.g., designing and delivering e-learning modules). **IEE** and **UR-CE** noted that producing the amount of remote learning content required has been difficult because there are not enough editors available to pull the recordings together in such a short time. Teachers and students may also face a lack of resources in the home, creating challenges for accessing and engaging with teaching and learning materials outside the school environment.

Quality assurance and maintaining motivation. Delivering remote learning is not enough; it must also deliver high quality learning outcomes. Remote learning via online platforms, TV and the radio is less interactive than learning in the classroom. Interacting with material is an important pathway for learning, which is recognized by the move to a competence-based curriculum in Rwanda. The competence-based curriculum has a strong emphasis on group work rather than teacher-led approaches. It is not yet clear how this will be achieved in the context of socially-distanced classrooms and remote learning. **VVOB Rwanda** noted that it is also important for teachers to be able to practice their pedagogical skills as they progress through continuous professional development programs, something that can be difficult for them to do outside the classroom especially in the secondary context where the material is more complex.

Opportunities to reshape the future of education in Rwanda

Implementing partners outlined several areas of focus for continuing to improve teaching and learning quality in Rwanda, based on their experience through the *Leaders in Teaching* initiative.

Collaboration emerged as an important theme, with many partners identifying similar needs and challenges, as well as potential synergies that would benefit secondary education and teacher quality in Rwanda. These could include finding ways to leverage parent and teacher networks to improve the outcomes of remote learning; and sharing resources to improve online learning modules.

Partners also identified opportunities for future **research**, with a focus on understanding the quality of different modes of remote learning delivery; learning about best practices in blended learning in secondary schools in low- and lower-middle-income countries; and finding ways to minimize inequalities in access to education in this context.

Despite the challenges, the partners are continuing to find ways to support teaching and learning in Rwandan secondary education, both throughout and beyond the COVID-19 crisis.

About the *Leaders in Teaching* implementing partners

African Institute for Mathematical Sciences (AIMS): The Next Einstein Initiative. AIMS is providing teacher training programs that equip secondary school teachers with gender-responsive teaching tools for math and science. AIMS also leads the establishment of smart classrooms, supports the strengthening of school leadership, and leads public engagement and outreach to increase public support for STEM education, particularly for young women.

Inspire, Educate and Empower (IEE) Rwanda. IEE Rwanda is piloting a program that matches talented female high school graduates with teaching assistantships. Working in 75 schools alongside qualified teachers, these assistants will provide support to students in subjects such as math and science. The pilot is designed to attract the best and brightest students to the profession and equip them with relevant experiences and skills.

University of Rwanda College of Education (UR-CE). UR-CE is strengthening pre-service teacher training to support the delivery of Rwanda's competency-based curriculum, providing quality practicum opportunities that help student teachers put theory into practice, promoting the integration of ICT, and supporting academic staff to undertake relevant education research.

VVOB Rwanda. VVOB is working closely with UR-CE and the Rwanda Education Board to strengthen school leadership through mentoring and coaching, to support teachers and enable high-quality instruction. VVOB and UR-CE deliver certificate and diploma courses together for system and school-based leaders, and provide opportunities for school leaders to encourage one another in supportive professional learning communities.

UNICEF Rwanda. UNICEF is working with the Ministry of Education, the Rwanda Education Board, CMU Africa, teacher training colleges, and others to strengthen and improve the use of data for planning and decision-making. UNICEF is leading the assessment process to determine overall data needs for the Teacher Management Information System (TMIS), help design an integrated management system to support educational leadership, and facilitate decision-making.

Carnegie-Mellon University Africa (CMU Africa). CMU Africa is working with UNICEF to provide technical support to strengthen data-driven decision-making in education. CMU will also map international best practices in education data and explore opportunities to apply 'big data' and artificial intelligence to public sector planning and management.

Laterite and the **Research for Equitable Access and Learning (REAL) Centre at the University of Cambridge** are learning partners for the initiative. They are working together to develop evidence of improved teaching quality and student learning, particularly for those who are most at risk of being left behind. This evidence will be used to inform the initiative and provide lessons for other contexts. Activities include collection and analysis of data on teaching quality and student performance over time; conducting phone surveys with teachers on COVID-19 school closures; and working with implementing partners to support them in making best use of their monitoring, evaluation and learning systems to achieve their goals.