When COVID-19 struck, it flipped the world in a matter of days. The world of education had to immediately transform and now, just more than two years after that world-changing event, there is an opportunity for us to reflect on what education should look like in the future and what innovations we are striving for to address SDG 4 – Quality Education, Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all – and SDG 8 – Decent Work and Economic Growth, Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all. There is a lot to learn from the pandemic to design new solutions that will be human-centered and infused with the principles of diversity, equality, inclusion, and justice.

Based on UNESCO figures, 90% of learners were affected by COVID-19 worldwide. For a majority of them, it meant no online and face-to-face classes and no contact with teachers/instructors for several months, especially in developing countries. This situation has consequences related to hard skills acquisition, soft skills gains, and well-being of the learners - consequences that will undoubtedly follow them into professional life.

Online education presented itself as the de facto solution for learning continuity and resilience. And while it enabled instructors to connect, engage with, and teach students, it did not offer solutions across the board. For example, how does “online education” work for communities that are off-grid and off-line for extended periods of time? It does not. We believe that innovations can emerge from these constrained contexts, which are present mainly in developing countries, and the lessons learned from creating solutions in constrained contexts can be applied to less constrained contexts in developed countries to build better ways of doing things.

We should not overlook teaching and learning solutions based on television, radio, mail delivery, email and social networks such as WhatsApp and Facebook. Learning Management Systems (LMS), expensive and sophisticated, cannot be our only go-to solution.

Innovation in education will pass by:
• **Human-centered approaches** – The design of the solution must take into account the environment of the users: teachers and students’ digital readiness, infrastructures in place, hardware available, culture, etc.

• **Partnership** – Innovation will happen through partnerships and should involve all the stakeholders of the education ecosystems, including influential companies such as Google, Microsoft, Facebook, and Zoom, all of which are providing software and services that were not specifically designed as education solutions but, are, in fact, used to teach.

• **Community** – Connection between teachers and students and between peers are crucial. The pandemic taught us that teachers are essential in the learning process. The human connection needs to be leveraged in online teaching and the role of instructors needs to be rethought. MOOCs never delivered to expectations, with a drastic attrition rate. A major reason for this attrition was that students found learning solo is difficult and lonely.

• **Technology** – Technology is an enabler; it is not the solution. Giving access to LMS to all teachers will not transfer to use of this LMS; there also needs to be a support system in place. Training for teachers and students to be able to leverage the power of technology is essential. Mobile technology was completely overlooked during the pandemic in developing countries. We can look into AI, AR, VR, and the metaverse to improve teaching, but these solutions will automatically eliminate a large part of the learners worldwide.

• **Diversity, Equity and Inclusion** – Existing education solutions are mostly created in developed countries. This raises questions about the level of bias integrated in these solutions in terms of pedagogy, diverse ways of learning, and evaluation processes. There is a global trend in looking at decolonizing learning technology and providing more diverse and inclusive systems.

• **STEM education** – We may not know what will be the jobs of the future but we do know that they will rely on STEM skills. We need more students in STEM, female students in particular. STEM studies have not raised the expected level of interest and enthusiasm that it should. We need to find new ways to interest students in these studies and innovate in the teaching of these topics, as well as look at the cultural and societal aspects of how STEM classrooms (online and in person) are set up to favor more inclusive approaches.

It is time to rethink education and edtech solutions and propose innovations that start with the person who is learning first. While it is admirable that so many teachers, institutions, and students were able to pivot during the pandemic, the disparities between different countries, cultures, and communities became more stark than ever. Now, it is time to find solutions that focus on the user - the learner - and that leverage current and novel technologies to provide an equitable education for all.