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## 2023 GEM Report consultation on technology and education convened by the International Task Force on Teachers for Education 2030

Thursday 23 June, 15:30-17:00 (CET)



# CONSULTATION REPORT

## Background information

The [Global Education Monitoring \(GEM\) Report](#) assesses the world's progress towards achieving Sustainable Development Goal (SDG) 4 on education, its related targets, and the Education 2030 Agenda more broadly. The GEM Report is driven by the explicit reference to inclusion in the 2015 Incheon Declaration, and the call to *ensure an inclusive and equitable quality education* in the formulation of SDG 4, the global goal for education. It reminds us that, we have a moral imperative to ensure every child has a right to an appropriate education of high quality which can only be achieved with well-trained and qualified teachers and education support personnel.

Created in 2008, upon agreement in the [Oslo Declaration](#), the [International Task Force on Teachers for Education 2030](#), or Teacher Task Force (TTF), is a unique global independent alliance working solely on teachers and teacher issues. It is dedicated to raising awareness, expanding knowledge, and supporting countries on the questions and themes raised in [target 4.c of SDG 4](#). The TTF members include national governments, intergovernmental organizations, non-governmental organizations, international development agencies, civil society organizations, private sector organizations, and UN agencies, working together to ensure synergies at national, regional and global levels in the work on teacher and teaching issues. The objectives of the TTF are anchored also anchored in SDG 4.

The [2023 GEM Report](#) will examine education challenges to which appropriate use of technology can offer solutions, while recognizing that many of the solutions proposed may also be detrimental. The report will examine issues of access, equity, and inclusion in education, quality, technology development and system management. It will also explore three system-wide conditions that need to be met for any technology in education to reach its full potential: ensuring that all learners have access to technology resources, protecting learners from the risks of technology through appropriate governance and regulations and supporting all educators to teach, use and deal with technology effectively.

## Consultation on teachers and training

In collaboration with the GEM Report team, the [International Task Force on Teachers for Education 2030](#) convened a consultation meeting to collect feedback and evidence on the lines of research proposed in the [concept note](#) of the of the 2023 GEM Report on technology and education. The consultation looked into the ways in which education systems can support teachers to teach, use and deal with technology effectively and at the barriers they face. It focused on three key issues:

- 1. Barriers to access, equity, and inclusion:** Technology's capabilities offer education systems tools to overcome longstanding inequalities along two key dimensions: reaching disadvantaged populations and ensuring that content reaches all learners in more engaging and cheaper formats. Two of the main barriers to access, equity and inclusion associated with the use of technology in education are providing education to all hard-to-reach learners and ensuring that teachers have access to technology including hardware, software, and connectivity. These barriers are most prevalent in low- and lower-middle income countries and in remote and rural regions in many other contexts. This session will explore the role of different actors to help provide teachers with the appropriate tools to expand access for disadvantaged groups such as learners with disabilities, migrants, displaced populations, and women, including through partnerships with the private sector, as well as through donor and international cooperation and various ICT procurement and rollout methods by Ministries.

2. **Teacher professional development & pedagogy:** Once they have access, teachers need to know how to use the different tools effectively to enhance teaching and learning. There are many factors that prevent teachers from using technology effectively, including not being a digital native, lack of understanding of the technology, gendered norms, and anxiety around its use. Teachers need to be provided with context specific initial and in-service training to effectively integrate technology in their teaching and adapt their practice to different tech-based tools to enhance teaching and learning. According to recent research on teacher training in and through technology also often tends to be mainly project-based and transient, with only rare examples of strong collaboration between teachers for continual learning on-the-job. Training needs to be connected to the objective of transforming teachers into facilitators of learning through technology, establishing where possible online professional learning communities. This session will examine how initial teacher education can be enhanced and what conditions ensure that continuing professional development in ICTs is effective.
  
3. **Systemic support and collaboration:** Multiple actors can be mobilised to support teachers to integrate new technologies into their classroom and effectively integrate new teaching and learning practices, including non-state actors, unions, school leaders, students, research institutes and universities, ICT technicians. Teachers need systemic support from school leaders and institutions in order to connect with, and benefit from these support networks. They also need to be provided opportunities for peer learning and collaboration. Countries also need to ensure the effective use of technology in teaching is reflected in policies and legal frameworks. This session will examine how different actors and systems can work together to support teachers in ICT use.

This report summarizes the discussion and key questions that were raised during the consultation meeting on the 2023 GWM Report convened by the [International Task Force on Teachers for Education 2030](#) on June 23<sup>rd</sup>.

## Agenda

Time	Speaker	Agenda Item
15:30-15:40	<b>Carlos Vargas Tamez</b> , Chief of Section for Teacher Development, UNESCO, and Head of the Secretariat of the International Task Force on Teachers for Education 2030	Opening remarks and presentation of the work of the International Task Force on Teachers for Education 2030
15:40-15:52	<b>Manos Antoninis</b> , Director, Global Education Monitoring Report	Presentation of the 2023 GEM Report concept note
15:52-15:55	<b>Carlos Vargas Tamez</b> , Chief of Section for Teacher Development, UNESCO, and Head of the Secretariat of the International Task Force on Teachers for Education 2030	Objectives of the consultation and dynamic for the breakout group discussion

15:55-16:45	Breakout group discussions	<p><b>Barriers to inclusion, access, and equity:</b></p> <ul style="list-style-type: none"> <li>• Lead: Mary Sichangi, ADEA</li> <li>• Co-lead: Purna Shrestha, VSO</li> </ul> <p><b>Teacher professional development and pedagogy:</b></p> <ol style="list-style-type: none"> <li>1. Lead: Latoya Swaby Anderson UNESCO Kingston</li> <li>2. Co-leads <ul style="list-style-type: none"> <li>○ Leticia de Rato, ProFuturo</li> <li>○ Jef Peeraer, Blend, a VVOB Project</li> </ul> </li> </ol> <p><b>Systemic support and collaboration:</b></p> <ul style="list-style-type: none"> <li>• Lead: James McIntyre, Mastercard Foundation</li> <li>• Co-lead: Mary Burns, Education Development Center</li> </ul>
16:45-16:55	Feedback from the groups to the plenary	Feedback from the groups to the plenary
16:55-17:00	Carlos Vargas Tamez, Chief of Section for Teacher Development, UNESCO, and Head of the Secretariat of the International Task Force on Teachers for Education 2030	Closing remarks

## Format

The consultation included a presentation of the [2023 GEM Report concept note](#) and the work of the [International Task Force on Teachers for Education 2030](#) followed by a breakout group discussion with national governments, international organisations, international NGOs and CSOs and foundations members of the TTF, experts, school leaders and teachers.

Breakout groups were organized around the three issues identified. Key organisations working on each field were invited to do a short presentation of their work, to moderate the discussion and to summarize the takeaways and report back to the plenary.

1. **Breakout group 1:** Barriers to access, equity, and inclusion (ADEA and VSO)
2. **Breakout group 2:** Teacher professional development and pedagogy (UNESCO Kingston, ProFuturo and BEND a VVOB Project)
3. **Breakout group 3:** Systemic support and collaboration (Mastercard Foundation and Mary Burns, Education Development Center)

## Expected outcomes

1. Present the concept note of the 2023 GEM Report on technology and education

2. Collect evidence and examples on barriers to access, equity and inclusion, teacher professional development and pedagogy and systemic support and collaboration that can feed into the 2023 GEM Report and the GEM Report's PEER profiles on technology and education.
3. Forge partnerships to enhance advocacy activities once the report is launched.

## Main takeaways

1. Connectivity, poor infrastructure, the cost of data and the lack of funding remain some of the biggest challenges to access to education technology.
2. Low-tech and no-tech solutions offer opportunities for learning and teaching and therefore play a key role in promoting access, equity, and inclusion.
3. Adaptability is essential to ensure that education solutions reach all learners, inclusion those with disabilities. Adapting training courses to local languages leads to further reach.
4. Several countries and organisations had already started to integrating technology into teaching and learning before the Covid-19 pandemic. During Covid-19 there was an urge for continuous support and training for teachers both pre-service and in-service.
5. The lack of preparedness of some teachers to use digital skills to implement distance learning modalities was seen as one of the biggest challenges during the pandemic.
6. Continuous professional development (CPD) remains a priority for many countries and organisations, and there have been many efforts to strengthen CPD in recent years through blended modalities. However, there are still many challenges associated with blended CPD which include issues related to cost-effectiveness, sustainability and scalability, engagement, motivation, and wellbeing, ensuring inclusion and diversity and taking into consideration privacy and data safeguarding concerns.
7. Two of the key components of education technology solutions and teacher training programmes are sustainability and adaptability. The ability to scale up solutions and the availability of fundings are also essential to ensure that these reach more teachers and learners.
8. While there is overall agreement that technology is an effective tool for learning, technology cannot substitute teachers. Pedagogy should always come first when we are thinking of teacher education or teacher professional development
9. Teachers and unions must be involved in the discussions on the use of technology in schools and considerations on teacher's wellbeing should be at the center of the development of plans and policies.
10. Technology should not duplicate teachers' workload, though unfortunately this is often the case. It should support and increase learning processes.

## Summary from the discussions

1. Mr Carlos Vargas Tamez, Chief of Section for Teacher Development, UNESCO, and Head of the Secretariat of the International Task Force on Teachers for Education 2030 welcomed participants and opened the consultation event.
2. Mr Carlos Vargas outlined some of the challenges of education and technology and presented the work of the Teacher Task Force to support countries to overcome these challenges. The past two years of the pandemic and the exposure of a deepening digital divide across countries has shown that ministries toned to strengthen the use of ICT and digital technologies. Yet to facilitate this, it is important to improve and share knowledge around teacher policy formulations, regarding teacher education and continuing professional development. The Teacher Task Force has focused its efforts in exploring the enabling conditions to improve digital competencies for teachers in the past two years. One example of this is the



teacher training programme developed by Blackboard that trained over 12.000 teachers in the Caribbean under the train-the-trainer model. The TTF has drawn out some key lessons on what worked and what challenges existed in this kind of digital training model.

3. To respond to the challenges of education and technology, the following issues need to be taken into consideration:
  - a. teachers need access to the devices and connectivity
  - b. teachers need support to develop the pedagogical skills to use this technology, in particularly to provide learners with the skills to respond to the challenges of the 21<sup>st</sup> Century
  - c. systems need to adapt to support teachers to integrate new teaching and learning practices.
  - d. Teachers should be included in decision-making, at the school level by school leaders and also by policy makers within a systems perspective. It is also important to explore blended and hybrid approaches in education,
4. Mr Manos Antoninis, director of the Global Education Monitoring Report introduced the [concept note of the 2023 GEM Report on technology and education](#). Mr Antoninis reminded participants that the report is trying to cover all topics from a broad perspective and will be considering all ways in which technology affects education systems.
5. Mr Antoninis presented the concept note for the 2023 GEM Report which will be released in 2023<sup>1</sup>. He reminded participants that technology was acknowledged as an important factor for achieving SDG 4 and that its role in education has been accelerated by the Covid-19 pandemic. Mr Antoninis also recalled the divided views on the use of technology in education, from technosceptics to the technophiles, and that it was challenging to have research that demonstrates the effectiveness of technology in education given the fact that it evolves at a rapid pace. Mr Antoninis then introduced the structure of the 2023 GEM Report. The report will be divided in two parts. First, the key education challenges that technology can solve, and second the minimum conditions that are needed for technology to support education. The report will be using a broad definition of technology and will therefore consider other technologies outside from ICTs such as issues of construction, school infrastructure, energy, transport, and climate change.
6. The first question that will be addressed in the report is what is the education we want? and how can technology help? To answer this question the first part of the report will cover issues related to access, equity, and inclusion, including access for disadvantaged groups and access to content, quality including basic skills and digital skills, technology development and system management including assessments and education management data systems. The second question that will be addressed in the report: what are the minimum conditions to be met for technology to support education? To answer this question, the second part of the report will look into issues related to access to technology, governance and regulation and teacher preparation. This last point, of particular relevance for this consultation will look into how education systems can support all teachers to teach, use and deal with technology.
7. Mr Antoninis explained that some of the barriers to the use of technology for teachers include access to technology and knowledge about technology and readiness to integrate technology in classrooms. This takes into consideration teachers beliefs about appropriate pedagogies and organizational factors such as support by school leaders to establish professional learning communities and the presence or absence of

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<sup>1</sup> The following edition of the GEM Report will be on leadership.

responsive professional development programmes. The report will also examine the role of ICT teachers and support personnel.

8. Mr Antoninis concluded by presenting the key issues that will be covered during the consultation: barriers to access, equity and inclusion, teacher professional development and pedagogy and systemic collaboration. The [consultation process](#) will remain open in an effort to expand its scope and to foster contact with different stakeholders working on technology. A new chapter of the [PEER profiles](#) on technology and education is currently under development and will be released together with the report.

### **Breakout group 1: Barriers to access, equity, and inclusion (ADEA and VSO)**

Ms Mary Sichangi from ADEA opened by outlining that the emerging realities of the Covid-19 pandemic revealed a number of inadequacies in education access, equity, and inclusion, specially for learners with disabilities, migrants, displaced groups, and migrants which impacted remote teaching and learning in Africa. She invited participants to identify barriers to access to think and to reflect together on possible solutions. The objectives for the session are to:

1. Discuss some of the barriers that may benefit from technology (hardware, software, and connectivity) integration in education to reach more learners and teachers
2. Confirm the prevalence in low, lower, or middle-income countries, remote and rural regions and in other contexts
3. Share what governments or organisations are doing to support teachers and learners with appropriate technological tools to expand access

Ms Sichangi reminded participants presented the four questions that will be covered during the consultation:

1. What are some of the barriers to access, equity, and inclusion in education?
2. How can technology be used to provide education to all-hard-to-reach teachers and learners?
3. What innovations can be implemented to reach more teachers and learners in cheaper formats?
4. What role can governments and different actors play to provide learners and teachers with the appropriate tools to expand access for disadvantaged groups?

Ms Sichangi then handed the floor to Purna Shrestha from VSO, the co-lead for this session who presented the VSOSchool App, an open-source application that enables users to access content offline through mobile phones. The app empowers learners, educators, and parents by delivering accessible interactive course contents which help them to improve their knowledge and skills, including for those who live and work in the most challenging circumstances. The VSOSchool App uses Bluetooth technology to enable users to access and share contents with each other offline through several platforms. Mr Shrestha mentioned that the app offers different functionalities such as course management and performance analysis and has more than 45 different types of content including audio, video, H5P formats and digital books. VSOSchool is aligned to the principles for digital development meaning that it is designed with the user, is built for sustainability, and designed for scale, is data driven, addresses privacy and security concerns and uses open standards. The app is being used in Rwanda and can be easily adapted to other countries.

Mr Shrestha mentioned that the app has different features related to access, inclusion, and equity. In terms of access, the app is available offline and empowers teachers, educators and trainers which develop the content themselves. In terms of inclusion, the app includes sign language and video, contents on audio formats, is accessible for people with disabilities and content is available in local languages. In terms of equity, the app

contents can be shared without internet and through low-tech platforms such as radio, allows teachers to reach hard to reach areas and to complete continuous professional learning courses offline and relies on an open-source software.

Mr Shrestha highlighted the importance of peer-to-peer mentoring, community participation and mentoring circles as well as having all courses available in local languages to promote accessibility. A blended approach to continuing professional development is used by the VSOSchool app, combining coaching, and mentoring and face-to-face and online learning. The app has been used in different contexts. In Bangladesh, the app was used to empower ECCE facilitators through play-based learning. After following a course on how to make play-based learning materials and meeting once peer week at an ECCE centers, ECCE facilitators go back to their centers to use their skills into practice. In Nepal, the app was used for a course on gender-based violence during emergencies, while in Nigeria it has been used to teach sign language. Mr Shrestha also mentioned that a package on inclusive teaching practices which was based on three projects funded by FCDO in Myanmar is being adapted as a global resource. The app is also being used to train youth on the Washington Group of questions and for training on digital skills for teachers and students in different languages.

In terms of reach, the app has been downloaded more than 1000 times and has benefited more than 500,000 primary actors. The content has been developed in multiple languages and while it has not been fully evaluated yet, evidence finds that teachers have found it empowering.

Ms Sichangi thanked Mr Shrestha for his presentation and open the floor for the discussion. One participant mentioned that one of the biggest barriers for teachers to have access to content, devices and infrastructure is the lack of resources at all levels. Another participant from Swaziland highlighted connectivity as one of the main challenges to access as well as the costs for data which leads to many schools and learners being unable to afford data. Another challenge that was raised was access to education for children with special needs who in many cases are unable to access quality education. There seemed to be agreement amongst participants that some of the biggest challenges arise when children are not in school and have to continue with their learning at home as many households lack electricity, learners lack the support they need to succeed in education and in some cases, there are also security concerns.

A good example from Swaziland was shared during the discussion on how the country has started to transition to integrating technology into teaching and learning by moving away from chalk and blackboards to interactive blackboard and software for interactive teaching and learning. The country has also acquired a series of devices, including special devices for learners with disabilities to slowly move away from paper and pen to ensure that learning is not disrupted in the eventuality of another crisis such as the Covid-19 pandemic.

Another participant shared examples from South-East Asia where they have a disability inclusion online training for teachers which focuses on strengthening capacity and training in the context of emergencies. The course has been translated into eight languages so far. One of the lessons that they have learnt so far is the need for adaptability. Given that many households and regions lack access to the internet, they developed hybrid training courses that work off-line and on-line. Another lesson that was learnt is that they were able to reach more teachers when their courses were endorsed by the Ministries of Education from each country proving that governments play a central role ensuring that training is available, and policies are in place.

A representative from Namibia reminded other participants that basic infrastructure such as access to electricity is also essential, and that policies around access should not be limited to connectivity. She also mentioned the use of solar energy as a possible innovation to expand access to technology in areas where there is no access to electricity.

Lastly the Head of the Secretariat of the International Task Force on Teachers for Education 2030 spoke about the importance of ensuring that the use of technology is sustained in time. Once platforms are set up and teacher



training has taken place, there needs to be a continuity in the use of technology in classrooms. But also, the use of these technologies in classrooms need to be fed and transformed with the experiences of teachers themselves.

## **Breakout group 2: Teacher professional development and pedagogy (UNESCO Kingston, ProFuturo and BLEND a VVOB Project)**

Latoya Swaby-Anderson, National Programme Officer at the UNESCO Office in the Caribbean based in Kingston, moderated the breakout group on teacher professional development and pedagogy and presented the work of the UNESCO Office in the Caribbean on this area. Ms. Swaby-Anderson highlighted the importance of turning the spotlight into teacher preparation, teaching and the teaching profession, of ensuring that teachers are better supported to integrate technology in teaching by leveraging the resources that they have in hand and ensuring that teachers actively shape the direction of technology in learning to ensure relevance, sustainability, and adaptability.

Ms Swaby-Anderson highlighted some of the projects that UNESCO has developed and implemented to support teachers in the Caribbean and ensure the continuity of learning during Covid. An estimated total number of some 91,710 teachers were affected by Covid-19 in the Caribbean Small Islands Developing States. Teachers had to adapt to the new normal resulting from the Covid-19 crisis by creating content for online and distance education spaces, learning new delivery tools, understanding online pedagogy, engaging parents, addressing student mental health issues, and attempting various pedagogical strategies to address both synchronous and asynchronous teaching and learning.

Ms Swaby-Anderson highlighted that teachers for the most part were unprepared to support continuity of learning and adapt to new teaching methodologies. One of the challenges that was observed was the lack of preparedness of some teachers to use digital skills to implement distance learning modalities. Other challenges related to difficulties in teaching TVET and STEM classes, conducting assessments online and addressing mental health issues of teachers, parents, and children.

An online survey conducted in September 2021 which collected the views and experiences of 124 teachers across the Caribbean showed that high-tech solutions were used by the majority of teachers. Low-tech solutions such as WhatsApp were used by less than 50%, while no-tech solutions were used by less than 15% of teachers. The biggest challenge faced by teachers was internet connectivity followed by health problems arising from prolonged computer use, lack of student motivation and difficulties in maintaining active engagement of students and difficulties in communicating effectively as a class.

Ms Swaby-Anderson also highlighted the key issues that were identified by the UNESCO Office in the Caribbean based on early consultations with Ministers of Education, teachers, and students:

1. Strategic planning
2. Monitoring and data analysis
3. Mapping of intermediate and long-term responses and strategies
4. Online blended teacher training initiative for the Caribbean
5. Technical assistance to Caribbean governments
6. Digital learning resources for teachers and parents

Short- and long-term actions were designed to adjust to shocks and disruptions in learning. UNESCO partnered with Blackboard to create a project to support Member States by developing quality distance education and training in the Caribbean and offering coordinated support to 20 Caribbean SIDS. The objectives of the program were to train master trainers from 20 countries to become facilitators of the course “Blended Learning and Online

Strategies” and contribute to the professional development for teachers and educators in the area of blended online teaching and learning for 12,000 teachers. Moving forward, Ms Swaby-Anderson mentioned that teachers in the Caribbean will continue to receive support, their capacities and communities of practices will be strengthened, and they will continue to receive social and emotional support.

Mr Jef Peeraer from VVOB-*education for development* presented the BLEND Project. Blend is a project which brings together likeminded partners and whose objective is to provide and enhance continuous professional development using blended technology. VVOB works together with eight partners (Aga Kahn Foundation, BRAC IED, Plan International, Pratham, Right to Play, STiR Education and VSO), the project is funded by the LEGO Foundation.

Mr Peeraer concluded by mentioning some of the main outcomes from this experiment of shifting to blended continuous professional development for educators. Switching to blended modalities is an opportunity to reflect on what an effective continuous development programme means by identifying needs, objectives, analyzing the context and designing and developing steps to implement these programmes. The key challenges with blended CPD include issues related to cost-effectiveness, sustainability and scalability, engagement, motivation, and wellbeing, ensuring inclusion and diversity and taking into consideration privacy and data safeguarding concerns.

Ms Leticia de Rato from ProFuturo<sup>2</sup>. Ms de Rato shared some of the learnings after 5 years of implementing their digital education programme and 2 years of Covid 19. ProFuturo is a digital education programme that seeks to promote the pedagogical appropriation of technology and innovation with training proposals and innovative classroom experiences, specially designed for vulnerable environments. They are working in 40 countries with a network of 1.2 million teachers. Their education strategy is based on three pillars:

1. A Global Framework for Learning and Educating in the Digital Age.
2. A blended training programme that strengthens and develops teachers’ skills and contributes to their professional development.
3. And a set of “digital learning experiences” specially selected for off-line and on-line environments that are aligned with the teachers’ expertise.

While their training model is based on the following principles:

- It is ongoing: ProFuturo training is not limited to specific training, but rather a long-term development plan.
- It is personalized and progressive: the training adapts to the teachers’ level of competence and provides them with a training itinerary that allows them to gradually assimilate the technology from a pedagogical perspective.
- It is linked to the classroom: the training proposals are eminently practical and provide the teacher with tools and techniques to apply with their students in their classroom planning.

ProFuturo has collected some evidence on the impact of their digital education programmes. An impact evaluation carried out in Angola by the NOVAFRICA institution in 2019 mentioned that teachers claimed to have a “a greater degree of familiarity with technology.” In the same year, J-Pal highlighted that 96% of teachers reported having improved their digital skills after receiving training from ProFuturo. Lastly, in 2021 another

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<sup>2</sup> Due to technical difficulties experienced during the session, the lessons from ProFuturo included in this report have been shared by writing.

evaluation showed that after two months receiving the training courses, 83% of the participants had used the methodologies, tools or resources learned in some way in their classrooms.

Ms Swaby-Anderson introduced three questions to guide the discussion:

1. What is needed in teacher training on ICTs, including digitalization for and with teachers with a blended approach? How to ensure training is accurate to the cultural and social needs of each context?
2. How to integrate training and learnings on digital skills into the everyday classroom?
3. How to ensure effective training as part of continuous professional development and that is sustainable on time?

Participants explored these three questions. In rich countries such as the United Kingdom, there is a large number of commercial providers which have developed quality CPD platforms, offering relevant and flexible tools for teachers. Another participant highlighted the importance of using pre-service training to integrate new technologies into the classrooms and mentioned that TVET teachers often need to engage with technology beyond ICTs. As a result, they need to be aware of the latest technologies that are available in each industry to be able to thrive and successfully integrate technologies into their classrooms. Another important aspect that was highlighted was the fact that teachers need to understand why it is important to incorporate technology into their learning practice and for that their need to be trained to use the various resources that they have in hand. The importance of sustainability was also mentioned.

Another participant shared the experience from Africa where in poor and marginalized areas there are still many challenges related to basic infrastructure such as connectivity. The Covid-19 pandemic demonstrated that there is no better place for learning than schools. However, the pandemic also reminded us of some of the key challenges associated to the use of technology in education such as lack of infrastructure, teacher infrastructure, costs of data, teacher workloads, security concerns and lack of consultations with teachers and their unions.

While it was agreed that technology is an effective tool for learning, one participant reminded us that technology could not substitute teachers. In this regard, pedagogy should always come first whether we are talking of teacher education or teacher professional development. Teachers and their unions must be involved whenever we discuss the use of technology in schools. Without the support from teachers, the deployment of these solutions will not succeed.

### **Breakout group 3: Systemic support and collaboration (Mastercard Foundation and Mary Burns)**

Mary Burns, who had prepared the [Think Piece](#) for the 2023 GEM Report, opened the discussion by presenting some of her findings based on the interviews she conducted on 70 teachers from 17 countries. Regarding education and technology, she emphasized that:

- Many education systems have not made the necessary accommodations to help teachers to integrate technology.
- In many countries, education systems are barriers rather than supports for teachers wishing to integrate technology.
- Pre-service programmes are not preparing teachers to integrate technology in education and teachers don't feel satisfied with their training.
- Teacher voices are not integrated into professional development: They have almost no say on the focus or formats of TPD. This is true among teachers interviewed across 17 countries.

Her presentation summarized some of the challenges in integrating technology in education, focusing on teachers' role in this transition. Some of the questions raised to start the discussion were:

1. How can systems better support teachers to integrate new technologies into their classrooms?
2. How to encourage support networks for and between teachers for peer-learning and collaboration, including the consolidation of online learning communities?
3. How can countries ensure the use of technology in education policies and in the classroom?

In the discussion that followed, participants raised several points. Countries must select which new technologies should be included in the classroom, and how teachers can be involved in this decision-making. One of the challenges is that technology is evolving faster than teacher preparation. Often learners are more agile than teachers in using devices, which points to the importance of creating a solid base as part of pre-service training, including familiarization with devices.

It is critical for countries to establish a clear vision of the use of technology. Technology should support teachers doing what they already do, to maximize their teaching focusing on the ICT skills they already have. It should also not increase the workload, but it should support and increase learning processes. Establishing parameters for digital literacy aligned to the context needs will facilitate systemic support in education and technology.

The role of support networks for and between teachers was discussed during the session, as online learning communities have proven their importance during the covid-19 pandemic. Teachers engaged comfortably in communities of practice during the pandemic. Communities of practice were seen to play an important role in professional development. Some felt however, that many of these communities of practice were not maintained when schools reopened. Participants expressed that systems should support grass-roots initiatives and recognize the role played by teachers in sharing good practices and learning from peers. Top-down and bottom-up initiatives should be integrated and reinforced mutually understanding different networks and their results.

Some final thoughts and questions to conclude the discussion were on the bridges between policy and practice, about bringing actors together to obtain consensus, and the role of teacher unions in this mediation and on teacher professional development. While some of these key questions remain unanswered, they are nevertheless critical to understand the role of systemic support for teachers in education and technology.

### **Resources shared in the chat**

Association for the Development of Education in Africa, 2021. *7 Action steps from the 4th African Policymaker Forum to improve Teachers Trainings Delivery Approaches*. [Access here](#).

Association for the Development of Education in Africa, 2021. *Remote Education Benchmarking Toolkit Basic Education*. [Access here](#).

Mary Burns, 2021. *Paper commissioned for the 2023 Global Education Monitoring Report, Technology, and education*. [Access here](#).

Global Education Monitoring Report, 2021. *Concept note for the 2023 GEM Report on technology and education*. [Access here](#).

International Task Force on Teachers for Education 2030, 2022. *Distance learning and teacher training strategies. Lessons from the Caribbean*. [Access here](#).