



International Task Force on Teachers for Education 2030

The Futures of Teaching Final Report

Proceedings of the Annual Meetings and 12th Policy Dialogue Forum, Dubai, United Arab Emirates 8-11 December 2019



The International Task Force on Teachers for Education 2030 (also known as Teacher Task Force) is a global and independent alliance. Members are national governments, intergovernmental organizations, non-governmental organizations, international development agencies, civil society organizations, private sector organizations and UN agencies that work together to promote teacher-related issues.

The Teacher Task Force Secretariat is hosted by UNESCO at its Headquarters in Paris.

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HIGHLIGHTS

The Challenge

Governments around the world need to demonstrate bold leadership and take transformative action to ensure that national education systems and their frontline workers, teachers, keep pace with a rapidly changing world. Such action is vital to fulfil the promise of the Sustainable Development Goals 2030 Education Agenda of achieving equitable, quality education for all.

Core 12th Policy Dialogue Forum findings related to teaching and learning

- Models of teaching and learning must be more closely connected to the needs of modern societies.
- Education systems must lean towards the curriculum of the future, not the past.
- Teacher education that is better adapted to particular contexts will be key to preparing teachers for tomorrow's learning challenges.
- As with classroom instruction, models of continuous professional development and teacher support must evolve.
- School leadership is critical in driving and supporting change.
- Socially and culturally responsive teacher education practices are critical to reducing inequalities.

Opportunities

- Technologies can help to expanding low-cost access to teacher education.
- Collaboration between all education partners may make teacher education and management processes more efficient and more effective.
- Collaboration within extended learning communities can radically enhance school-level instruction and management.

Recommendations

Ministries of education now need to:

- Update existing systems for teacher management and look at the potential for scaling up innovative solutions.
- Anchor and better align non-state teacher training and support with national education systems.
- Engage with and empower the education workforce to lead change.
- Invest in information and communication technology (ICT) infrastructure in sustainable and socially responsible ways.
- Review teaching roles and responsibilities and update professional standards and certification.
- Establish tools for diagnostics, measurement, comparison and deliberation.

SUMMARY

Teaching in the 21st century is complex and challenging, in part because there are inherent tensions between traditional and emerging models of public education. New models respond to a range of challenges and opportunities: changes in thinking about the purposes of learning; advances in technology; the opening up of learning to the virtual world; and recognition of how more personalized, context-relevant pedagogies can improve learning.

Old models of education are increasingly viewed as disconnected from the realities of modern societies. The world of work is changing quickly. The climate crisis is accelerating. Socio-economic inequalities are increasing within countries. Political instability and environmental disasters have cross-border migration. Keeping pace with all these changes has set off a radical re-thinking of the purposes of learning, how to organize learning and how to prepare teachers for their expected roles.

This report outlines the proceedings and recommendations of the Annual Meetings and 12th Teacher Task Force (TTF) 12th Policy Dialogue Forum, hosted in Dubai from 8-11 December 2019 by the Hamdan Bin Rashid Al Maktoum Foundation and the Government of the United Arab Emirates. The forum offered an opportunity to look at how future-oriented learning goals and delivery models are affecting teaching practice around the world. Participants debated whether emerging education trends are part of a common global vision for the future of teaching or just a utopian vision shared by some countries. They also discussed which emerging ideas, if any, could be used to guide education policy making and decision making towards the achievement of the Sustainable Development Goals (SDGs).

The forum in Dubai drew teachers and other education practitioners, leading thematic experts, high-level decision makers, technical partners and representatives from civil society, academia and the private sector. The participants contributed rich insights into innovative learning and teaching practices in their countries, including school and classroom pedagogies, professional development approaches, resources and technologies. The discussions and examples of good practice confirmed that countries in different regions are already developing new visions of learning and teaching. Participants underlined, however, the importance of considering context as well as general principles in any debates on the future/s of teaching.

Forum attendees were reminded that even though teachers are at the heart of the learning process, many low- and middle-income countries have enormous teacher shortages. In addition, teachers often lack the training and support needed to provide quality teaching and learning. Over 69 million qualified, properly trained and adequately supported primary and secondary teachers must be recruited worldwide by 2030 to meet the targets of the fourth SDG ("Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all").

Around the world, 90% of primary school-age children are enrolled in school, but this increased access to education has not always improved education quality, learning outcomes, or economic and social mobility. More than 617 million children and adolescents of primary and lower secondary age – mainly in sub-Saharan Africa and Southern Asia – still lack minimum proficiency in reading and mathematics. Some of these children have never enrolled in school, some have dropped out early and some are in school but not learning enough.

The diversity of testimonies in Dubai brought into relief the co-existence of multiple realities for countries' teaching corps. Education systems are advancing at different speeds and, as participants underlined, there is no one-size-fits-all solution to the challenges ahead. Across all contexts, however, education systems and their frontline workers, teachers, will have to demonstrate bold

leadership and devise comprehensive responses to fulfil the promise of the SDG Education 2030 Agenda: equitable, quality education for all.

As we also came to agree in Dubai, the conversation about the future/s of teaching needs to go beyond the impact of education technologies on classroom instruction and teacher preparation. It is urgent that we accelerate progress towards SDG 4. That means all governments must now consider innovative, cost-effective approaches to teaching and learning that generate more equitable and immediate impact.

This conversation includes different ways that countries might strengthen and renew their education systems from within to prepare teachers for the opportunities, challenges and transitions ahead. But it also extends to alternative ways of designing and delivering of teacher education, teacher management and classroom practices in different contexts. There is much scope for identifying ways of working more closely with communities, the business sector and other partners to expand and deepen learning.

In all of these endeavors, equity must be a central concern. At the 12th Teacher Task Force Policy Dialogue Forum in Dubai, the education community reaffirmed its commitment to breaking the cycle of exclusion for vulnerable, "at-risk" and historically marginalized children; to designing classrooms that address the unique needs of all learners, including children with disabilities; and to avoiding practices that diminish the status of certain population groups or undermine learning.

About this report

This report summarizes the core thinking on the future of teaching discussed at the 12th Policy Dialogue Forum in Dubai in December 2019, drawing on examples of emerging approaches and good practice presented throughout the forum. Examples have been chosen for their originality – including new ways of thinking about teaching, teacher education and decision making that revisit past assumptions and/or harness collaboration to increase impact.

The report is just one part of the Teacher Task Force's efforts to make information and knowledge on innovative teaching practice more widely available throughout the education community. By showing what is possible in different contexts, we hope to enrich our support for UNESCO Member States' efforts to achieve their SDG targets. We also hope to generate further global, regional and country engagement in the future of teaching and advance the case for increased investment in the teaching community.

Acknowledgements

The Secretariat of the International Task Force on Teachers for Education 2030 wishes to thank all the participants, speakers and moderators of the 12th Policy Dialgue Forum for their invaluable input, discussions and energy which are reflected in this document. Special thanks also to the coordinators of the regional and thematic group meetings who helped bring together such rich discussions and presentations.

We also wish to thank this Report's author, Carmela Salzano and editor, Andrew Jonhston, for their work.

Finally, the Secretariat of the Teacher Task Force expresses its immense gratitude to the generous hosts, notably the Ministry of Education, United Arab Emirates and the Hamdan Bin Rashid al Maktoum Foundation for Distinguished Academic Performance for their support in the organisation of the Forum. It also recognises the on-going financial support of the Government of Germany (BMZ/GIZ) in the organisation of the Policy Dialogue Fora.

I. 12th Policy Dialogue Forum Findings

This report identifies the main findings and examples of good practice within the three subthemes covered during the plenary sessions, regional and thematic group meetings, caucus groups and side events of the 12th Policy Dialogue Forum:

Sub-theme 1. Teachers and teacher education in the 21st century. What changes are we seeing in the classroom as a result of new learning goals and emerging educational technologies, particularly with regard to the teaching-learning process and assessments of learning? What skills, dispositions and knowledge will teachers need for education systems of the future and how is this need affecting teacher education?

Sub-theme 2. Addressing inequalities. How do we ensure that emerging education trends promote inclusion and reduce education inequities, rather than leaving certain categories of learners even further behind?

Sub-theme 3. Innovations. What innovations might support teachers' changing roles, or tap new sources of expertise and talent? What are the implications of these innovations for teacher management and the governance of public education?

These sub-themes were selected because they sit within current global debates on the future/s of education and the alignment between global and regional expectations and national priorities. The summaries of discussions are based on notes taken during the sessions, PowerPoint and slide deck presentations provided by the presenters, and background information from the forum Concept Note and partner literature.

<u>Caveats</u>: In the interest of brevity, we are unable to cover the contents of each presentation but have done our best to represent the themes covered and constituency groups present during the forum. Nor are the summaries exhaustive of all the debates currently taking place within each sub-theme. The reporting covers the main issues raised during the forum. Challenges to teaching were inevitably noted during the presentations and these are also taken up as part of the recommendations later in this report.

I.1 Sub-theme I - Teachers and teacher education in the 21st century

While the one-teacher, one-classroom model still dominates classrooms in many education systems, the cultural dictum of a teacher standing in front of rows of students imparting knowledge through standardized pedagogy and learning content is gradually becoming a thing of the past.ⁱ The fixed technologies that once anchored teachers and learners to blackboards, textbooks, desks and classrooms are losing their domination.ⁱⁱ

Technology is changing not only how students acquire knowledge and the learning content available, but also the skills needed to access them, the relationship between teachers and learners, and where learning takes place. Against this backdrop, past assumptions about the role of the teacher in the classroom and the requirements of teacher education are being revisited.

Finding 1: Models of teaching and learning must be more closely linked to the needs of modern societies

"The future is the present [and] this means that education practices need to catch up with current and future demands of society and labor markets".

Dr. Maszlee bin Malik, Minister of Education of Malaysia

Learners now need much more than academic knowledge to get ahead and thrive. They require a broad array of 21st century skills including critical thinking and creativity, as well as technological, interpersonal and citizenship skills. They need such skills to integrate into workforces that are rapidly changing, contribute to the well-being of their

communities and demonstrate resilience in the face of instability and crises. The acquisition of these skills is at odds with traditional top-down forms of education where the teacher has control over the instruction process and students are passive recipients of knowledge. Such traditional approaches have not always fostered a "rounded" education or developed skills needed for livelihoods and well-being in the modern world.

For many education experts, education is no longer defined in terms of what a teacher will teach but rather the skills that students can demonstrate.ⁱⁱⁱ Teachers of today are viewed not only as imparters of knowledge but also as facilitators, curators, partners and guides to learning. In response to these changes, school systems have recently adopted more energetically active learning approaches that allow learners to engage their natural curiosity and abilities "A change in paradigm is needed to bring values back to education; living together, peace and solidarity. This can be coupled with and not against technological change: digital citizenship is a fundamental line of work for teachers and learners, to foster participation and motivation."

Monserrat Creamer, Minister of Education of Ecuador

through opportunities for self-driven and team-based enquiry, inside and outside the classroom. Teachers are also playing an increasingly greater role in helping learners to navigate the multiplicity of online and offline learning supports in ways that meet their individual and collective needs.

In short, teachers are moving from traditional "listen and respond" didactics to more interactive, agile, student-centred approaches.^{iv} Evolving pedagogies are sometimes (but not always) nested within a "whole school" philosophy that tackles numerous educational, societal, environmental and economic issues simultaneously. Such an approach can include working with partners in the business sector and community to support learning.

BOX 1 – Indonesia, SEAMEO Smart School Implementation: A holistic approach to workforce preparation, learning and school life.

Southeast Asian Ministers of Education Organization (SEAMEO) Smart School is a best practice project being implemented in 11 vocational high schools in Indonesia from September 2019 to June 2020. It was developed in collaboration with the Directorate for Vocational School Development (Ministry of Education and Culture), the Indonesian SEAMEO Centres Coordinator, the West Java Provincial Education Office and the SEAMEO Regional Open Learning Centre (SEAMEO SEAMOLEC). While the project is expected to be a trigger for ICT-based learning (equipping students with skills in developing augmented reality (AR), virtual reality (VR), the Internet of things (IoT) and Edu Game products), it is much more than this. At the SMKN 11 Bandung School in Indonesia, for example, the Digital Learning programme is one of several pillars that structure school life. These include: a Green School and Healthy Canteen approach that address environmental issues and learner's health and nutritional needs; the Religion, Culture and Art programme, which promotes moral purpose, cultural knowledge, values and creativity; and the Industry 4.0 and Digital Learning Programme. Schools are chosen because of their holistic approach to learning and school life.

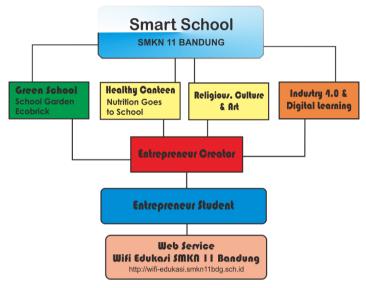


Figure 1. SEAMEO Smart School Implementation

Other key features of the school philosophy are leadership and collaboration. Teachers are encouraged to take the lead in working with their learners to build repositories of learning contents (Edukasi) including poems, short stories, journal articles, music and animation videos for children, ebooks, and district news items.

The Smart School Programme is transforming how teachers work in the classroom and school community. Their approach to teaching, capacities to lead and relationships with students are being strengthened. Teachers receive special training to facilitate their participation in the Smart School project, including digital learning and ICT competencies in addition to entrepreneurship skills. As a result, Smart School teachers are making greater use of e-learning applications in the process of teaching and learning and assessment activities.

The Twinning Digital Class Programme facilitates learning with several classes from several schools through videoconferencing using WebEx guided by one or more teachers about one or more subjects. The programme also fosters a civic-minded and entrepreneurial spirit, with both teachers and learners encouraged to care about their school environment and add value to the local economy while developing the communication skills to promote culture, culinary, creative industries and local tourism in West Java.

Presented by Dr. Anne Sukmawati, KD, M.MPd. SEAMEO Smart Schools 4.0, Indonesia. For more details please refer to the presentation or to https://www.qitepinscience.org/blog/2019/09/06/seameo-smart-school-4-0/

Finding 2: Education systems must lean towards the curriculum of the future, not the past

Debates on the future of education frequently centre on <u>how</u> teachers promote the skills now needed by learners to meet workforce- and society-focused goals. However, conversations about systemic changes to what is taught often receive less attention. Most countries' education systems continue to teach traditional subjects that have been taught for generations: reading, writing, maths, geography, history, sciences and languages.^v Subjects such as digital skills, computer science, entrepreneurship, global citizenship education and education for sustainable development remain on the periphery in many countries, particularly in developing and least developed countries.

Given the skills that learners will require if they are to thrive, countries need to reflect on their normative vision for education and redefine the meaning of a foundational education that enables learners to keep up with rapidly changing modern societies. Without such reflection, fundamental innovation in primary and secondary school content and delivery could remain limited.^{vi}

Box 2 – A Regional Approach to Re-imagining Curriculum, Learning and Assessment in the Arab States: Master of Education in Smart Curriculum and Learning.

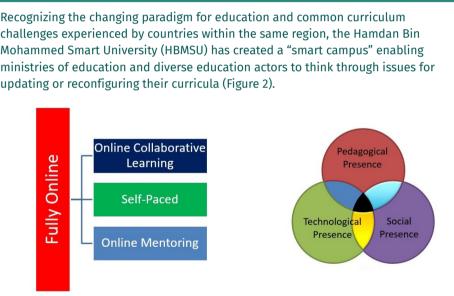


Figure 2. Smart Campus by the Hamdan Bin Mohammed Smart University.

The postgraduate diploma in Curriculum Design and Development in the Arab States was developed in collaboration with the UNESCO International Bureau for Education (IBE) and the UNESCO Section of Teacher Development (TED) and since 2017 has already benefited 16 countries in the Arab States region.

The course is designed for teacher educators, teachers, curriculum officials, textbook developers and education officials to strengthen their capacities in Smart Learning, Curriculum, Technology and Assessment. It is administered through a blended learning approach. On-site ten-day face-to-face instruction modules are mixed with online learning, site visits, reflection and analysis within a 30-week timeframe. The

diploma also entails continuous monitoring of the performance of the instructors/ tutors, ongoing assessment of the trainees using standardized assessment rubrics and continuous revision of the training modules and course contents.

Two editions of the postgraduate diploma were offered in 2017 and 2018 with 78 students graduating from 16 countries. Positive testimonies commended the use of the Arabic language for instruction, the contextualized case studies used, the possibility for participants to connect through the virtual learning space in spite of their geographical separation, and opportunities and encouragement to enhance academic and professional competencies.

Presented by Professor Hamdy A. Abdelaziz, Dean, School of e-Education, Hamdan Bin Mohammed Smart University, United Arab Emirates

Box 3 – Ed-Alignment Arab-Africa Inter-regional Initiative: Developing Ed-Alignment Toolkit.

UNESCO has embarked on developing a toolkit to align curriculum/learning, teacher policies/practices, and learning assessment. The toolkit is based on the reports and recommendations of:

i) the 2017 capacity building workshop on alignment of curriculum, teacher training and assessment in Africa, Dar es Salaam, Tanzania;

ii) the 2018 Third Arab regional meeting on Education 2030, (ARMED III), Dead Sea, Jordan;

iii) the 2019 interregional Arab-Africa workshops, Beirut.

The Toolkit is a practical guidance package that will include a background to alignment rationale, conceptual clarifications and the benefits of alignment in implementing the Education 2030 Agenda. Selected country case studies on promising policy and practices from Arab States and Africa regions are used for the purposes of illustration and enhancing technical capacity. UNESCO considers the Toolkit to be an important output to implementing the Education 2030 Agenda. During the 12th Policy Dialogue Forum, national experts from selected countries had the opportunity to discuss and enrich the draft Toolkit. UNESCO expects to publish the Toolkit in 2020.

Presented by UNESCO, Ed-Align programme.

Finding 3. Teacher education that is better adapted to particular contexts will be key to preparing teachers for tomorrow's learning challenges.

The SDG 4.c indicator points to the importance in Agenda 2030 of **trained teachers** who have received at least the minimum organized pedagogical teacher training pre-service and in-service required for teaching at the relevant level in a given country (SDG 4.c.1). The

"Context is critical and education must respond to the needs of the country."

Mohamed Elamin Ahmed Mohamed Eltom, Minister of Education of Sudan

indicator also underlines the need for **qualified teachers** with at least the minimum academic qualifications required for teaching their subjects at the relevant level in a given country. This is reflected in the percentage of teachers qualified according to national standards (Indicator SDG 4.c.3).^{vii}

While these elements are critically important, the Policy Dialogue Forum discussions underlined that teaching and learning do not take place in a vacuum and there is a need to adapt teacher training to particular contexts in ways that have concrete applications for both learners and teachers. Many teachers feel largely unprepared for the realities of teaching in different contexts. They often feel disempowered, with limited opportunities to update their competencies and keep abreast of developments in global education. As a result, many do not have the skills, competencies and confidence they need to deal with the evolving learning landscape, with diversity and with challenges as they emerge in the classroom.

The Policy Dialogue Forum participants recognized the need to update or reorient teacher preparation strategies using modern approaches to teaching and learning, including the integration of education technologies and e-learning applications. But a more human-focused, context-specific teacher preparation is also needed. Training should cover the social and emotional capacities to cope with large classrooms, multi-grade teaching and scarcity of educational tools. It also needs to equip teachers to face the demands of socially, culturally and linguistically diverse classrooms. In other words, teachers must be holistically supported and "ready for service."

"Being an island affected by climate change poses additional challenges to those already faced as, for example, 90% of educational infrastructure was destroyed by the devastating Category 5 hurricane of 2017".

Dr. Natalio D. Wheatley, Minister of Education from the British Virgin Islands Just as critically, Policy Dialogue Forum participants emphasized, teacher education must include preparation to deal with instability, vulnerability and trauma, and their impacts on learners, including how to create safe learning environments. This is increasingly urgent given that migration and human mobility are likely to increase in the face of economic instability, climate change, wars and political crises. These forces further heighten

diversity in the classroom, potentially causing major disruptions to teaching and learning, and exacerbating inequalities in education outcomes.

As the Policy Dialogue Forum participants highlighted, we are already seeing some of these issues in Africa and to a growing extent in Europe. The Latin America and the Caribbean region is also experiencing turbulence due to the Venezuelan refugee crisis. Teachers in Venezuela's neighbouring non-Spanish-speaking countries are experiencing language barriers with refugee learners whose first language is Spanish. Such challenges are also experienced in advanced economies. Over 9 per cent of the 50 million public school students in the United States are now first- or second-generation English language learners.^{viii}

Box 4 – A responsive teacher induction programme in Rwanda supported by VVOB

The government of Rwanda has revised its Teacher Development and Management (TDM) Policy to emphasize the need for a high-quality induction for newly qualified teachers through mentorship and supervision. To support the ministry in putting this policy to practice, the Belgian non-governmental organization VVOB helped to establish an induction programme for newly qualified teachers in 17 districts (including the most disadvantaged) to reach 612 primary and 680 secondary schools. The programme was developed in partnership with the Rwanda Education Board, the University of Rwanda, College of Education, and the Ministry of Education.

What sets this induction programme apart are the textured layers of support available to teaching staff and support actors. Mentoring is offered by a school-based mentor and/or school subject leader, in particular science, technology, engineering and mathematics (STEM) teachers. Mentoring focuses on joint lesson planning; observing mentors teaching or observing fellow teachers, including pre- and post-lesson preparation, debriefing and reflection; analyzing students' work and results on assessments; marking and record keeping; discussing teaching and learning issues; discussing teaching and classroom management techniques. The second activity concerns Communities of Practice (CoP) sessions, where newly gualified teachers and more experienced teachers who are teaching the same subject (depending on the size of the school) meet to discuss their work. They think up solutions to challenges they encounter in the classroom and share good practices. Activities that can be undertaken during a CoP session include analyzing student work on formative and summative assessments or developing strategies for teaching learners with special educational needs. The third activity involves seminars or training sessions on topics of concern to new teachers, which can be organized at school, sector or district level. And three times a year, a tutor of the pre-service teacher training centre (TTC) monitors the newly qualified teachers by observing his/her teaching practice and providing feedback. Potential problems with the mentor can also be discussed with the TTC tutor. The TTC tutor also establishes a link between the pre-service and in-service teaching training. This is also in line with Policy Priority 4 of the draft TDM-policy, which stipulates that continuous professional development (CPD) of teachers and pre-service teacher education must be more closely linked.

To provide school-based mentors and school subject leaders with coaching and mentoring skills, VVOB and the College of Education developed a CPD certificate programme on Educational Mentorship and Coaching. In addition to skill development, they receive guidance on how to organize CPD and promote reflective practice in their schools, and how to advance the implementation of the curriculum. TTC tutors also follow the CPD certificate programme. They receive additional training on monitoring the performance of newly qualified teachers and receive coaching by the College of Education in their roles as co-trainers and coaches of mentors (school subject leaders and school-based mentors).

Presented by Dr. Jef Peeraer, Programme Manager, VVOB – Education for Development, Rwanda

More info: https://rwanda.vvob.org/

Box 5 – Creating bridges between foundational knowledge and expanded core competencies: the Training Pack for Teachers in Crisis Contexts (TiCC Training Pack)

The Teachers in Crisis Contexts Collaborative (TiCC), founded in 2014, is an inter-agency effort to provide more and better support to teachers in crisis settings as part of the work of the Inter-agency Network on Education in Emergencies (INEE). Members of the group work together to identify problem areas in teacher management, development and support and then propose inter-agency or multi-partner open-source solutions.

The open source, inter-agency Teachers in Crisis Contexts Collaborative (TiCC) training pack was created in March 2016 to build basic teaching competencies for unqualified or under-qualified teachers recruited to teach in emergency settings (e.g. camps for refugees or internally displaced people (IDPs), conflict-affected areas, natural disaster zones, and/or with highly vulnerable populations). TiCC is comprised of a short Introductory Training Pack introducing foundational skills and four Core Modules, developed around a set of 28 teacher competencies that support teacher professional development over time. The modules are designed to introduce teachers to key concepts and skills by modelling participatory, interactive, learner-centred pedagogies that teachers can experience and then try in their classrooms. The materials can also be used with qualified teachers who require refresher training or support in critical areas who find themselves now teaching in crisis-affected environments.

TiCC has been used by Voluntary Services Overseas (VSO) in Kakuma refugee camp, Kenya, to respond to the lack of high quality, common training practices and materials. It was used as part of an inter-agency coordinated response to teacher professional development with the aim of reducing poor targeting of training participants and developing a more continuous, ongoing approach to training. It is delivered modularly through the inter-agency working group, with agencies taking ownership over different dimensions. The contextualized TiCC training takes place over five days followed by post-training peer support through Teacher Learning Circles. The module on curriculum and planning was expanded to include the rollout of the new Kenyan competencybased curriculum.

Presented by Casey Pearson, Education Volunteer, Voluntary Services Overseas. For more details, please see:https:// inee.org/resources/teachersprofessional-development-inter-agencyapproachhttps://www.vsointernational. org/news/blog/why-refugee-teachers-onthe-frontline-need-support

"[Our school] handles a lot of refugee children who come with issues of trauma and psychosocial issues and do not match in age with those other age levels since they dropped out of schools. The school has also noticed that children from conflict areas have limited social skills and need a lot of guidance and counselling."

William Mushobya, teacher at Jamhuri Primary School in Kenya

Finding 4: As with classroom instruction, models of continuous professional development and teacher support must evolve

The Education Commission reminded us that in some countries, teachers receive very little support from education systems and are visited on average every two and a half years by a supervisor. Those in rural and remote areas may have to wait four years.^{ix} This is insufficient for teachers to adapt successfully to changing learning contexts and feel motivated and well supported in their practice. Policy Dialogue Forum participants debated the kinds of continuous support needed.

For years the most common form of professional development available to teachers in traditional school systems has been staff development or in-service training, usually consisting of workshops or short-term courses selected by administrators to provide teachers with new information on a particular aspect of their work.[×]

The training is institutionally mandated, highly structured and classroom-based with an "expert" typically disseminating information to novices (similar to old school models of learning). Such types of training have generally not been found to be successful in enhancing teacher knowledge and improving learning outcomes.^{xi} As with classroom instruction, the model of continuous professional development (CPD) should evolve to foster improved learning outcomes.

Lessons were learned from CPD models in crisis situations where peer support and mentoring, teacher learning communities, learning circles and teacher collaboration form part of an integrated, flexible model for building teachers' capacity and providing ongoing support. Through various 'horizontal' modalities, teachers have access to

The quality of a school system cannot exceed the quality of its teachers and principals...[and] the quality of teachers and principals cannot exceed the quality of their education, their opportunities to collaborate and develop and the quality of their working conditions.

Source: TALIS 2018

professional development that is participant driven, collaborative, practical and, when offered through virtual learning communities, available from any Internet-connected location.^{xii} Teachers are experiencing more opportunities to share what they know, to discuss what they want to learn, to connect new concepts and pedagogies to their own contexts, and to troubleshoot challenges.^{xiii} In short, unlike traditional professional development where the role of the teacher and learner are static, newer more dynamic forms of CPD are emerging.

Box 6 - Refugee Educator Academy (Center for Learning in Practice)

Launched in 2017, the Refugee Educator Academy strives to increase the number, and accelerate the preparation of, qualified refugee educators and service providers in the United States and globally. The U.S. settings include Washington D.C., New York and Arizona, which have large migrant resettlement numbers. Programmes are also offered remotely to refugee educators around the world. The training builds on the existing abundance of quality content, including minimum standards for child protection, teacher training packs, social emotional learning, and other critical content areas.

The academy provides an integrated teacher training and support system that includes in-person courses, certification, practice communities, and a general online support system marked by excellent facilitation and strong relationships among participants:

• A 12-week course with 6 months of coaching.

• A dynamic online learning environment with a community of practice, including discussion threads for real-time discussion, and sharing of links and resources.

• Teacher learning and peer-to-peer support and collaboration, including a sustainable learning framework that is participant-centred and embedded in work.

The aim is to make existing content more widely available in measured, digestible chunks that educators (including teachers already in practice) can instantly make use of in their unique contexts. By placing participants at the centre and building out from their goals, the Refugee Educator Academy aims to develop foundational skills, shared language, immediately useful lessons and materials, and learning design (or instructional) practice mastery. The academy cultivates teacher leadership and lifts educators' voices to advocate for inclusive, equitable, and sustainable learning environments for all teachers and students. To date, there have been promising results with a first cohort of trainees (113 educators) having completed the course. A second and a third round of training are planned, with graduates from the first round applying for leadership roles in cohort two. The Refugee Educator Academy aims to nurture vibrant partnerships, the open exchange of ideas and content, and the movement of refugee educators and service provider learning into virtual community spaces.

Presented by Julie Kasper, Refugee Educator Academy, Carey Institute for Global Good, Center for Learning in Practice. https://clip.careyinstitute.org/

Discussion at the Policy Dialogue Forum underlined the importance of integrated teacher training approaches at country level (combining theoretical classroom training and classroom practice) to prepare teachers for emerging challenges, including increased diversity, in the classroom. Practice must be at the core of teacher training and, in turn, theory will build up through practice. This new approach was shared by different countries in Latin America and the Caribbean.

Box 7 – Improving teachers' education in Brazil

Brazil's national plan for education offers a new approach called Forma Brasil Docente that seeks to increase teacher quality by strengthening teacher education. Due to the enormous size of the teacher workforce a process of partnership with the teachers themselves to help implement the strategic plan has been adopted. The project emphasizes training and professional development and is part of the national common curricula. The new approach still faces challenges, however, since teacher training has long been very traditional.

The approach seeks to improve teacher quality through:

- initial training
- continuous training
- recruitment
- motivation and retention.

This new approach will be introduced across all teacher training institutions in Brazil. It includes 3,200 hours distributed across 8 semesters over 4 years, including:

- 800 hours in the first year related to pedagogical skills and practice;
- 1,600 hours for specific education topics; and
- 800 hours of practical pedagogical training, of which 400 are dedicated to classroom experience and 400 to curriculum components.

The new design emphasizing teaching practice empowers teachers to deal effectively with everyday challenges once they are practicing in the profession.

Presented by Aline Ribeiro Dantas de Texeira, Deputy Secretary of Basic Education, Brazil

Around the world, thousands of education sector professionals and teachers now regularly connect through online communities, social media and digital platforms to discuss teaching and learning issues affecting them in the classroom. They have found ways to network, exchange ideas and resources, and stay at the cutting edge of education outside formal education settings. This trend has been particularly visible in the creation of communities of learning and support frameworks between schools and education actors at provincial level. Some of the ways in which communication and collaboration are being supported through private sector infrastructure efforts were brought to the Policy Dialogue Forum.

Box 8 – Peer support through WhatsApp groups and Facebook WorkPlace

During the Policy Dialogue Forum, representatives of Facebook gave a presentation on how WorkPlace (the private version of Facebook) is being deployed to enable teachers, education professionals and institutions to connect and collaborate more effectively in Edo State, Nigeria.

In the first phase of the project, Facebook is helping the government of Edo State to develop the Internet infrastructure needed to strengthen connectivity. This will be followed by the joint creation of learning resources, continuous training opportunities and community support for teachers to strengthen the state's basic education reforms. When the service becomes fully functional, it is expected that teachers and many others involved in education will maximize the use of technology to improve learning.

Dr Adam Seldow, the Director of Facebook Education Partnerships, explained that Facebook was interested in Edo State because of the state government's accomplishments with the Edo Basic Education Transformation Sector (Edo-BEST) programme. He noted that while 10.5 million children were not attending schools in Nigeria, one in five teachers is still not receiving relevant training to improve learning outcomes in the classroom.

Presented by Dr. Adam Seldow, Director of Education Partnerships, Facebook

Finding 5: School leadership is critical in driving and supporting transformational change

Good school leadership is vital to improve the performance of teachers and learners (school leadership accounts for 27% of variations in students' learning achievements) and the efficiency

of education systems. It comes second only after classroom teaching; and can affect the overall quality of teacher professional development in the workplace.xiv

In evolving learning environments, transformational school leaders harness the talents and energies of fellow teachers, pupils and parents to achieve common educational aims.^{xv} They develop and share a clear vision of education success with students, staff and the community to promote a school climate that supports learning achievement for all students.^{xvi} They inspire and support teachers in their practice, encouraging collaboration and team building. They raise expectations for performance and degrees of motivation.^{xvii} These changes, in turn, generate a positive school climate where everyone's attitudes, feelings and behaviours contribute to school improvement.^{xviii}

But even though much is expected of school leaders in the changing education paradigm, we were reminded during the Policy Dialogue Forum that school leaders have little time to focus on a higher vision due to the pressures of their administrative and supervisory activities, and are rarely selected for training on the basis of skills that enhance school transformation and learning.

Box 9 - School leadership training in Africa (UNESCO-IICBA)

Transformational school leaders are a key part of school preparation. However, there are many challenges to school leadership and management in Africa, including poor mechanisms for school leader recruitment, lack of investment in their professional development and low retention. For this reason, in 2005 the UNESCO Institute for International Capacity Building in Africa (UNESCO-IICBA) developed three training manuals for school principals, on school management, school excellence (Figure 3) and human resource management. Issues covered include:

 instructional leadership, pupil management, the concept and practice of financial management, the need and means of parents' involvement in school affairs;

 school improvement, including the school climate and culture, highlighting the organizational structure of the school

and the functional tasks of school management i.e. planning, organizing, leadership and control; and

• development of education managers based on the key concepts of in-service training, job rotation and enrichment, and quality circles; other issues discussed include staff performance and appraisal, group dynamics and motivation.

The three manuals have been presented over five days in several countries including Guinea, Lesotho, Nigeria and Sierra Leone. Their development was informed by the 1996 study modules of the Advanced Certificate in Educational Management course at the University of South Africa.

Presented by Mr. Saliou Sall – Senior Programme Officer, UNESCO-IICBA

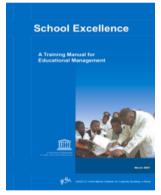


Figure 3. A UNESCO-IICBA Training Manual for School Principals, 2005

I.2 Sub-theme 2 - Addressing inequalities

We now know that a one-model-fits-all approach to teaching and learning does not work for all learners. Education experts, social and cognitive psychologists, anthropologists and other social scientists all recognize that children bring their own knowledge and life experiences into the classroom and that these influence how students learn, as well as what they learn. Yet in more traditional public education systems, the everyday practices of teaching and learning continue to exclude some groups of students while facilitating success for others.^{xix}

Learners who do not fit into an "academic" mould tend to absorb the idea that they lack ability. As a result they lose confidence, which can have an enduring influence on their motivation, effort and perceptions of self-efficacy. Unfortunately, learners who are already part of minority groups in society –whether based on gender, ethnicity, social class, linguistic group, disability or another difference – are disproportionately represented in so-called "low ability" groups. They often score below average in standardized tests and their experiences and histories are frequently misrepresented or underrepresented in curriculum materials.^{xx} In other words, instead of being a ladder for social mobility, schools can reproduce inequality.

Policy Dialogue Forum participants emphasized that social justice begins with an inclusive and equitable education. Teachers must receive support to move away from models that identify certain children as "low ability" or "disadvantaged". Teachers need systematic training in pedagogies that recognize students' uniqueness and help them to learn and build self-esteem by connecting with their prior learning and lived experiences. Participants also underlined the need for more socially and culturally responsive teaching practices that express relevant values, attitudes, skills, knowledge and/or understanding. Such practices are necessary to respond effectively to the needs of learners, especially historically disenfranchised minority and indigenous groups, including internally displaced people and refugees.

Finding 6: Socially and culturally responsive teacher education is critical to reducing inequalities

Socially and culturally responsive teacher education programmes encourage teachers-in-waiting to reflect on how learners' backgrounds, teacher-learner relationships, the learning environment, learning content and other features of teaching practice affect learning and the learning process. They create positive role models for girls and women and seek to avoid stereotypes that diminish the status of certain population groups or undermine learning. Trainees who attend such programmes are expected to emerge with a mindset that enables them to work creatively and effectively to support all students in diverse settings.^{xxi}

Additionally, social and culturally responsive teacher education can promote greater inclusion in terms of ethnic, racial, linguistic, cultural and social diversity. This is particularly relevant in highly diverse regions such as Latin America and the Caribbean, where the diversity of the population remains one of the greater barriers to equality. Standard schools and traditional education systems have often ignored racial, social, ethnic and linguistic differences and have tended to reproduce inequalities, privileging a minor proportion of the population. Teachers must therefore be aware of their students' diversity, the differences between their mother tongues and languages of instruction, and their specific needs and backgrounds.

Policy Dialogue Forum participants emphasized that six dispositions should be considered in the design of pedagogy in <u>all</u> teacher education programmes as part of strategies for building more inclusive classrooms, schools and education systems (Figure 4). These include socio-cultural consciousness, high expectations, desire to make a difference, a constructivist approach, deep knowledge of students and culturally responsive teaching practices.

Social Justice Begins with Inclusive and Equitable Education

Within a Transcultural Perspective culture goes much deeper than typical understandings of ethnicity, race and/or faith. It encompasses broad notions of similarity and difference and it is reflected in our students' multiple social identities and their ways of knowing and of being in the world.

Effective Education Begins with Engaged Learners Pedagogy for Equity:

Pedagogy embracing El'konin's (1934/71) research that shows people value 3 things can promote the development of a community of cooperative learners.

Socio-cultural consciousness An awareness of how socio-cultural structures impact individual experiences and opportunities.

Disposition #1

Disposition #4 Constructivist approach Understand that learners

Disposition #5 Deep knowledge of their students

Disposition #2

High expectations

Know about the lives of students and their families; know how students learn best and where they are in their learning,

Disposition #3 Desire to make a difference

See themselves as change agents working towards more equity.

Disposition #6 Culturally responsive teaching practices

Design and build instruction on students' prior knowledge in order to stretch students in their thinking and learning.

Figure 4. Policy Dialogue Forum dispositions for pedagogy design. Source: The Policy Dialogue Forum Thematic Group on Inclusion and Equity

Box 10 - Transforming Refugee Education Towards Excellence (TREE)

The TREE programme was launched by Save the Children Jordan and the Massachusetts Institute of Technology's Abdul Latif Jameel World Education Lab (MIT J-WEL). The programme sets out to protect refugee children and promote their primary and secondary education by focusing on teachers' social and emotional traits, transforming the school environment into a friendlier learning setting. The programme was developed in collaboration with the Jordanian Ministry of Education, Community Jameel and Dubai Cares.

It is hoped that this collaborative initiative will improve the educational process in public schools by equipping educators with tools and techniques to strengthen their own well-being and capabilities, leading to positive learning opportunities for children. This pilot is ultimately intended to benefit 745,000 students in public schools across Jordan. It is part of Save the Children Jordan's wider mission to ensure all children have access to quality education. Other initiatives include the Every Child Learning (ECL) programme in partnership with the education publisher Pearson, providing access to digital learning remedial classes as well as continuous training and support to teachers.

Presented by: Kirsten Mucyo, Save the Children Compassionate Systems in Jordan

Box 11 – Gender Responsive Pedagogy for Early Childhood Education (GRP4ECE) Toolkit.

Gender discrimination in education – from biased teaching and learning materials to gender-based divisions of roles and tasks – and can impact education and career pathways. Given that the concept of gender is formed at an early age, investing in gender equality in early childhood education (ECE) is very important. However, donor investments in gender equality in education are considerably lower in ECE than in other school levels. The Belgian education agency VVOB and partners developed the Gender Responsive Pedagogy for Early Childhood Education (GRP4ECE) Toolkit to assist teachers and school leaders to challenge gender stereotypes before gender identities are developed. The toolkit includes material for lesson planning and games for both students and teachers. It is built on play-based learning and is designed to be low cost and adaptable to local settings. The toolkit pilot in Zambia showed there was increased awareness by teachers of the social significance of gender, that teachers actively integrated gender in classroom activities, and that teachers required greater support to use gender and play-based learning components.

Presented by, Tom Vandenbosch, VVOB – Education for Development

Box 12 – Empowering ECE Teachers in Nyamasheke District, Rwanda

Despite strong political commitment by the Rwandan government, there are significant barriers to achieving its ambitious goal of increasing national pre-primary enrolment to 45% by 2024. As in many less developed countries, these barriers include limited financial support, poor infrastructure, few trained early childhood education (ECE) teachers and little ECE provision, with ECE teachers not on the government payroll. With teacher costs borne by parents, the ECE enrolment rate is much lower than in primary school (98%).

With funding from Dubai Cares, VSO's three-year inclusive ECE project aimed to improve access to quality ECE, including for children with disabilities. This approach also enabled options for low-cost and reliable co-payment models to be tested. VSO focused on three main lines of intervention in 30 model schools:

1) ECE Teaching System through integrated in-service and pre-service training and monitoring, peer-to-peer learning, sharing from model schools to a further set of 30 schools, design and creation of inclusive child-friendly classrooms;

2) Community Engagement including systemic needs assessment and support for children with special education needs, schools-based livelihoods activities, raising awareness of the importance of ECE; and

3) Education Governance via capacity building at district and senior level education officials, ECE centre school leaders, PTA and school management committees.

Evaluation attested to the positive impact of the project: increased enrolment in the 30 ECE target schools, tripling numbers from baseline. Overall, 11,618 children benefited, including 146 with disabilities. ECE teachers reported higher levels of confidence, skills and motivation, after having gained greater recognition and support from parents, communities and school leaders.

Fran Turner, Inclusive Education Practice Area, VSO International

I.3 Sub-theme 3 - Innovations

As the previous Policy Dialogue Forum sub-themes have hinted, the conversation on the future/s of teaching goes well beyond equipping classrooms with computers to foster learners' digital skills and ICT literacy. The discussion is also about strengthening and innovating education systems holistically in preparation for the opportunities, challenges and transitions ahead.

Innovation can take many forms, including alternative or more efficient ways of designing and delivering teacher education; improving efficiency in teacher management through multi-partner collaboration; and identifying ways of working with communities and the business sector to expand and deepen learning. Any approach to supporting teachers that adds value and bolsters the teaching workforce is worthwhile.

Finding 7: Technologies are part of the solution in expanding low-cost access to teacher education

In many countries, teachers are in short supply and complex structural issues, including a lack of access to teacher education, further limit entry into the profession. The communities that experience the greatest teacher shortages – particularly in certain subjects, such as STEM subjects – are often geographically remote, disadvantaged and affected by crises.^{xvii} Such is the case of the Kakuma refugee camp in Kenya, an extreme hardship area; it is difficult to find nationals who want to teach there. Moreover, potential candidates in this area experience difficulties in accessing high-quality teacher training, with teacher training colleges filled to capacity or located hundreds of kilometres away. A similar situation is found in refugee camps around the world, and the majority of remote and rural areas.

Given the high cost of systemic reforms to teacher training, countries must explore more efficient and cost-effective strategies to generate immediate impact. One option is to offer online teacher education courses through a combination of distance and on-site learning, mentoring and peer support, Teaching Circles and Teacher Learning Communities and/or the creation of digital portfolios to represent continuous professional learning around emerging concepts. This may be especially relevant for practicing teachers and potential recruits from rural and hard-to-reach areas.

The 2019 Policy Dialogue Forum highlighted many good practices where online technologies are opening up the potential for more flexible teacher training modalities, courses, certifications, practice communities and general support systems. Participants underlined that technology need not be used to usurp critical face-to-face teacher development activities but can, without question, create and extend opportunities to prepare, support and connect teachers working in all contexts.

Box 13 – Teacher Education at Hamdan Bin Mohammed Smart University, United Arab Emirates

In response to revised learning goals defined by the government of the UAE, the Hamdan Bin Mohammed Smart University (HBMSU) has revised both the contents and approach to its teacher education approach. Four new teacher education programmes have now been created to enhance the knowledge, skills and competencies of UAE teacher educators, teachers, curriculum and assessment specialists. They include: i) Faculty Certificate in Smart Learning; ii) Master of Education in Smart Curriculum and Learning; iii) Master of Education in Gifted and Talented Education; and iv) Master of Science in Smart Assessment and Evaluation.

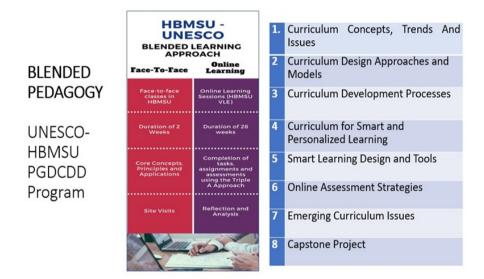


Figure 5. Blended Pedagogy of UNESCO-HBMSU's Post-Graduate Diploma in Curriculum Design and Development (PGDCDD)

All of these programmes combine personalized learning content, real world applications, innovative technologies and blended learning approaches within a multi-faceted faculty (Figure 5). Periodic teacher assessment is based on industry/work-place assessment, academic achievement, competency-based and personalized assessments, as well as technology enhanced assessments. One UNESCO-HBMSU diploma participant contributed immensely to the Blended Approach to Teacher Training (BATT) to work with teachers teaching refugee learners in Jordan.

At the same time, the Hamdan Bin Mohammed Smart University launched an initiative to design and develop an innovative strategy of professional development for teachers in the UAE through the utilization of powerful mobile learning tools and other emerging technologies that will provide personalized, on demand training. This initiative is a product of one of HBMSU's PhD scholars (Ms Athra Alawani) supervised by Prof Abtar Darshan Singh (Figure 6).

Presented by Prof Abtar Darshan Singh- Hamdan Bin Mohammed Smart University (HBMSU), UAE



Figure 6. Mobile learning tools and other emerging technologies that provide personalized, on demand training.

For more details on the programmes at HBMSU please refer to the presentation PPT or to https://www.hbmsu.ac.ae/study/masters/master-arts-online-curriculum-and-instruction

Box 14 – Digital platform leveraged to provide teacher training in Kakuma Refugee Camp, Kenya

According to a study by UNHCR, the UN refugee agency, on secondary education at Kakuma refugee camp, 90,000 children at the camp are eligible for secondary schooling but only about 6,000 (around 3%) are able to attend because of the lack of facilities and teacher shortages. To address these challenges, UNHCR and the Windle Trust invited the Faculty of Education of Utrecht University of Applied Sciences (HU) to help design a rapid, context-specific, high-quality teacher training package for the Kakuma camp.

Following missions in 2016 to understand the camp's education priorities, HU designed the programme in collaboration with two Kenyan universities, Moi University and Kenyatta University. One component is cascade training by HU teachers in cooperation with local universities, institutions and the government. The lead trainers visit the camp four times per year, while the remaining classes and support are given by means of a digital platform, and social and other digital media.

Basic teaching skills are covered, but the training is also evolving to strengthen the connection between schooling and employability, with teachers now being trained in coding and ICT. The refugee teacher graduates' desire for legal certification led to the QSEE (Quality Secondary Education in Emergencies) Diploma Programme funded by the Mastercard Foundation, with the first graduates in December 2019. Members of the first cohort are now assuming roles as trainers, which is important for sustainability. Although the teacher training programme began in Kakuma, there are hopes to eventually develop a teacher training academy, in collaboration with regional and local stakeholders, for the whole Intergovernmental Authority on Development (IGAD) region, which includes Djibouti, Eritrea, Ethiopia, Kenya, Somalia, South Sudan, Sudan and Uganda.

Presented by Dr Nicole Reith, Refugee Education (University of Applied Sciences Utrecht). For further information please see https://www.internationalhu.com/a-future-for-refugee-children

Finding 8: More efficient and impactful teacher education and management processes emerge through co-creation, collaboration and synergies between education partners

The Policy Dialogue Forum showed that alternative models of teacher training and management are possible where multilateral agencies, governments, civil society organizations (CSOs), non-governmental organizations (NGOs) and teachers jointly design and implement teacher-targeted interventions, sharing resources to support teachers and learning. The added value comes from collaboration, creating a virtuous circle leading to active learning environments, a significant move away from traditional teacher management models whereby ministries of education hierarchically determine teacher education

Finding 9: Collaboration within extended learning communities can radically enhance schoollevel instruction and management

Policy Dialogue Forum participants expressed their commitment to increasing opportunities for all those involved in providing quality education in formal and non-formal settings. This includes parents, community experts, entrepreneurs, health and welfare professionals, volunteers and school and district leaders. Participants acknowledged that everyone involved is needed to help schools create responsive learning environments that keep pace with today's rapidly evolving climate. "Education is no longer the responsibility of only schools and teachers, but communities, agencies, society, and not only the Ministry of Education, but ministries of agriculture, science, culture... They need to come together in equipping teachers and learners with relevant skills."

Dr. Maszlee bin Malik, Minister of Education of Malaysia

In the future, schools may need to employ a more intricate balance of teachers, generalists and specialists to support learning, with specialists invited from the workforce or community to provide extra subject matter expertise and extra-curricular experiences.^{xxiii} New participants, and greater recourse to educational software, may come into the picture to relieve the massive pressure caused by the various non-pedagogical tasks that teachers tackle each day, including administrative duties. "Teacherpreneurs," for example, may take on roles in mentoring new teachers, developing specific learning goals with students and monitoring their learning, piloting new pedagogical practices and organizing community partnerships.

Developing learning teams does not necessarily involve hiring new staff. It rather entails understanding existing roles and skills, diagnosing challenges and gaps, and considering how best to utilize existing staff in a team; focusing any new roles on the areas of greatest need; and enabling more teamwork.^{xviv} Expanding who works with students, and in what ways, may make the teaching profession more inviting for undergraduates and for professionals already in the labour market.

Box 15 - The Teach for All Collective Leadership and Learning Model.

The Teach for All approach is based on the notion that the most promising hope for reimagining education is in the collective leadership and learning of students, teachers, and communities that are, every day, navigating systemic challenges in their classrooms, schools and education systems. The Teach for All Collective Leadership and Learning model (Figure 7) is further based on the idea that the collective wisdom of students, families,



We develop specialized knowledge and skills essential to our role.

We strive to fulfill our potential as leaders

Figure 7. Collective Leadership & Learning Model

educators and communities is needed to inform education's purpose.

According to Ms Tamara Durzi, Senior Director for Middle East and North Africa, Teach for All: "If we expect students in our classrooms to learn differently, we must help adults (teachers) in our classrooms to teach differently. The vision of student success is an authentic, ongoing conversation – a process more than a product – that emerges from and drives forward collective action."

Presented by Ms Tamara Durzi, Senior Director, Middle East and North Africa, Teach for All. For more details please refer to the presentation PPT or https://teachforall.org/topics/ collective-leadership

II. Policy recommendations

Countries' teaching workforces must evolve to keep pace with a rapidly changing world and embrace the new opportunities these changes bring. To that end, Policy Dialogue Forum participants called for informed teaching policies that anticipate the full implications of emerging trends and dare to do things differently. Such policies need to cover teacher preparation, continuous professional development, career progression, leadership and management of the education workforce, teachers' well-being and teachers' voices.

Strategic investments and experimentation across all of these spheres should unlock existing resources and talents and generate efficiencies in the teaching workforce that underpin longer-term returns.

Recommendation 1 – Update existing teacher education systems and look at the potential for scaling up innovative solutions

A modern teaching corps must be ready to respond to technological innovation, demographic shifts and environmental changes. However, models of initial teacher training and continuous professional development in many countries are still based on outdated models of education, which are often ineffective.^{xxx}

Policy Dialogue Forum participants underlined that reform goals should always be realistic in the light of economic and political contexts, and national infrastructure. They should also safeguard labour rights, fair working conditions and wages in both the public and private sectors. There is room, however, for exploring the potential of flexible solutions adapted to local contexts that successfully fill human resources and capacity gaps. Could such initiatives be taken to scale to deepen impact and advance large-scale systems change?

To sustain change, reflection should include more systematic investigation of questions such as: What has worked and at what cost? Who could support the transition to a larger scale (with advocacy, capability and capacity building) and with what resources? Are there examples or road maps that show how to amplify or scale up good practice? Analysing the answers to these questions would help to ensure that research on pilots and prototypes generates evidence for advocacy and future research, as well as creating recommendations for the design of national teacher policy and policy guidelines.

Recommendation 2 – Anchor and better align teacher training and support efforts within national education systems

Countries need to better anchor localized teacher education initiatives (e.g. teacher professional development for refugee teachers, accreditation and certification models) into national education systems as well as align opportunities for comprehensive change with sector reform plans and legislation, including reforms to national curriculum, competency-based curricula and qualifications frameworks (see below).

In Kenya, for example, Voluntary Service Overseas (VSO) works closely with the District Quality Assurance and Standards Office within local government and the Kenya Institute of Curriculum Development (KICD) on part of its training related to the application of the competency-based curriculum (CBC) followed by all schools in Kenya. Kenya has also approved the University of Utrecht certificate of teacher training with support from Mastercard Foundation. Moreover, the training is currently being adapted for use in national teacher training colleges throughout Kenya.

Recommendation 3 - Engage with and empower the education workforce to lead change

The Education Commission report Transforming the Education Workforce: Learning Teams for a Learning Generation emphasized that all members of the education workforce must be strengthened and empowered to become change agents. Ministries of education need to listen to teachers and their representative bodies so that they understand teachers' concerns and basic needs and can hence design relevant and timely support for teachers in their changing roles. Policy makers must also engage with the school- and district-level workforce and other key stakeholders (including parent groups, civil society and government bodies in other sectors) to establish joint ownership and creation of reform processes and develop strong feedback loops to inform and drive in-depth change. xvvi

Box 16 - Strengthening Multi-Partner Cooperation to Support Teacher Policy and Improve Learning, Uganda

The Norwegian Teacher Initiative (NTI), funded by the Norwegian Agency for Development Cooperation (NORAD) aims to support countries' efforts to realize SDG 4.c of the Education 2030 framework by strengthening coordination and cooperation among key international agencies and partners. NTI involves seven international partner organizations– UNESCO (lead coordinator), Education International, the Global Partnership for Education, the International Labour Organization, the UN Refugee Agency (UNHCR), UNICEF and the World Bank – and four African countries: Burkina Faso, Ghana, Malawi and Uganda.

Uganda will soon implement its National Teacher Policy (NTP) with the support of the NTI and other partners. Priorities consist of disseminating the approved NTP to local education stakeholders, including private and public education providers, establishing a National Teacher Council and improving leadership, management and governance of teacher training institutions, in particular by developing national guidelines.

Uganda will also develop an implementation plan for engaging in continuous social and policy dialogue with teacher representatives. Representatives from the Ministry of Education and Sports and from teacher unions are expected to participate in a regional forum on social and policy dialogue, to facilitate the sharing of experiences among the four NTI countries.

Another priority identified by Uganda is to scale up the Teacher Management Information System (TMIS), which is an online platform facilitating teacher registration, recruitment and management. The scale up will consist of training district education officers, head teachers, teachers and municipal education officers in selected regions to familiarize users and ultimately increase the rate of teacher registration in TMIS.

Presented by Brighton Barugahare, Norwegian Teacher Initiative – Strengthening Multi-Partner Cooperation to Support Teacher Policy and Improve Learning

Recommendation 4 - Invest in ICT infrastructure and ICT focused teacher-training

It is critical for countries to invest in ICT infrastructure to ensure that learners (and teachers) benefit from the opportunities offered by the digitalization of pedagogy, learning contents and continuous professional development. Policy Dialogue Forum participants urged, however, that where local, low-cost, technology-based solutions are proposed, investments are made with careful consideration of their added value and sustainability. There must be close attention to context, infrastructure, connectivity and appropriate training for teachers to avoid the risk of aggravating inequalities and inappropriate uses of ICT and online information. Given legitimate concerns about many sources of online information, teachers and students need to work together to strengthen their media and information literacy (MIL) to interpret search results, critically assess the quality and veracity of information and make ethical judgements about how to use it. Public oversight, monitoring and regulation of ICT infrastructure will therefore be important to ensure the use of educational technologies in a safe, equitable and critical manner.

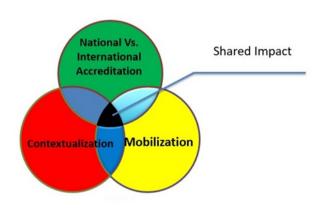
Recommendation 5 - Review roles and responsibilities, and update professional standards and certification

Schools of the future will work with a more complex mix of teachers, subject specialists, generalists and non-teaching staff to support skills acquisition. Countries therefore need to reflect on what types of incentives would bring different actors into schools, what type of training they might need and how to manage quality control.

Rethinking who is involved in teaching and learning may also challenge the status quo for employment arrangements and teacher credentials. Countries need to "[There is a] need to focus on the professionalization of teachers by means of teacher training (and credits for this) and Continuous Professional Development, and attracting the best talents to the teaching profession, including through teacher academies and innovation awards as well as school-based mentors."

Dr. Eugène Mutimura, Minister of Education of Rwanda

anticipate the evolution of training qualifications, and the certification that will enable teachers and non-teaching staff to work alongside one another and demonstrate mastery.^{xxvii} This includes developing training or qualifications standards for school and district leadership roles, and recognizing the need for clearly defined standards and guidelines for teacher education and career advancement.



In relation to both early childhood education and refugee education. Policy Dialogue Forum participants underlined the need for formal certification and accreditation to strengthen capacity. skills and competencies gained through participation in high-quality teacher training. Moreover, such accreditation should allow training graduates to cross over into national education systems (as a pathway to sustainable livelihoods). A desire was also expressed for a specialized refugee education credential recognizing the attainment of minimum standards for teacher professional development.

Figure 8. Shared impact on future schools

Significant policy challenges still remain (particularly for refugee teachers) including the recognition of teacher status (in many countries refugee teachers are only recognized as "incentive" teachers), accreditation, and right to work. There are hopes that the open source, inter-agency Teachers in Crisis Contexts Collaborative (TiCC) Training Pack can be certified and made compulsory (with UNHCR as the education partner).

Recommendation 6 - Establish tools for diagnostics, measurement, comparison and deliberation

Finally, Policy Dialogue Forum 2019 participants highlighted the importance of international and national data collections on teaching and learning to support evidence-based policy making and to help countries monitor progress towards their SDG 4 targets, including Target 4.c

In the first instance, this includes general information on the status and well-being of teachers internationally, such as that provided by the OECD Teaching and Learning International Survey (TALIS) 2018, the UNESCO Institute for Statistics (UIS) database, and its proposed internationally comparable standard (ISCED-T) to classify teacher education and training programmes and assist countries to compare progress with international goals. However, to support national objectives, there is also a need for diagnostic instruments and information-gathering tools anchored in countries' own frameworks to assess teacher capacity, track measurements of progress, diagnose challenges and generate ideas as the basis for deliberation on teachers and teaching.

Those involved in refugee education already understand the importance of mapping teacher capacity at local level: i) as a baseline during needs assessment to better design and tailor teacher professional development approaches – including at the individual teacher level; ii) as a basis for contingency planning for future crises, and; iii) to avoid duplication and competition for funding.

Box 17 – OECD Teaching and Learning International Survey (TALIS)

The OECD Teaching and Learning International Survey (TALIS) is the largest international survey asking teachers and school leaders about their working conditions and learning environments. It provides a barometer of the profession every five years. In 2018, TALIS surveyed 260,000 teachers in 15,000 schools, representing more than 8 million teachers across 48 countries. It asked teachers and school leaders about their work, their schools and their classrooms using questions such as whether teachers spent more time on actual teaching and learning in a typical lesson than in previous years. It also asked questions about whether they felt prepared to teach when they started teaching, what sort of continuous professional development programmes they participate in, and how these programmes affect their practice.

The 2018 report also looked at how teachers apply their knowledge and skills in the classroom in the form of teaching practices, accompanied by an assessment of the demographic data of those classrooms and the school climate to provide context on learning environments. The report then assesses how teachers acquired their knowledge and skills during their early education and training, as well as the steps they take to develop them through continuous professional development.

Based on teachers' and school leaders' voices, the report has offered a series of policy orientations to help the teaching workforce strengthen its knowledge, and professionalism.

Presented by Karine Tremblay, OECD, TALIS Senior Analyst and Team Leader, Supporting the Teaching Profession in a Changing World, TALIS 2018 First Results and Key Messages.

Box 18 – ISCED-T, Classification of teacher training programmes (UNESCO Institute of Statistics)

Due to the lack of an international standard for teacher training, and the reliance on national standards, there is much debate on how to measure teacher training in a way that provides a global perspective of what is happening in education systems. The current indicator on the percentage of teachers who are trained in line with national training standards (Indicator 4.c.1) requires data on the proportion of teachers in pre-primary to upper secondary education who have received at least the minimum amount of formal teacher training, whether pre-service or in service, to do their job. But qualifications for teaching vary from country to country, so this data is not internationally comparable.

The definition of a "trained teacher", for example, should imply a teacher is trained to ensure that pupils learn. In practice, however, some countries may have high shares of trained teachers (according to their own national definitions), but standards that are very low and accompanying high rates of children who do not achieve minimum levels of learning. Other countries may achieve high levels of learning despite low proportions of trained teachers. In summary it is difficult to draw any conclusions on what is happening in classroom – in part because the data on teachers does not accurately reflect the quality and levels of their training.

As the custodian for SDG 4 data, the UNESCO Institute of Statistics (UIS) is developing a framework to help bridge the gap between the current indicators: the International Standard Classification for Teacher Training Programmes (ISCED-T). Welcomed at the 6th meeting of the Technical Cooperation Group (TCG) on the Indicators for SDG 4 in Yerevan, Armenia, in August 2019, the framework builds on and extends the International Standard Classification of Education (ISCED), responding to both a longstanding demand for more data and the policy window opened by the prominent new position of teachers in the Education 2030-SDG 4 Agenda.

The ISCED-T proposal is a positive step towards an international public good: global policy dialogue on teacher education and training that links national definitions of teacher training with international standards and goal setting. It draws on an extensive review of 170 teacher training programmes reported in the ISCED database.

Presented by Friedrich Huebler, UIS, Classification of Teacher Training Programmes: Progress and next steps towards ISCED-T

III. Conclusion

Emerging teaching and learning trends and educational technologies are having a powerful impact within classrooms and education systems. But progress towards SDG 4 has been uneven and there is limited time left before the 2030 SDG deadline. Without delay, governments must consider innovative and cost-effective approaches and solutions to teaching and learning that generate more equitable and lifelong learning opportunities.

At the 12th Policy Dialogue Forum in Dubai, we were reminded that in low-resource contexts, the urgent priority is still to recruit and adequately train sufficient numbers of teachers. At the same time, it is vital to invest in integrated approaches to teacher education and professional development that tackle the significant challenges presented by overcrowded classrooms, insufficient teaching and learning materials, low compensation, and unrecognized teaching certifications.

In middle- to high-income countries, the uptake of digital and open-source technologies, resources, textbooks and educational software may become an integral part of a school's toolbox. But these developments must not detract from other important areas of teacher development, such as strengthened and evolving models for teacher training, and pedagogical and administrative support needed to support the future of teaching and education.

At the end of the 12th Policy Dialogue Forum, the members of the International Task Force on Teachers for Education 2030 made a commitment to continue strengthening the capacities of the task force to provide technical and policy advice to all countries, to act as a platform for multi-stakeholder, southsouth policy dialogue and engagement, and to galvanize and coordinate global efforts in support of teachers in realizing national education goals.

Annex 1: Policy Dialogue Forum Meeting Agenda

AGENDA

Saturday December 7	Arrival of international participants						
	Afternoon	14.30-17.30	NTI Steering Committee Meeting (Norwegian Teacher Initiative members only)				
		15.00-17.00	Early regist	Early registration			
Day 1 Sunday December 8	Morning	08.30	Registration opens				
		09.00-10.00	Registration and coffee				
		10.00-12.30	TTF Steering Deans of Committee meeting)1) (SC members only) UNESCO chairs roundtable		nairs	Teachers / principals roundtable	
		12.30-14.00	Lunch				
	Afternoon	14.00-15.30	Plenary Session (Presentation of ongoing projects relevant to teachers – Education Commission, IIEP, OECD)				
		15.30-15.45	Coffee				
		15.45-17.30	AFRICA regional group meeting	ARAB States regional group meeting	ASIA/ Pacific regional group meeting	LAC reg group ing	
	Evening – Side events	17.45- 18.00	00 Side Events				

Day 2		08.45-09.00	Welcome				
Monday December 9		09.00-10.00	Plenary Session: Official Opening				
Morning		10.00-10.30	Group photo and coffee				
	Morning	10.30-12.00	Ministerial Round- table (closed meeting)	Thematic session: Pre-primary teachers (TTF Thematic group 1)	Thematic session: Inclusion and equity (TTF Thematic group 2)	Thematic session: ICT and distance education (TTF Thematic group 3)	Thematic session: Teacher management in crises and emergencies (TTF Thematic group 4)
		12.00-14.00	Lunch				
	how to organ	ote: All parallel sessions above will look at the future of teaching in light of: (a) trends in learning and ow to organize teacher education/training; (b) how to address inequalities; and (c) what innovations to ring to teacher development					
	bring to teac	14.00-15.15	Plenary Session: Multiple stakeholders panel 1 (2 MoE, Dean, Teacher/principal, NGO/DP/Private organisation, Thematic: ECCE): Teaching Approaches/ Teacher Education				
	Afternoon	15.15-15.45	Coffee				
		15.45-17.00	Plenary Session: Multiple stakeholders panel 2 (2 MoE, Dean, Teacher/principal, NGO/DP/Private organisation, Thematic: Crisis and Inclusion)				
		Addressing inequalities					
	Evening – Side events	17.15	Side Events				

Day 3 Tuesday December		09.00-10.15	 Plenary Session: Multiple stakeholders panel 3 (3 MoE, Dean, Teacher/principal, NGO/DP/ Private organisation, Thematic: ICT) 				
10			Innovations				
	Morning	10.15	Coffee available				
		10.15-11.15	Plenary Session: TTF's work on teacher policy development: Launch of the online and full version of the Guide and Discus- sions of experiences of countries engaged in the development of their teacher policy				
		11.15-12.00	Plenary Session: The Development of the Taxonomy of Teacher education: Progress report and discussion				
		12.00-14.00	Lunch				
	Afternoon	14.00-16.30	Annual TTF members' meeting: (TTF Focal Points/members only) Secretariat reporting: State of implementation of the Strategic Plan (incl. welcoming new members) Regional groups reporting (annual report) Thematic group reporting (annual report) Election of new members to the TTF Steering Committee				
		15.00	Coffee available				
	Evening – Side events	17.00	Side Events				
Day 4		08.30-11.30	Visiting Education Institutes				
Wednesday December	Morning		Coffee available				
11		12.00-13.00	Plenary Session: Conclusions and way forwards				
			Closing ceremony				
	Afternoon	13.00-14.00	Lunch				
		14.00-15.30	TTF Steering Committee meeting (2) – Lessons learnt and way forward (SC members only)				
		14.00- evening	Sightseeing – social activities				
Day 5							
Thursday December 12	Departure						

Annex 2: The Dubai Declaration





مؤسسة حمدان بن راشد آل مكتوم لــلأداء التــعليــمي المتــميــز Hamdan Bin Rashid Al Maktoum Foundation for Distinguished Academic Performance



UNITED ARAB EMIRATES MINISTRY OF EDUCATION

International Task Force on Teachers for Education 2030

Annual Meeting and 12th Policy Dialogue Forum

Dubai, United Arab Emirates

8-11 December 2019

Dubai Declaration on the Futures of Teaching

(Dubai, 11 December 2019)

During the 12th Policy Dialogue Forum of the International Task Force on Teachers for Education 2030 held in Dubai, United Arab Emirates, we, ministers, representatives and participants from 102 countries, came together as a community of teachers and education stakeholders committed to fresh thinking on how to prepare teachers for education systems of the future and to realizing the ambition of Sustainable Development Goal 4. We gathered insights on innovative teaching approaches, emerging education technologies, equity and inclusion in and through education, teacher education policies and practices from around the world and sought to identify gaps in policy and practice. Our conversation focused on the role of teachers in this changing context to ensure equity and inclusion, in harnessing new technologies to offer meaningful learning, and in engaging with ongoing

professional development. In addition, Deans of a number of institutions, as primarily responsible for teacher education, met and provided their rich perspectives and recommendations.

Many countries are already forging bold paths ahead – recognizing that learners today need the knowledge, skills and attitudes to fully realize their potential and to contribute meaningfully to their community, society and the world. Teachers play an important role in transforming their learning environment and in changing their classrooms and societies. We noted the need for independent, self-directed and team-based learning in the future in a context in which technologies are shaping how teachers and learners interact with each other and the world.

While technologies can increase access to education, inappropriate use can pose risks of exacerbating inequalities, disinformation and teacher and learner wellbeing. Teachers need to be well-trained to strategically use learning technologies and to facilitate a critical and engaged interaction with digital learning methods. Investments in learning technologies should be done with careful consideration of their effects on learners, societies and the sustainability of the planet, and should complement other important areas of teacher development, such as training, pedagogical and administrative support, and decent work.

We recognize that teachers are the key to addressing the learning crisis facing the world. We noted the challenges for teachers individually and collectively, and for the teaching profession more generally, and the diverse contexts in which they work. These include rural and remote areas, areas affected by conflict, displacement and migration, large class sizes and inadequate infrastructure and resources. Teachers are also impacted by climate change, economic instability, political crises and acute health

concerns. The challenge faced by the global community is huge - over 69 million qualified, properly trained and adequately remunerated teachers must still be recruited worldwide by 2030 to meet SDG 4.

In this context, governments and stakeholders at the Policy Dialogue Forum underlined the need for innovative education and teaching policies that respond to these global trends and challenges.

We, Ministers of Education and representatives of government, teachers and their representatives, development partners, teacher education providers, civil society, NGOs and the private sector participating in the 12th Teacher Task Force Policy Dialogue Forum 2019, have come together to restate our commitment to take bold action to accelerate progress towards achieving SDG 4 - Education 2030 Agenda, particularly target 4.c to ensure the supply of well-qualified, highly motivated and supported teachers. We re-affirm the need for bold visions on the future of teaching in national strategies and call for governments to make integrated investments across all policy dimensions of education systems impacting on teaching and learning.

We reaffirm our commitment to forms of teaching and learning that help overcome the exclusion of the marginalized and call on countries to ensure that schools and teachers are supported to address the unique learning needs of all students, including indigenous peoples, persons with disabilities, migrants and refugees, and to promote gender equality.

We are committed to supporting teachers to deliver quality education, including using technologies effectively in their classrooms, and to providing the necessary infrastructure to ensure this can occur, particularly in marginalized and disadvantaged schools and communities. We call upon governments, the international community and other stakeholders to:

- a) develop contextually relevant guidelines for teacher education, continuous professional development opportunities and career advancement;
- b) harness technologies in support of innovative and contextualized teaching and learning;
- c) provide teachers with the necessary tools, resources and pedagogic and psycho-social skills to use the new technologies in the classrooms of the future in a fair, safe, ethical and just manner;
- d) support relevant institutions, teachers and other stakeholders in identifying, developing, and incentivizing the use of innovative teaching and learning approaches and technologies.

We call on governments to intensify efforts to engage in social dialogue with teachers and their representative bodies to understand teachers' needs. We are also committed to the meaningful involvement of parents, communities and other local stakeholders in future-focused learning. In this respect we recommend:

a) support for all efforts at widespread and meaningful dialogue with all stakeholders and partners; and

b) working with all stakeholders in strengthening public education systems to deliver equitable and quality learning.

We call upon all actors to galvanize and coordinate national and global efforts in support of teachers in realizing inclusive and equitable quality education for all.

We call upon the International Task Force for Teachers for Education 2030 to continue acting as a platform for advocacy, knowledge sharing, country engagement and promoting South-South collaboration on pertinent teacher issues.

End notes

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The International Task Force on Teachers for Education 2030 is a global and independent alliance. Members are national governments, intergovernmental organizations, non-governmental organizations, international development agencies, civil society organizations, private sector organizations and UN agencies that work together to promote teacher-related issues.

The Teacher Task Force Secretariat is hosted at UNESCO's Headquarters in Paris. www.teachertaskforce.org