



International
Task Force on Teachers
for Education 2030



Innovation in teacher policy and practice in education recovery

*Final Report of the 13th Policy Dialogue Forum
Kigali, Rwanda
2-3 December 2021*

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Introduction

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Innovation is a critical engine to improving education by developing resilient, strong systems that can adapt to society's changing needs and goals. Innovation here is defined as the *implementation and diffusion* of an invention in a *particular context* (Fagerberg, 2006), and occurs in response to problems, challenges, or opportunities. The intervention does not have to be 'new to the world', it can simply be new to the context in which it is being implemented, whether in a single classroom, school or institution, or a whole system.

The COVID-19 pandemic has created pressure to change the way education is delivered, leading to clusters of innovations around the world. Governments must support education systems in harnessing these innovations as well as expand their capacity for innovation to effectively tackle the complexities and inequalities of the COVID and post-COVID eras.

Teachers lead in this innovation work: to reinvent our education systems, to find new ways to teach and learn, and to reimagine schools in ways that recognize that learning is relational and social. Drawing on their professional expertise, including knowledge of their students and student contexts, their courage and sense of moral imperative, teachers drive classroom innovations in support of increased quality, equity and relevance in learning.



How can education systems recover from the global pandemic? By capitalizing on the innovation and invention that the teachers and systems have activated during this time."

Linda Darling Hammond, Charles E. Ducommun Professor of Education Emeritus at Stanford University and founding President of the Learning Policy Institute, Opening plenary.

This report on innovation in teacher policy and practice summarizes the key issues raised during the plenary and breakout sessions of the 13th Policy Dialogue Forum in Kigali, Rwanda, 2–3 December, 2021. The discussion is illustrated with examples of innovative approaches and policies, and good practice in harnessing innovative capacity and policy development presented throughout the Forum. Examples have been chosen for their originality, to illustrate how innovation is driven by the local context, and to prompt changes in the thinking around teaching, teacher education and education policy. In addition, the report offers actionable policy recommendations for Teacher Task Force (TTF) members and beyond, including ministries, civil society organizations, international organizations and donors that will foster different forms of innovation in support of education transformation to achieve Sustainable Development Goal (SDG) 4, including Target 4c related to teachers.

The report is organized in alignment with the three sub-themes of the Forum. Each sub-theme sought to respond to the questions below:

Sub-theme 1: Innovation in teaching and learning. What resources, skills and enabling factors do teachers need to enhance their capacity to innovate in their practice? How can the ingenuity and creativity of teacher innovations be harnessed and expanded to support further innovation in support of better experiences and outcomes for learners and increased equity in education?

Sub-theme 2: Innovation in teacher education. What innovations in curricula and organization of pre-service and in-service teacher education have emerged during the pandemic? How are information and communication technologies (ICT) harnessed to support equity in teachers' professional learning? How does teacher education need to adapt to empower teachers to be confident pedagogic innovators?

Sub-theme 3: Innovation in policy and enabling innovation through policy. How can policies be shaped to facilitate innovation in schools and classrooms? How can policy-making itself become more innovative — who might be involved and what kinds of evidence might be drawn on? And what policies, partnerships and coalitions can advocate and sustain innovation?

It is critical to rethink these three areas of teacher practice and policy to achieve global goals and national priorities. It is especially important as institutions deal with the effects of the pandemic, including exacerbated inequality, funding constraints, and historically poor learner outcomes in many communities.

The report is based on the video recordings of the sessions, material provided by presenters, and background information from partner literature and the Forum concept note. However, in the interest of brevity, details of each contribution, presentation and debate at the Policy Dialogue Forum are not included.

Acknowledgements

We wish to express our deep appreciation to the Government of Rwanda, in particular the Ministry of Education and the Rwandan Convention Bureau for their support and for hosting the 2021 Policy Dialogue Forum and governance meetings in Kigali, 1-3 December 2021. Special thanks also go to the many speakers and panellists for their rich contributions, as well as the TTF member countries and organisations who coordinated the organisation of the breakout sessions.

A special thanks to Freda Wolfenden for the writing and compilation of this report.

Key Insights and Recommendations

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Key Insights

The following are key insights related to innovation in teacher policy and practice as discussed during the 13th Policy Dialogue Forum.

Key Insight 1: Foster innovation in support of teacher autonomy and agency

Teacher autonomy, agency and professional skills are critical for innovation in teaching to impact student learning outcomes. Teachers initiate, refine and implement innovations appropriate to their context and their students' learning needs.

Key insight 2: Create conditions for teachers to be able to innovate

The capacity for teachers to be innovative is dependent on the existence of decent working conditions, support (including from their school leader), adequate resources such as digital devices, appropriate incentives and access to formal and informal professional learning opportunities. This has implications for the role of the school leader and their relationships with teachers.

Key insight 3: Recognize teachers' contributions to innovation

Successful education responses to the pandemic are widely recognized to owe much to teachers' professionalism. As systems recover, it is important to continue to publicly recognize teachers' innovation and provide spaces for them to share their knowledge and experiences.

Key insight 4: Integrate inquiry into teacher preparation and development

To be confident pedagogic innovators who improve equity in learning for their students, teachers need opportunities in pre-service programmes to develop skills of classroom inquiry; this will prepare them to be self-directed lifelong learners.

Key insight 5: Move to teacher-led and practice-based teacher professional development

Teacher professional development must be teacher-led and classroom-focused to respond to the needs of increasingly diverse classrooms and thus can take multiple forms. Context appropriate ICTs have a role in supporting teacher professional learning communities and teachers' access to expertise and resources. This applies to teacher educators as well as teachers.

Key insight 6: Create an environment that supports sustainable innovation in teacher education

When planning innovations and reforms in teacher education, consideration needs to be given to the relationship of teacher education policy to all other teacher policies so that reform is systematic, and policies reinforce each other.

Key insight 7: Recognize the importance of social dialogue in teacher policy development

New forms of policy development draw on teachers' unique expertise and authoritative voices through sustained structured social dialogue. This ensures policies are grounded in teachers' professional and life experience.

Key insight 8: Nurture partnerships for innovation

Partnerships, including those with non-education actors, have an important role in stimulating and leveraging innovations in teacher policy and practice.

Key insight 9: Combine structure and flexibility in policies to foster innovation

Teacher autonomy and agency to develop innovative practice is enabled by holistic and comprehensive education policies with clear frameworks and quality standards *combined* with flexibility at local level. This helps to address the tension between autonomy and accountability at different levels within the education system.

Recommendations for policy-making

Based on the discussions and insights from the 2021 Policy Dialogue Forum, the following are recommendations for governments and stakeholders to ensure that innovation is harnessed to support teachers and teaching, and ultimately contribute to equitable and inclusive and quality learning for all.

Recommendations to generate, foster and diffuse innovations in teaching in response to challenges or opportunities within schools and other learning spaces:

- 1. Invest in teachers to empower them to play their part as innovation partners in revitalizing pedagogies, curricula and professional relationships.** This should include the following:
 - Providing greater access to resources, including appropriate infrastructure, tools, information and communication technologies (ICTs), different forms of knowledge (codified and practical knowledge) as well as teaching and learning resources.
 - Fostering more opportunities for teachers individually and in teams to develop their capacity relating to innovation, in particular through teacher-led inquiry, which helps teachers generate evidence to evaluate and improve innovations in their own practice.
 - Improving conditions of work, including class-size, working hours, access to health and sanitation facilities and psychological and socio-emotional support to ensure teachers' health, safety and well-being, without which innovation will be constrained.
 - Appreciating the key contribution of teachers to education innovation and in decision-making. Teachers should be given visibility in the public space in recognition of their role in the production and dissemination of new professional and pedagogic knowledge.
- 2. Review the role and responsibilities of school leaders** and update professional standards to reflect their role as instructional leaders who nurture collaboration, teamwork and agency in their teaching staff.
- 3. Ensure teaching policies are sufficiently flexible** to offer space for teachers to innovate to meet the learning needs of all their students. Teacher autonomy to develop new forms of practice requires a strong culture of trust and high-quality, lifelong teacher education; it should, however, also be accompanied by quality standards frameworks including those related to professional development, teacher competencies and standard career paths.

Recommendations to support innovation in teacher education to prepare teachers to be future-oriented lifelong learners:

- 4. Generate a nationally agreed vision for high-quality teaching** which can provide clear direction for innovation in teacher education both in formal accredited programmes and in more informal teacher-driven initiatives. Provision of a knowledge-sharing platform can support expansion of the knowledge base on new practice-based professional development approaches, including those that harness the power of digital technologies.
- 5. Strengthen teacher educators' capabilities to engage with the latest research** in learning, cognitive development, psychosocial approaches, digital technologies and other relevant areas such that they are able to confidently initiate and embed innovations of pedagogy and curricula in teacher education, including initial, pre-service and continuing professional development programmes.

Recommendations relating to the formation and successful implementation of innovative policies concerned with teachers and teaching:

- 6. Ensure innovative policies are coherent with other relevant policies and contextual realities within the education system and wider national structures.** They also need to take into consideration national and local capabilities, infrastructures, cultural factors such as routines, structures and practices and the experiences of teachers and their students. Achieving coherence may involve coordination with multiple ministries and non-government actors. Innovative policies covering teachers should also be holistic and cover all relevant interconnected dimensions of teachers and teaching that organize their work to ensure their effectiveness. Policies that specifically target driving innovations in education and teaching can also play an important role to foster improved practice, preparation and support.
- 7. Prioritize a more inclusive approach to education policy development through social dialogue.** Teachers' experiences and deep knowledge of their students and contexts are critical inputs to successful innovation. Their voices, and those of their representatives, need to be heard in the policy development process. ICTs can play a role in facilitating wider participation in policy development. This shift may also require attention to strengthening the capabilities of policy-makers and other stakeholders involved in the process.

Theme 1: Innovations in Teaching and Learning

The background is a solid teal color with several large, overlapping, organic shapes in various shades of teal and dark teal, creating a layered, abstract effect.

Teachers are critical in bringing about innovation in education. Teaching and learning innovations need to be meaningful for teachers and relevant to the work that they do. This requires that teachers be the starting point for innovation as they are best placed to adapt and evaluate classroom practice to become more inclusive and support improved student learning outcomes.

Innovation is mainly a process of production of knowledge by teachers and sharing this knowledge and sharing these experiences.”

Antonio Novoa, Professor, University of Lisbon, plenary panel 1 (36.05).

Teacher-led classroom innovation has always been present, enacted by bold visionary teachers. Teachers have adopted new pedagogies, assessment practices, methods of classroom management, imaginatively created or adapted resources and collaborated with different actors including their peers to generate grassroots innovations. During the school closures and unprecedented disruptions of the pandemic, it was essential for teachers and other educators to innovate for continuity of student learning. They were able to devise and implement a myriad of innovations — new ways to connect to students and families as well as new pedagogies. Such decentralization of innovation meant that responses were localized, and appropriate to the needs of students and their families in each context.

Teachers have been innovators, leading the way to new approaches in education. It is critically important to seize the opportunity to follow up on innovations that occurred in teaching, educator preparation and school designs.”

Linda Darling Hammond, the Charles E. Ducommun Professor of Education Emeritus at Stanford University and founding President of the Learning Policy Institute, Opening plenary.

As the world begins to emerge from the pandemic into an uncertain future, teacher-led education innovation is even more critical, playing a central role in driving improvements towards inclusive, equitable, good quality education for all.

Box 1. 2021 Varkey Global Teacher Prize winner: classroom innovation for inclusion

Keishia Thorpe, an English teacher at International High School Langley Park, Bladensburg, Maryland, was selected as the 2021 Global Teacher Prize Winner from over 8,000 nominations from 121 countries. She shared how she innovates in her classroom to improve the learning of her first-generation American students by adapting to their social reality, and not allowing their current situation and experiences to limit their aspirations and goals. Her key actions include: adapting the reading programme to make it culturally relevant to her students; establishing strategies to increase students' ability to be successful in her classroom and their self-efficacy for academic success; and ensuring access for her students to opportunities for further education after school.

Her innovations have led to a 40 per cent increase in her students' reading levels, with many being awarded full college scholarships.

The Global Teacher Prize is a US\$1 million prize which is awarded annually by the Varkey Foundation to a teacher who has made an outstanding contribution to the profession.

For more details, please refer to the Opening Ceremony and the [Global Teacher Prize website](#).

Teachers' professional autonomy and innovation

Building more resilient education systems means equipping teachers with the necessary skills, embracing innovative practices and providing teachers with the autonomy and capacity to innovate."

Firmin Edouard Matoko, Assistant Director-General of the Africa Department of UNESCO, Opening plenary.

To sustain and renew education through grassroots innovation, the exercise of teacher professional autonomy is critical. Teachers draw on their professional knowledge and wisdom to select, modify and evaluate pedagogic approaches, learning assessments and teaching and learning resources so that they are appropriate for their context and learners' needs. Professional autonomy enables teachers to be highly adaptive, including in a crisis such as the pandemic. Their adaptability is an important factor in education system resilience.

Key insight 1

Foster innovation in support of teacher autonomy and agency

Teacher autonomy, agency and professional skills are critical for innovation in teaching to transform student learning outcomes. Teachers initiate, refine and implement innovations appropriate to their context and their students' learning needs.

However, there were concerns expressed at the Forum that some current discourses and policies were potentially endangering the professional identity and autonomy of teachers. From a policy perspective, top-down approaches to innovation (for example, a rigid curriculum with detailed lesson plans) devalue teachers' professional judgment and competence to design lesson activities that meet their students' needs. Inflexible teacher standards can be harmful to innovation, as well as to educational renewal and teachers' professional growth, as they do not allow for the changing conditions of teaching and learning inside and outside of schools. The use of technology tools such as artificial intelligence to replace teachers rather than as an aid to teachers can be equally harmful.

However, professional autonomy does not mean working in isolation or solitude, nor does it imply an absence of accountability. Innovation in this area points to a shift in the schooling model and an increasingly collaborative approach to teachers' work. Indeed, collaboration at all levels was emphasized as vital for innovation: teachers collaborating in their planning; teachers exchanging ideas across disciplines and schools; teachers and researchers engaged in continuous dialogue about the latest evidence and knowledge relating to teaching and learning; and teachers co-creating curricula and resources with their peers, school leaders and other actors to ensure the continued relevance of education to the needs of modern societies. This collaboration should not be imposed; instead, through shifts to more collaborative approaches, forms of responsive accountability can be exercised by educators, after taking into account the interests and wishes of relevant stakeholders (Sachs & Mockler, 2011).

We understand collaboration to be the prerequisite for innovation."

Kati Anttalainen, Senior Specialist at the International Relations Secretariat, Ministry of Education and Culture, Finland, plenary panel 1 (24.10).

New forms of working for teachers have emerged during the pandemic — for example, co-ownership of children’s learning with parents. Forum participants spoke of teachers making extraordinary efforts to maintain human connections with parents and caregivers as well as their students.

Box 2. Learning through play: new partnerships and pedagogies

A play-based approach is increasingly seen as an effective innovative strategy to support children’s well-being and learning and, particularly important in the pandemic, to strengthen relationships with parents and ease children’s re-integration to school.

Play-based learning is intended for all children, not just the youngest, to help them gain a breadth of skills including problem-solving and critical thinking, as well as basic skills. It encourages curiosity, collaboration, courage and a sense of self-reliance while also being fun, absorbing and personally meaningful for children. Recognized by parents as integral to children’s holistic development for all ages, play provides an opening for teachers to interact with parents in different ways to encourage and develop play activities beyond the school.

However, play-based learning is a new approach in many contexts and the adoption of play-based pedagogies and child-led play in classrooms involves a shift in the role of the teacher, from keeper of knowledge to experimenter and collaborator. For teachers to be able to make this transformational shift requires an enabling environment, both locally in the school and in policy. It also requires teachers to be able to take advantage of professional development and time to engage in detailed collaborative planning.

Within play-based learning approaches in Rwanda, technology-based games (apps) have been found to be motivating and engaging for learners, and children have been excited to return to school. Fun, interactive digital environments bring the real world to the class and can enhance learning experiences, including in remedial programmes. However, these apps must be appropriate to the context of education and related to the curriculum. It is also critical for girls and boys to have equal opportunities to engage with a wide range of different types of apps: play-based pedagogies should be gender-responsive, and not promote gender-based activities and roles.

*Presented by UNICEF and TTF ECCE Thematic Group
For more details, please refer to [session 1.2](#).*

Children are the masters of play. So as long as we create an enabling environment for them, they will always fly, they will always be innovative, always be creative and always be creative thinkers.”

Emmanuel Murenzi, Country Director, Inspire, Educate and Empower Rwanda (IEE), session 1.2 (9:17).

Enabling conditions for classroom innovation

Classroom innovation can only flourish within a context of collaboration and professional autonomy. Both positional and distributional leadership¹ have an important role here: for school leaders to be empowered to support teachers in classroom innovation requires school leaders to move from a managerial role to proactive instructional leadership and to engage in collaborative decision-making with teachers and students. In many countries, this shift will involve reviewing the standards for school leaders to address quality concerns and variations in how the role is understood and fulfilled. Cultural norms — for example around gender roles, school community relationships, evidence-based research, and the adoption of technology — may need to be challenged.

Rwanda is in the process of establishing an African Centre for school leadership with the aim of supporting governments in Africa to build capacity and promote effective school leadership for improved quality of teaching and learning outcomes.”

H.E. Valentine Uwamariya, Minister of Education, Government of Rwanda, Opening plenary.

Box 3. Global School Leadership Network: innovation in school leadership

The Global School Leadership Network was created in 2021 to build a global community around school leadership as well as to identify current and future challenges of school leaders, promote innovative solutions and reinforce their voices in relevant academic and policy-making communities. It is an initiative of the Varkey Foundation and Global School Leaders, which is part of the TFF.

During the breakout session, Professor Jose Weinstein, Director of the Global School Leadership Network Programme in Chile, identified the three key priorities for school leaders through the pandemic crisis and initial stages of recovery. First is the changed priorities of students, specifically the need for socio-emotional support to students to minimize school dropouts. Second is the increased importance of the relationship with families, who have taken on a heightened role in the learning process throughout the pandemic. Third is the need for teachers to adopt new practices, such as interdisciplinary connectivity, the use of digital technologies, and collaborative work with families.

In this context, different types of leadership have gained importance: caring leadership, transformational leadership, and distributed leadership.

In the future, it is important to reflect on the extent to which these shifts in leadership should be sustained, what further shifts which might be beneficial for the renewal of education and the type of evidence which could usefully inform these discussions.

For more details, please refer to [session 1.3](#) and the [School Leadership Global Network website](#).

1. Distributed leadership is primarily concerned with the interactive and interdependent practice of leadership while positional leadership refers to the roles and responsibilities of those who are formally assigned authority. In the context of schools, distributed leadership would therefore comprise shared leadership roles amongst different actors including teachers, head teachers, principals, teaching assistants versus the positional leadership of one individual in a particular position of authority.”

Forum participants emphasized the need for innovations to be owned by the whole system, including the school leader. The teacher is a change-maker but if teacher-led innovations are not endorsed by the system then they will rarely be sustained. Similarly, innovations are unlikely to be successful if teachers are merely implementers of policy rather than actors in their own practice.

“Is innovation being pushed to the teacher or does the whole system role model the innovation? Is it owned by the whole system?”

Karema Modern Musiimenta, Country Director for Uganda, STIR Education, plenary panel 1 (19.52).

Innovations in teaching and learning with digital technologies

Digital technologies offer the potential to personalize learner support and accommodate diversity, enhance access to resources, and facilitate collaborative learning for teachers and students, unhindered by space and time. During the pandemic, governments, non-governmental organizations (NGOs), civil society organizations, and small groups of teachers designed and made freely available digital learning packs and resources. In South Africa, for example, the African Institute for Mathematical Sciences School Enrichment Centre (AIMSSEC) developed lessons in Google classroom and WhatsApp that could be accessed both by teachers and their students via mobile phones (plenary 1).

Box 4. Egypt: Educate Me Foundation: teacher ownership of innovation with technology

The Educate Me Foundation runs a community school and offers professional development programmes to teachers and students with a focus on learner-centred pedagogies and a skills-focused curriculum. They aim to empower teachers, students and school leaders to be agile lifelong learners and drive local solutions to education challenges. In this work, the foundation emphasizes the importance of values and working on teachers' and students' mindset, offering them respect and dignity and a vision of what change could look like. During the pandemic, teachers drew on these capabilities to transform their teaching despite limited resources; teachers who had never used digital technologies before were able to reach their pupils through innovative uses of WhatsApp and by their own YouTube channels.

*Presented by Christine Safwat, Executive Director, Educate Me Foundation (Hamdan Prize Laureate)
For further details see [plenary 2](#) and the [Educate Me Foundation website](#).*

However, digital technologies are only ever part of the solution to improve student outcomes and they are not a teacher substitute. Forum participants emphasized that a range of high- and low-tech approaches are needed as appropriate to the context: when introducing technologies it is important to understand teachers' levels of familiarity, identify areas where they might be struggling, and determine which technology might be helpful to them.

“We need to improve teacher development through digital skills and opening learning opportunities in Africa and enable teachers to have access to digital devices.”

H.E. Valentine Uwamariya, Minister of Education, Government of Rwanda, Opening plenary.

Technologies invented outside the classroom can be a burden to teachers if not adapted and integrated appropriately. Feedback mechanisms need to be set up when new technologies are introduced to schools and classrooms so that teachers' experiences and needs can be shared with software developers. In many countries, teachers do not have access to adequate infrastructure and digital devices, Internet or opportunities to experiment with digital devices in their own classrooms either *in situ* or virtually. Effective harnessing of technology to improve teaching and learning demands investment not only in hardware and software but also in professional development for teachers. Teachers need to understand how digital technologies have changed the nature of subject disciplines and can transform educational practice. The **Technological Pedagogical Content Knowledge** TPACK framework (Mishra & Koehler, 2006) is one way of viewing the knowledge required for teaching at the intersection of discipline knowledge (subject content) and knowledge of digital tools and their functions.

Box 5. Kenya: Encouraging and sustaining educational innovation in the COVID-19 era with teacher communities

The closure of schools in Kenya in March 2020 affected 12 million learners and 330,000 teachers. In response the Teachers' Service Commission (TSC) adopted remote and virtual learning methodologies including radio and TV. To support teachers in using these methodologies, the TSC trained over 163,000 teachers (58 per cent of them female). These sessions also included guidance on how teachers could support peer teachers and offer psychosocial support to families and students. Although these actions did not fully mitigate student drop out or loss of learning, many teachers successfully adapted to these new more collaborative methodologies and there was a substantial increase in the use of radio and TV for student learning.

A key lesson from this initiative is the value of online teacher communities to provide opportunities for teachers' reflective exchange of teaching experiences and sharing of new resources. Lessons such as this are now informing Government policies on eLearning and associated professional development for teachers.

*Presented by Gabriel Mathengi, Assistant Deputy Director, Teachers Service Commission, Kenya
For further details, [see video / slides from session 3.4.](#)*

Key insight 2

Create conditions for teachers to be able to innovate

The capacity for teachers to be innovative is dependent on teachers having decent working conditions, support (including from their school leader), adequate resources such as digital devices, appropriate incentives and access to formal and informal professional learning opportunities. This has implications for the role of the school leader and their relationships with teachers.

Supporting and honouring teachers' contributions to education innovation

.. with the pandemic (...) we have a large consensus in the way we talk about teachers but unfortunately our policies, our practices, the conditions in the school are not very often consistent with this discourse about the teaching profession.”

Antonio Novoa, Professor, University of Lisbon, plenary panel 1 (38.10).

Throughout the pandemic, the role of teachers has received a lot of attention. It is important as we move forward to maintain this recognition and visibility to legitimize the involvement of teachers in innovation and their contribution to the production of pedagogic and professional knowledge. There are a number of ways to create these conditions, including providing opportunities for teachers to share their experiences and reflections in various formats such as publications. However, teachers' social conditions do not always match the recognition they receive and it is critical to continue to invest in and enhance teachers' working conditions and well-being. It is also important to regularly review what we ask of teachers and school leaders, and to look at their roles in a holistic way. Consideration needs to be given to how digital technologies might best be used to reduce the burden on teachers.

First remember the teacher is a human being before being a teacher and treat teachers as human beings, taking a humanist approach.”

Christine Safwat, Executive Director, Educate Me Foundation (Hamdan Prize Laureate), plenary panel 2 (41.30).

Key insight 3

Recognize teachers' contributions to innovation

Successful education responses to the pandemic are widely recognized to owe much to teachers' professionalism. As systems recover, it is important to continue to publicly recognize teachers' innovation and provide spaces for sharing their knowledge and experiences.

Theme 2: Innovations in Teacher Education

The background is a solid teal color with several large, overlapping, organic shapes in various shades of teal and dark teal, creating a layered, abstract effect.

The pandemic prompted a plethora of new forms of teacher education — formal, non-formal and informal, in blended, hybrid and online formats. It also revealed the need to revisit and redesign teacher education programmes to ensure teachers have the requisite skills to innovate and adapt to changing circumstances to best meet the learning needs of all their students, now and in the future. Teachers are prime movers in driving educational innovation, and so innovations in teacher education must be a strategic objective in all countries.

The best way to prepare societies for fast paced change is through innovation of the teaching profession.”

H.E. Liina Kersna, Minister of Education, Government of Estonia, plenary panel 2 (15:15)

Innovation in teacher preparation

Teacher education curricula need reviewing and revising. They need to reflect future-oriented student curricula which emphasize areas such as active citizenship, environmental understanding and digital literacies. The pandemic revealed the need to equip teachers with skills in areas previously given little attention: supporting students’ socioemotional well-being; implementing remedial or accelerated learning; and integrating digital technologies into teaching and learning (WOB, 2021). However, the inclusion of new topics is not in and of itself sufficient to ensure teachers’ education meets their needs. Attention also needs to be paid to pedagogy: the act of teaching with its attendant discourse about learning, curriculum, assessment, inclusion, etc. (Alexander, 2008). In many contexts, teachers are aware of active learning approaches but have little first-hand experience themselves of such pedagogies and lack confidence and skills to apply them in their own classrooms. The pandemic also showed how few teachers had previously been offered opportunities to learn about digital pedagogies and explore how they might enhance learning with ICT tools.

Forum participants emphasized how educators who design and deliver pre-service or initial teacher education need to engage in continuous dialogue around the latest knowledge, evidence and goals of education to inform programme innovations to improve quality.

Institutions involved in teacher education should be just as included in the details of how teachers are trained.”

H.E. Liina Kersna, Minister of Education, Government of Estonia, plenary panel 2 (17:17)

Forum participants advocated for integration of research skills as a third pillar of pre-service teacher education, alongside content knowledge and pedagogy. Strong inquiry skills will allow teachers to study their own classrooms and to develop skills such as problem-solving and resilience in experimenting. These skills are necessary for teachers to innovate for continuous improvement and to generate their own professional knowledge. However, inquiry needs to be framed in ways that are appropriate to teachers’ context and undertaken with peers and mentors, not in isolation.

Strong inquiry skills allow teachers to study their own classroom and create inclusive and equitable practice in their classroom. But this does take some time to develop.”

Gerald Letendre, Professor of Education and International Affairs, Penn State University, U.S.A, plenary panel 2 (25:33).

Box 6. Brazil: Programa de Especialização Docente: integrating theory, practice and inquiry in teacher education

The Teacher Specialization Programme (PED Brasil) is a postgraduate course in teaching mathematics or natural sciences for teachers working in basic education classrooms. It takes between 1.5 and 2 years to complete and is offered by 15 higher education institutions in partnership with municipal and state education departments in different areas of Brazil.

The PED curriculum is composed of two highly integrated and connected dimensions: academic and clinical. It consists of 10 sequential modules and a mentoring component. These experienced teachers work alongside university-based faculty to support each teacher through four cycles of mentoring in their own classroom. The professional learning experience discussions are based on real examples of student work and teachers' deepening understanding of the social conditions of the classroom. In one assignment each teacher is asked to choose a student that s/he would like to know more about. The teacher interviews the student and their family and examines the student's relationships in the classroom, thereby improving their capacity to understand the student holistically to inform his/her pedagogic practice and as a consequence the student's learning.

Presented by Gerald Letendre, Professor of Education and International Affairs, Penn State University, United States

For further details, [see plenary 2](#) or the [PED Brasil website](#).

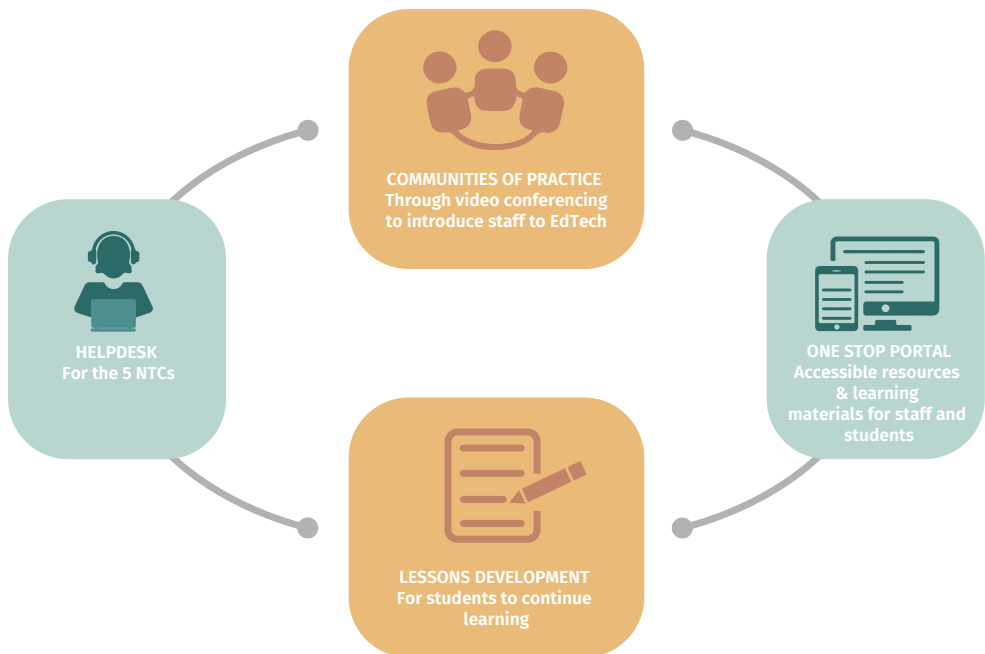
The professional learning of teacher educators is critical but frequently overlooked; they too need opportunities to engage in professional development and to experiment with new practices, particularly those using digital technologies. Then they will be able to confidently model interactive pedagogies and effective teaching approaches with their student teachers.

Box 7. Uganda: TTC Sandbox programme integrating ICT in Teachers' Colleges (ENABEL)

When the Teachers' Colleges in Uganda were closed at the start of the pandemic, the Teacher Training Education Project (TTE) responded with a Sandbox Ed Tech experiment. This aimed to improve the digital competencies of college lecturers (teacher educators) and ensuring the continuity of learning for student teachers during the pandemic. The TTE project is concerned with the training of secondary school teachers at the five National Teachers' Colleges (NTCs) and their 16 partner secondary schools in Uganda.

In the Sandbox experiment, college lecturers and student teachers at the five colleges were provided with a range of online materials and open and free digital tools. These included digital learning spaces for teacher educators to experiment and innovate in their own teaching.

Figure 1. Key Sandcastles of the TTE Sandbox.



Evaluations of the Sandbox indicate that over 75 per cent of lecturers and 60 per cent of students accessed the various e-courses and resources and those students who accessed the portal found it very useful. Engagement with the portal was higher among female lecturers and students than their male peers. Lessons from this initial phase are now informing the development of further e-content for the NTCs.

*Presented by Jane Egau, Director Higher Education, Ministry of Education and Sports, Uganda
For further details, see [slides from session 2.3](#).*

Key insight 4

Integrate inquiry into teacher preparation and development

To be confident pedagogic innovators who improve equity in learning for their students, teachers need opportunities in pre-service programmes to develop skills of classroom inquiry; this will prepare them to be self-directed lifelong learners.

Supporting inclusive practice through innovative teacher education

Teacher education needs to pay greater attention to new policies on education inclusion (at global, national and local levels) to equip teachers to respond to increasing student diversity. As countries transition towards inclusion in education to meet the targets of SDG4, more children previously excluded from education because of background, ability or identity, are attending mainstream schools. For example, in Brazil, the share of students with disabilities enrolled in mainstream schools increased from 23% in 2003 to 81% in 2015 as a result of a policy change (GEMR, 2020). But teachers are frequently struggling to address and respond to the diverse learning needs of all the students in their classes. Many teachers have had little training in inclusive teaching strategies and classroom management techniques. Across the globe teachers report a high need for professional development, materials and classroom conditions to help them move towards classrooms where all students are valued and able to succeed.

Inclusion needs to be a central principle in pre-service and in-service teacher education to strengthen the capacity of all teachers in this area. It needs to be multi – dimensional and not limited to issues of disability. Achieving the targets of SDG 4 requires innovative approaches to offer sustained practice focused support to existing teachers as well as those studying in pre-service programmes.

Box 8. Rwanda: Building Learning Futures (BLF): Peer support and networks for inclusive teaching practices

In Rwanda, inclusive teaching practice is defined through policy as effective inclusion of all children in lessons with adapted and additional support for children who need the most support. As part of the BLF project, the policy is being implemented through the development of a cadre of teachers known as ‘Inclusive Education Focal Teachers’ in each school. These focal teachers are selected and trained by Special Needs Education Coordinators (SNECOs) who work at district level and have deep knowledge of their local context. Focal teachers work with SNECOs to organize communities of practice at their school to support the school leader and their peer teachers to change their classroom practices and to share ideas and effective approaches. A key aim is to improve the confidence of teachers in working with all children through responding to teachers’ individual professional needs.

Programme evaluations have shown that more children feel included, valued, and safe in their educational settings and teachers are more effectively meeting the learning needs of their students through effective diagnosis of needs and use of a greater range of strategies.

The programme is now being scaled up to mainstream the SNECO role and expand the number of Inclusive Education Focal Teachers.

*Presented by Jean-Claude Sabato, Special Needs Education Coordinator and VSO volunteer, Rwanda
For further details, see [session 21](#).*

It is critical for in-service teacher education and continuous professional development (CPD) to incorporate the principle of inclusion. All teachers, regardless of their status, location, gender or other characteristic, must be able to participate in CPD relevant to their work. In many countries, for instance, teachers in rural areas are much less likely to have opportunities to participate in CPD (GEMR, 2019).

A key element of teacher education policy [in Colombia] is to reduce the teacher training quality gap between the rural and urban setting.”

H.E. María Victoria Angulo, Minister of Education, Government of Colombia, plenary panel 2 (7.45).

Continuing professional development for teachers

If there is one thing we’ve learned during COVID-19, it is that teachers are irreplaceable. Moving forward it will be important to have good strategies for teachers’ continued professional development.”

H.E. Tonje Brenna, Minister of Education, Government of Norway, Opening plenary.

Ensuring CPD is relevant and worthwhile for all teachers necessitates a pivot from centrally driven professional development to a situation in which teachers co-own and co-design the CPD system — they identify their own professional development needs and opportunities. This involves an important mindset shift from those responsible for CPD as well as from school leaders and teachers themselves. Integral to this shift to teacher-led CPD is an understanding that effective professional learning occurs through practice in classrooms, not in workshops removed from the realities of schools. CPD needs to focus on experimentation and inquiry with new practice in teachers’ own classrooms, reflection on practice, and adjustment, all undertaken as part of a shared endeavour with peers.

Social interactions and collaboration are key characteristics of these new forms of CPD. Several countries have been successful in relying on peer support as a way forward for sustainable, cost-effective practice-based CPD. There are a number of examples of this: school-based mentors co-teaching with peers for six hours each week in Rwanda; school-based tutor teachers offering meaningful ‘just in time’ guidance to peers on the use of digital technologies for teaching and learning in Finland; and Master teachers supporting their peers in Shanghai (Box 11).

How do we offer our best support to teachers in the context of increasingly higher expectations from society and increasingly faster changes...”

H.E. Liina Kersna, Minister of Education, Government of Estonia, plenary panel 2 (16.24).

Both in and beyond school, teachers are utilizing a variety of teacher networks, professional learning communities, or research groups to connect with and inspire each other in developing or sharing new ways of enacting or adapting curriculum and pedagogies. Social media platforms play a major role in helping teachers to connect with each other in ways that are familiar, accessible, and low cost. In Indonesia, an online platform for teachers to collaborate, access and share resources was accessed over 100 million times by 360,000 teachers during the pandemic.

In addition, an online teacher training platform has reached over 40 per cent of Indonesian teachers in remote areas since its launch in October 2020.

Technology can enhance the learning process for teachers, offering opportunities to diversify and personalize their CPD. During the pandemic, the majority of teacher education programmes shifted to hybrid or blended models and many participants commented on the need to maintain these blended offerings after the pandemic. However, further work needs to be undertaken to identify the most appropriate blend in different contexts and for different groups of teachers to ensure equity in teacher education.

Box 9. Rwanda: Innovative leadership for teaching and learning continuity

A partnership within the Mastercard ‘Leaders in Teaching’ initiative has been providing different forms of CPD to district directors of education, sector education inspectors, headteachers, deputy headteachers, school-based mentors and science, technology, engineering and mathematics (STEM) school subject leaders across 14 districts in Rwanda. The initiative aims to build the leadership, mentoring and coaching capacity of senior educators to support them in their professional growth and in the development of quality learning in their schools. Historically, opportunities for these educators to participate in such professional development have been highly limited.

During the pandemic the partnership pivoted to a ‘Recovery and Resilience’ programme to ensure continuity of learning. A key observation from a review of this activity highlighted how leadership for inclusive and continued learning for students or teachers does not always have to be the sole responsibility of the school leader. School-based mentors, district education officials and sector education leaders can ensure teachers are prepared and education continuity for students is happening. Further takeaways include the need to continue to embrace hybrid modes for learning moving forward; the importance of digital connectivity and the use of low-cost tools such as SMS based platforms (SMS and WhatsApp in particular have been highly valuable for sharing advice on activities); and continuing professional learning activities over longer periods of time.

Rwanda Basic Education Board, the University of Rwanda College of Education, the Mastercard Foundation (Leaders in Teaching), WOB, IEE Rwanda and Eneza Education.

For further details, see [session 2.2](#).

However, in many contexts this practice based professional learning with peers is unfamiliar to teachers and weak initial teacher education means that guidance can be helpful to ensure teacher collaboration is meaningful and productive. Guidance, in multiple forms, can support teachers to develop a shared language as well as build their expectations and skills to act with autonomy. In response, many governments, prompted by the conditions of the pandemic, increased the number of available online CPD tools: for example, a partnership between the Government of Colombia and communication companies will give all education communities across the country free online access to the National Portal with pedagogical resource, learning packs, digital educational resources and more — this is particularly important for teachers and students in rural areas. Resources such as these are supplemented by global resources (Box 10).

Box 10. Pakistan: Improving in-service TPD (World Bank Coach)

Many teachers benefit from a structured framework of support to teach effectively and grow as autonomous professionals. To support teachers' professional growth the World Bank has developed two tools: Teach and Coach. Teach is an open access classroom observation tool which helps teachers to identify areas of weakness in their practice. Coach then utilizes these insights to tailor the design and implementation of different forms of TPD — including one-to-one coaching, training sessions and workshops in -in-person, remote or hybrid modes — to help teachers improve their teaching. In the Punjab, Pakistan, Coach is being used to develop a one-on-one coaching system which offers teachers regular feedback on their teaching practices in the classroom following focused classroom observations. A key feature is the use of clear structure for the coaching conversations which guide teachers to first describe, then evaluate, and analyse their classroom teaching experiences. Coaches then focus their feedback on a small number of areas for improvement, agreeing manageable and actionable targets with each teacher. This approach has led to an increase of 20 per cent in effective classroom practices.

Presented by Ezequiel Molina, Senior Economist and Global Lead for Teachers' Thematic Group, The World Bank.

For further details, see [plenary 1](#) and the [Coach website](#).

Key insight 5

Move to teacher-led and practice-based teacher professional development

The professional development of teachers must be teacher-led and classroom-focused to respond to the needs of increasingly diverse classrooms and thus can take multiple forms. Context appropriate ICTs have a role in supporting teacher professional learning communities and teachers' access to expertise and resources. This applies to teacher educators as well as teachers.

Supportive frameworks and systems for innovation in teacher education

Teachers need encouragement and motivation to engage in CPD throughout their careers. This may involve the linking of CPD and career development pathways through a CPD framework for teachers.

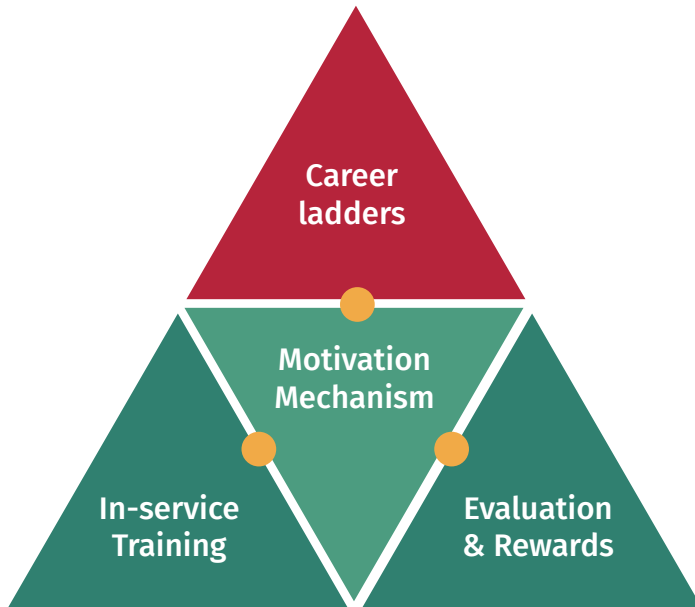
“Digital transformation is a reality and we must adapt our system and create incentives for teachers to learn and innovate.”

H.E. María Victoria Angulo, Minister of Education, Government of Colombia, plenary panel 2 (8.44).

Box 11. China: An innovative holistic system for CPD in Shanghai.

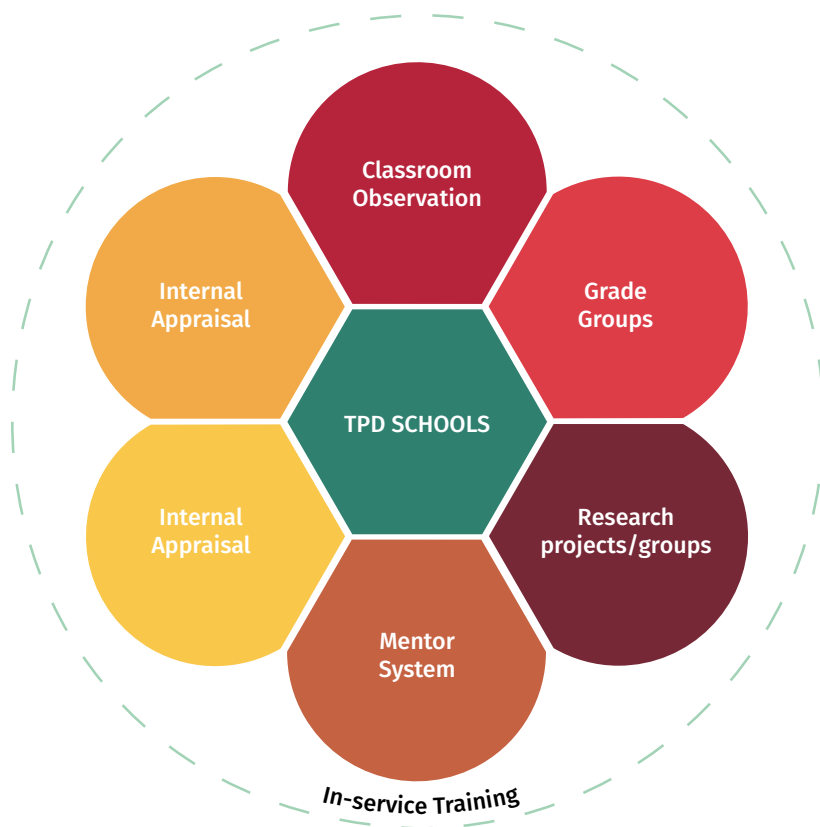
There are over 126,000 teachers in the city of Shanghai. The Teacher Professional Development Innovation System in Shanghai has been designed in partnership with teachers' unions and other stakeholders. The system links teachers' career development ladders, performance evaluation and rewards and in-service training (CPD) and is adaptable for teachers' individual professional needs.

Figure 2. The Triangle System for Teacher Professional Development in Shanghai.



As an innovative holistic system for CPD in Shanghai, recent innovations in CPD include the shift away from centrally provided CPD to self-driven learning, researching, and materials development for teachers. Teachers are allocated two to three hours each week for this school-based CPD and supported by Mastery teachers. The CPD may take a number of different forms: participation in subject based teaching research groups; participation in research project groups; classroom observation/ lesson study; or supporting teachers in neighbouring schools.

Figure 3. Innovations in School-based Training and Teacher Professional Development in Shanghai.



For teachers in Shanghai, a recent innovation is a new class of teacher – the professorship grade in the teacher professional career ladder. This recognizes teachers’ expertise in teaching, research and meeting students’ needs. A similar professor grade is available for school leaders.

*Presented by Minxuan Zhang, Head of Teacher Education Centre of UNESCO, and Director of the Research Institute for International and Comparative Education at Shanghai Normal University, China.
For further information, see [plenary 2](#).*

Innovations in teacher education need a supportive ecosystem in which teachers have time and access to tools for professional learning. Several countries or education authorities are now recognizing this need and giving teachers time for CPD during the school day: in Rwanda all teachers are now allocated three hours each Wednesday afternoon for CPD (Government of Rwanda, 2021).

However, without a strong sustained national vision of high-quality teaching and a systematic review of all related policies, innovations in teacher education may risk being piecemeal, fragmented and ineffective. Innovations in teacher education, such as the introduction of an inquiry focus, need to be aligned with other teacher education policies and with policies related to other aspects of teacher preparation and work including teacher recruitment, deployment, remuneration and working conditions.

“When nations attempt policy reform in teacher education, they rarely consider how the reform might be impacted by other aspects of teacher education policy. There are often problems with entrenched institutional arrangements and integrating initial teacher education with later teacher professional development is important.”

Gerald Letendre, Professor of Education and International Affairs, Penn State University, United States, plenary panel 2 (26:38).

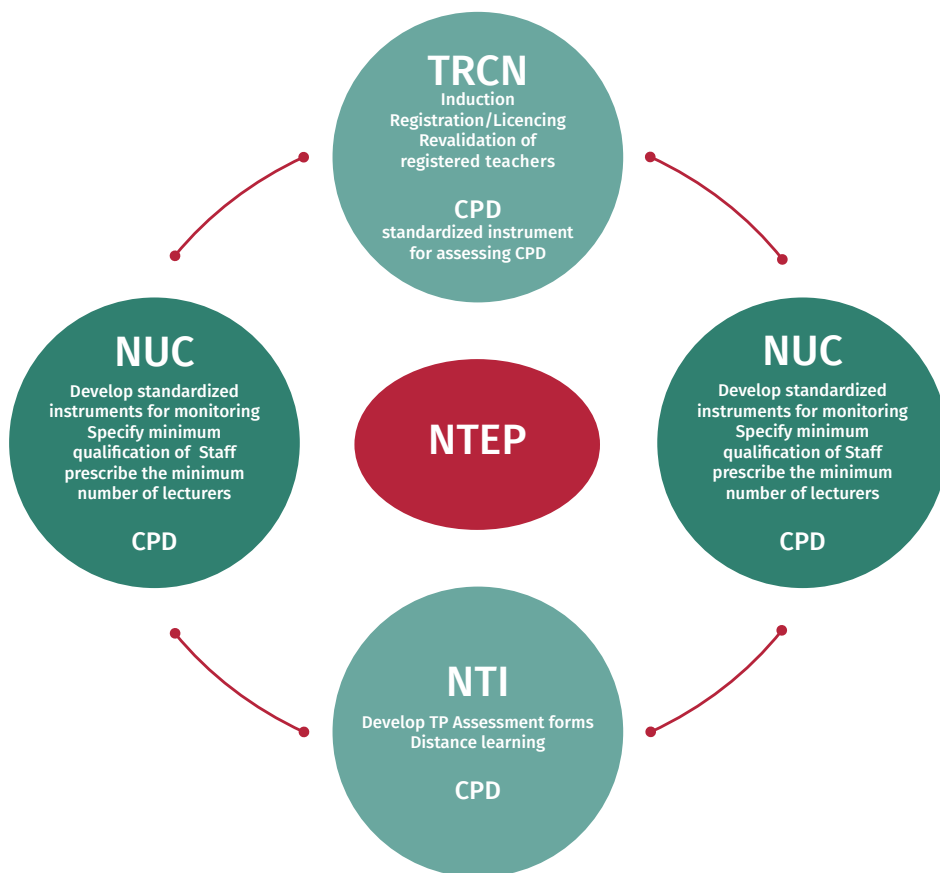
Box 12. Education for Change: a comprehensive Ministerial Strategic Plan in Nigeria

The Ministerial Strategic Plan (MSP) for Education articulates a pathway to reposition Nigeria’s education sector for a central role in national reform and development. The MSP is built on 10 pillars and around three result areas: access, quality, and systems strengthening.

Pillar 5 of the MSP is the National Teacher Education Policy (NTEP) which comprises eight interlinked policy areas: teacher enrolment; admission requirements; graduation requirements; curriculum and instruction; teaching practice and induction; certification and licensing; in-service teacher education – curriculum and programme; and CPD.

The NTEP will be delivered by four interconnected agencies and institutions working across the country.

Figure 4. Implementation Agencies / Brief Roles.



The TRCN is positioned to play a key role in this repositioning of the education sector in Nigeria. A current priority is the registration and licensing of all teachers in the country, currently over 2 million teachers have been registered but this is estimated to be only around 50 per cent of the teachers in Nigeria.

*Presented by Josiah Olusegun Ajiboye, Professor, University of Ibadan, Nigeria
For further details, see [session 1.1](#).*

Key insight 6

Create an environment that supports sustainable innovation in teacher education

When planning innovations and reforms in teacher education, consideration needs to be given to the relationship of teacher education policy to all other teacher policies so that reform is systematic and policies reinforce each other.

Theme 3: Innovation in Policy and Enabling Innovation through Policy

The background is a solid teal color with several large, overlapping, organic shapes in various shades of teal and dark teal, creating a layered, abstract effect.

Innovation in policy-making

Innovative approaches to teacher policy development are characterized by dialogue and partnership working. Teachers' voices – their experiences and professional needs, are critical in these discussions. Mechanisms need to be established for social dialogue with teachers and their representatives to ensure their experiences and needs are taken into account in teacher policy conceptualization, implementation and evaluation.

Teachers bring the realities of the classroom into the education policy-making process...in that way policies will be effective and relevant."

Dennis Sinyolo, Chief Regional Coordinator, Education International, plenary panel 3 (44.35).

Forum participants also emphasized the need to bring research findings into these discussions, in particular research which looks at teaching and learning issues through the eyes of the teacher.

Box 13. A Comprehensive National Teacher Policy for Ghana: the importance of social dialogue

The Norwegian Teachers' Initiative in Ghana set up a Ghana Teacher Task Force (GTTF) with the remit to develop a Comprehensive National Teacher Policy (CNTP) which would provide vision and direction for the recruitment, training, engagement, development and welfare of teachers. The GTTF brought together stakeholder groups including the Teacher Unions, Ghana Education Service, Development Partners and other actors.

The CNTP comprises 11 dimensions based on eight core values: dignity, inspiration, respect, integrity, fairness, excellence, continuous self-learning and inclusiveness.

Figure 5. Dimensions of Comprehensive National Teacher Policy.



Two areas from the CNTP were highlighted as of particular interest to the Forum: the detailed policy promoting a culture of social inclusion for teachers in their practice; and the emphasis on establishing a framework for social dialogue with teachers and their representatives - dialogue at multiple levels (local, regional, national) with concentration on policy formulation, development and implementation including policy initiatives to ensure all children access school.

Lessons learned from the process include the importance of collaboration and the role of social dialogue in facilitating collaboration.

*Presented by Yaw Afari Ankamah, Professor of Educational Planning and Educational Leadership, Ghana
For further details, see [session 3.1](#) and [Norwegian Teachers' Initiative \(NTI\) website](#).*

Several countries report drawing on the UNESCO/Teachers Task Force Teacher Policy Development Guide for guidance in the policy development process but with the caveat that the guidance needs to be contextualized for each country to take account of available resources, historic practices, national goals for education and local inclusion issues.

Box 14. TTF: Teacher Policy Development Guide (TPDG)

The Teacher Policy Development Guide is a key resource for national governments in the development of holistic, comprehensive teacher policies aligned to the national vision and education sector plans. Conceptualized and written through an extensive consultation process, the guide is available in multiple languages online and as an open course. The guide suggests nine dimensions for a national teacher policy and indicative steps for development, adoption, implementation and monitoring and evaluation of the policy.

Evaluation of use of the TPDG in nine countries indicates its usefulness as a resource. Several countries innovated by developing a number of additional dimensions or models; most common was social dialogue (Benin, Guinea, Togo) but teacher autonomy (Benin) and inclusion (Ghana, see Box 12) were also included. The review and evaluation process generated a number of recommendations for strengthening the processes of policy development through social dialogue (slide 15).

For further details see [session 3.1](#) and the [TPDG online course website](#).

However, it is important to note that social dialogue is not occurring only at the national level, but also at the level of schools, which are becoming more democratic.

Teachers who reported opportunities to participate in school -level decision-making (TALIS study) had higher levels of job satisfactions and believed that teaching was a valued profession in their country.”

Linda Darling Hammond, the Charles E. Ducommun Professor of Education Emeritus at Stanford University and founding President of the Learning Policy Institute, Opening plenary.

Key insight 7

Recognize the importance of social dialogue in teacher policy development

New forms of policy development draw on teachers' unique expertise and authoritative voices through sustained structured social dialogue. This ensures policies are grounded in teachers' experiences.

Innovative teacher policies

Teacher policies that are innovative can vary widely in their focus and form depending on a country's education priorities, needs and current practices. The conditions of the pandemic increased the pressure on countries to pay greater attention to teachers and to devise innovative teacher policies which supported continued student learning.

COVID-19 pushed all of us to adopt a new mindset, to become comfortable with the uncomfortable and gave us a new sense of urgency."

Iwan Syahril, Director General of Teachers and Education Personnel Ministry of Education, Culture, and Research, Republic of Indonesia, plenary panel 3.

A common feature of many innovative policies is the way in which they are informed by data and evidence. This might be from research or review of similar initiatives in other countries, as in the example from Saint Kitts & Nevis (Box 15), or from evaluation of pilot project activity as in the example from Zambia (Box 16).

Box 15. Saint Kitts & Nevis: scaling up professionalization of the teaching workforce

Following the first independent review of government education policy in a Caribbean state by UNESCO, the Government of Saint Kitts & Nevis recognized the need for changes to the education system.

A major review recommendation was the establishment of a National Teaching Council to drive a structured policy of professionalization of the teaching community. To support this process UNESCO organized an innovative workshop which brought together policy actors from various countries with their peers in Saint Kitts & Nevis to discuss different National Teaching Council models. Review of these models was followed by a report outlining the structure of the proposed Saint Kitts & Nevis National Teaching Council.

The purpose of the new National Teaching Council for Saint Kitts & Nevis is to regulate the teaching profession in accordance with international good practice. Initially it will implement registration of teachers, a code of professional conduct for teachers and national teacher standards. Future developments include the implementation of teacher career paths and professional licensing as a quality assurance measure linked to teacher appraisal. Operationalization of these plans is currently under way with support from UNESCO.

A further area of focus is the development of innovative recruitment approaches, moving beyond a ‘one size fits all’ approach and learning from innovative policies adopted by other small island states such as Singapore. Teacher recruitment in Singapore places strong emphasis on candidates’ academic achievement, communication skills, and motivation for joining the profession, and relies on school partners to be key decision makers in the selection process. Students who want to become teachers must go through a rigorous four-step process before entering a preparation programme:

- Screening of academic profiles to ensure candidates meet the minimum qualifications;
- A series of literacy assessment tests (evidence shows that teachers’ literacy affects achievement more than any other measurable variable);
- Interview with a panel led by an experienced school leader, to explore attitude, aptitude and personality;
- Participation in the Teacher Preparatory Programme run by the Academy of Singapore Teachers and time as a contract teacher in a school. Candidates are monitored throughout and required to take a final assessment.

Entry to teacher preparation programmes requires a pass in this final assessment and a good recommendation from the school (NCCE, 2016).

Presented by H.E. Jonel Powell, Minister of Education, Government of Saint Kitts and Nevis, Saint Kitts and Nevis
For further details, see [plenary 3](#).

Many education innovations are initiated with partners beyond the formal education system. It is important to facilitate teacher collaboration with these actors - civil society, the private sector, development partners and others. During the pandemic, a number of countries worked with private internet providers to reduce the cost of Internet access for students and teachers. In Indonesia free internet data packages were provided for over 30 million teachers and students as part of a comprehensive covid response.

Box 16. Zambia: Partnership with civil society organizations and funding agencies to scale up and embed innovation in classroom practice

The Government of Zambia is working with multiple partners to implement the ‘Catch Up’ programme based on the ‘Teaching at the Right Level’ (TaRL) method developed by Pratham India. This innovative approach involves grouping students in grades 3 to 5 by learning level, rather than grade or age, for one-hour literacy and numeracy lessons every day. The aim is to better support students to reach their expected learning levels in literacy and numeracy. Following promising results from an initial pilot in two districts, the programme was scaled up to 1,800 schools across two provinces under a USAID / J-Pal Africa / VVOB partnership with technical support from UNICEF (2017–2020). In the scale-up, attention is being paid to developing the capacity of Government staff at different levels to ensure the approach is embedded in the regular activities of schools and the Ministry of General Education.

Two key pillars of the programme are the use of active teaching approaches and the regular use of assessment data. This data is used for multiple purposes including informing the design of activities which meet students' specific difficulties, and to assess which schools and districts would benefit from support in implementing the approach.

Presented by Alfred Chilala, Primary School Class Teacher and Zonal In-Service Coordinator, Ministry of Education, Zambia

For further information, see [session 3.4](#) and [TaRL in Zambia](#).

Innovative teacher policies may be one part of a larger education innovative initiative as in the example from Chad (Box 17).

Box 17. Chad: Innovative policy for refugee education

In 2014, the Government of Chad committed to offering refugee children the right to access the national education system. Refugee camp schools are now being integrated into the official Chad education system through a transition approach designed to support social cohesion. This involves training teachers in the mainstream system to teach in the camps: to date 350 teachers have moved to work in camp primary schools and 140 teachers moved to teach in camp secondary schools. Similarly, refugee teachers are now working in Government Teachers' Colleges and vocational schools. Teachers in the refugee camps are included in new plans around TPD, professionalisation of the teaching workforce, and attention is being paid to their well-being, in particular the issue of security in camp schools.

Presented by Yousof Tahir Ahmet, Director General for the Agency for the Promotion of Community Initiatives, GPE Focal Point for Chad, Chad

For further details, see [session 3.2](#).

Coherence throughout the full education system is vital for policy innovations to scale and become embedded. Hence to increase the chances of being effective, design of innovative policy needs to consider the potential impact of the policy on education system dynamics and look to future national needs. This might require new or strengthened partnerships or systemwide remodelling.

Key insight 8

Nurture partnerships for innovation

Partnerships, including those with non-education actors, have an important role in stimulating and leveraging innovations in teacher policy and practice.

Policies to stimulate and foster innovation

For innovations to be easily initiated, flourish and spread, policies need to be sufficiently flexible to permit and foster variations which respond to conditions and needs at local level. Autonomy for teachers, school leaders and other education actors to be agents of change and innovate for the social conditions of their classrooms is only possible if policies for curricula, pedagogy, assessment and so on, allow flexibility for local adaptations.

“A culture of innovation for teachers occurs when they have a sense of purpose and agency.”

Lucy Crehan, Teacher, Author of *Cleverlands: The secrets behind the success of the world’s education superpowers*, plenary panel 3 (34.38).

Forum participants emphasized that this does not mean that policies are imprecise or unfocused. Rather, it means that policies need clearly articulated principles or frameworks which can be interpreted in context appropriate ways. And, equally importantly, that they need to be accompanied by transparent and well-defined expectations relating to outcomes and standards which can be used for evaluation and accountability. Such standards should be developed with and by teachers rather than being imposed on them.

“Teachers cannot innovate or solve problems if they are working in an environment characterized by control and lack of trust.”

Dennis Sinyolo, Chief Regional Coordinator, Education International, plenary panel 3 (43.20).

Box 18. Estonia: policies to support innovation for quality education

In Estonia, high levels of autonomy and responsibility at both the school and teacher level are prominent features of the national education system. The state sets national standards and establishes principles for education funding, state supervision and quality assessment along with complex procedures for system level evaluation. For example, the state sets a national curriculum which includes expected student learning outcomes. But importantly the national curriculum does not define how these outcomes should be met. There is a recognition that all schools are unique in different ways and schools and teachers are able to use their professional judgment in the pedagogies they employ, how they organize classes and the resources they select to teach the national curriculum. They can experiment with new approaches appropriate to the needs and experiences of their students and their context.

However, this does not mean that teachers are not supported in their work. They are provided with tools appropriate for their teaching and personal career trajectory. One such tool is 360 degree feedback; managers, colleagues, students and parents can give feedback on the teacher’s work. This is designed to help teachers understand how others view their work, and through that, better notice their own development needs and give them access to appropriate resources.

For further details, see [plenary 2](#).

Data play an important role in innovation. However, in many countries school-level educators act merely as data collectors; all data analysis is carried out at a higher level in the system. Innovative reform of the education data system to give responsibility for student learning data to teachers and school leaders opens up possibilities for grassroots innovation. Teachers and school leaders can use data to analyse challenges in their own schools and classrooms and to evaluate innovative local responses to these challenges.

Box 19. Gambia: innovation in data use for education quality

A regional GPE-KIX (Global Partnership for Education Knowledge Innovation Exchange) project working in The Gambia is seeking to understand how to better design and scale data systems for use in the policy and planning process. Historically organization of education management information system (EMIS) data has been highly centralized and focused on educational inputs. Data was not often used at regional or school level by school leaders or teachers and not sufficiently detailed or comprehensive to inform policy implementation or grassroots innovations.

At the national level, the introduction of an innovation from the health sector, the DHIS2 platform, is catalysing inter- and intra- ministerial collaboration to build an integrated system: the ministries of education and health are developing a memorandum of understanding to formalize their joint endeavour in the area of data management; and three departments within the Ministry of Education are collaborating on the implementation of the tool.

Notable achievements include the decentralization of School Improvement Planning and data ownership to school level— collection and use of data is now a minimum standard for all schools and an integral part of their School Improvement Planning. Schools develop their own indicators and targets through a consultative process involving teachers, students, parents and the community and use Community Report Cards to share progress at the end of the school year. Teachers play a key role in these new ways of working; they lead the generation and use of student learning data in their classrooms. Data champions in the school support teachers to extend their data management skills and digital competencies, increasing their confidence and autonomy to plan and monitor improvement measures.

*Presented by Mr. Alpha Bah, Head of EMIS and ICT, Ministry of Basic and Secondary Education, The Gambia
For further details, see [session 3.4](#) and [GPE-KIX website](#).*

Key insight 9

Combine structure and flexibility in policies to foster innovation

Teacher autonomy and agency to develop innovative practice is enabled by holistic and comprehensive education policies with clear frameworks and quality standards *combined* with flexibility at local level. This helps to address the tension between autonomy and accountability at different levels within the education system.

Final Reflections

Establishing a new social contract for education, in which the voices of teachers are prioritized and there is investment in teachers, is essential to enable the education innovation required to 'build back better' for all students following the disruptions of the pandemic. As Forum participants reported in their experiences from the pandemic, teachers are irreplaceable. They play a pivotal role in innovation and much education innovation is grounded in teacher professionalism.

When considering innovations in teaching and learning for students, teachers and school leaders, it is critical to pay attention to contemporary ideas on learning — relational and social — and to ensure opportunities are made available for dialogic activities, collaboration and joint inquiry with peers. This is essential if students and teachers are to become confident lifelong learners, but in many countries, it will involve disrupting deeply embedded ways of being as learners and teachers. Digital technologies will have a role here.

Good teaching involves paying close attention to students — their past experiences, their ideas and understandings, and making informed professional judgments on how to design and select learning experiences which will be productive for their students. As Forum participants shared, teachers are only able to make these decisions if their environment permits, and encourages, variation and adaptations to established ways of practice and curriculum guidance. Without this freedom, teachers' capacity to engage in praxis, practice reflexively informed by theory and formed out of theory, is limited. If theory is divorced from practice, what remains is either practice informed by intuition and / or experience, or practice which is dictated by policy. Both positions inhibit teachers' capability for innovation. They hinder teachers in responding with authentic learning experiences which the learning needs of all their students and limit movement towards equity in education. Innovation in teacher education must therefore involve greater integration of theory and practice.

But innovation in teacher education is not limited to initial teacher education. It is possibly even more critical to scale up promising innovations in teacher CPD, those which offer teachers opportunities to engage in collaborative activities with their peers in the site of their practice. These collaborations need to be targeted to teachers' problems of practice and enable them to apply theories to these problems, assess if the theory is appropriate and generate new professional knowledge. There is much to learn on how ICTs might be used in ways which enhance quality and equity in these CPD activities. For instance, are teachers in remote and rural areas included and those who have work in conflict affected settings such as refugee camps?

Policies to foster innovation need to be constructed to enable both centrally driven innovation and bottom-up innovation from teachers and other grassroots education actors. The latter approach requires policy to be sufficiently flexible to allow for teacher autonomy and agency to be creative, to experiment and adapt. But this flexibility needs to be within a clear framework of principles and standards with shared understandings of expectations and benchmarks across the education system. These measures of accountability must be seen as a means to enable autonomy and not compliance. This requires leadership and a policy environment which values and cultivates trust.

Innovative policies need to draw on data and evidence — from research, small scale pilots and evaluations from other contexts but it is critical that policy actors consider the potential impact of these innovative policies on other policies relating to teachers. Without system coherence, innovative policies are likely to contribute little to education transformation. For teachers to engage fully with innovative policies requires attention to be paid to the social conditions of their work and their holistic needs; their welfare, the resources available to them such as professional autonomy, digital hardware and science kits, the availability of relevant professional development opportunities and so on.

Finally, policies are more likely to achieve traction if their development has been a shared social endeavour based on social dialogue with teachers and their representatives. A new social contract for education requires such collaborative, inclusive and innovative approaches to policy-making.

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Innovation is an engine of improvement in education, and critical for education to be inclusive, equitable and of good quality. Teachers play a pivotal role in educational innovation, but to do so they need to be supported with an environment that values willingness to take risks and depart from established ways of practice.

To innovate, teachers must also be enabled to make connections with peers, researchers, and existing and emerging knowledge. Policy and teacher education should be oriented towards giving teachers the tools they need to drive progress in teaching and learning through innovation.

The 13th Policy Dialogue Forum of the International Task Force on Teachers for Education 2030, held on 2-3 December 2021 in Kigali, Rwanda and on-line, brought together education stakeholders from around the world to discuss ***Innovation in teacher policy and practice for educational recovery***. This Report synthesises the lessons learned and recommendations generated from the Forum on how to support innovation: in teaching and learning; in initial and in-service teacher education; and in policy-making to enable and sustain innovation.


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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