



Concept Note

The Futures of Teaching

*Annual Meeting and 12th Policy Dialogue Forum
Dubai, United Arab Emirates
8-12 December 2019*

*Prepared by the Secretariat of the International Task Force on Teachers for Education
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1. Introduction

This year, the Annual Steering Committee and the 12th Policy Dialogue Forum of the International Task Force on Teachers for Education 2030 (TTF) will take place from 8-12 December 2019 in Dubai, United Arab Emirates (UAE). Jointly organized by the TTF Secretariat, the Ministry of Education of the UAE and UNESCO Offices in the Region, the over-arching theme of this year's policy dialogue forum is 'The Futures of Teaching', with particular attention to: i) the implications of new learning goals for teacher preparation and training; (ii) addressing inequalities and diversity; and (iii) innovations - implications for teacher education and training and practices.

The Policy Dialogue Forum 2019 will bring together some 300 education stakeholders from around the world to reflect on current teaching policies and practices and discuss visions of teaching and learning that respond to emerging realities and the challenges of 21st-century education systems. The Forum will take ideas and clues from today's world of work, technological developments and knowledge on innovative learning and teaching approaches and look at the relevance of existing and future-oriented practices to different contexts, reexamining past assumptions, identifying gaps in teacher policies and reforms and proposing ideas to address them.

The Policy Dialogue Forum 2019 sets out to provide insights, stimulate and provoke further open-minded discussions rather than affirming or defending any particular trend. Through a combination of round tables, plenary and breakout sessions, a broad spectrum of teacher stakeholders will come together in Dubai to debate:

- How are changes in thinking around the purposes of learning and skills expectations impacting on teachers and teaching practice? What are the implications for instructional models, the learning-teaching process, learning contents and how learning is assessed?
- How do we ensure that teaching in the future contributes to reversing current disparities and rather leaving learners even further behind?
- What innovations might support teacher's new roles, or tap new sources of expertise and talent? What are the implications for the organization of the teaching corps?
- Beyond the pedagogic dimensions of teaching, what do the projected changes imply for governance of public education, the design of teacher policy and the teaching profession more generally?

The research on existing teacher policies and practices suggests that certain countries are already forging paths ahead. The PDF 2019 will seek to capture and synthesize emerging trends and challenges as means to enrich support to Member States towards the achievement of their SDG targets, as well as

generating further global, regional and country engagement, debate and research on the future/s of teaching. The outputs will also feed into UNESCO's Global Futures of Education project and the deliberations of its high-level commission up to the publication of the 2021 UNESCO Global Report 'Learning to Become.'

2. Background to the Teacher Task Force

In the spirit of the Education 2030 Agenda the Task Force on Teachers contributes to the quality and the quantity of teachers and educators globally through appropriate teacher policies. "We will ensure that teachers and educators are empowered, adequately recruited, well-trained, professionally qualified, motivated and supported within well-resourced, efficient and effectively governed systems." The Task Force pursues this mission through the strategic areas of its work (advocacy, knowledge creation and sharing, country support and engagement).

A flagship activity of the TTF identified in the 2018-2021 Strategic Plan is the annual Policy Dialogue Forum, which sets out to raise awareness among TTF members from countries and organizations representing various constituencies on crucial issues for the implementation of SDG 4.c and Education 2030 Agenda. Through the Policy Dialogue Forum, the TTF offers a platform for education actors and teacher stakeholders (including policy makers, teachers, representatives from teacher organizations, civil society organizations, researchers, the UN and other international organizations, private sector organizations and foundations) to delve into what it takes to teach and educate all children, youth and adults and to reaffirm the relevance of education as an equalizing factor in society. In bringing multiple stakeholders together, the PDF aims to foster more effective and focused exchange of knowledge and experiences and open up a unique opportunity for alliance building for advocacy and resource mobilization for achieving inclusive quality education for all.

3. Rationale and purpose of the 2019 Policy Dialogue Forum

Teaching in the 21st century is complex, challenging work and there are inherent tensions between traditional models of public education as we have known them, and emerging models of teaching and learning, inspired by advances in technology, that imply a radical re-thinking of how learning is organized and how teachers are prepared for their expected roles in today's and future learning environments.

Today's learners need much more than academic knowledge; they require a broad array of skills that will allow them to integrate into a world of work that is rapidly changing, to contribute to the well-being and

peaceful development of their communities and to demonstrate resilience in the face of crises. Technologies and the rise of social networks have dramatically changed how people live, work and communicate, even as they raise ethical questions about privacy and how humans connect with each other. Learners require technological and social media literacy to be aware of and protected from the dangers of this new world. Meanwhile technological disruption, such as we see in the emergence of big data, automation, machine learning and artificial intelligence, has placed additional pressure and demands on modern economies and skills requirements.

The workforce of the future will require higher order and flexible skills-sets, with learners needing creativity and the abilities to analyze, synthesize and apply logical reasoning for successⁱ. Also critical are skills – such as social skills, curiosity, discipline and communication, collaboration - associated with independent, self-directed and team-based learning. Many experts further emphasize the importance of lifelong learning and motivation, as young people who are intrinsically motivated and curious are willing to seek out knowledge, take risks and develop new skills continuouslyⁱⁱ.

Given the accelerating pace of technological advancement, demographic and socio-economic disruptionⁱⁱⁱ, there have been calls for a re-thinking of the purposes of learning. Some suggest that the goal of education today should be to make every child "innovation ready" – i.e. ready to add value to whatever they do. But across the world, the purposes of learning are being recast against broader notions of preparedness, empowerment, identity development, ethical behavior and transformation.

What does all of this mean for teaching? Without doubt, discussions around the learning goals and skills sets of the future are uprooting accepted wisdoms about what is expected of teachers, how they should teach and even what form the classroom should take. To develop the skills now needed by learners, teachers in next-generation learning environments are expected to transition away from traditional 'listen and respond' didactics towards more interactive, agile, student-centered approaches^{iv}. This requires a more diverse skill set than before, with teachers being ready to innovate in how they interact with and work with learners in developing new knowledge, being early adopters of technologies that support learning and working more effectively within physical and virtual learning communities.

The PDF creates an opportunity to pause for reflection, as the idea of learner-driven teaching is not always central to the training that teachers currently receive around the world. Some countries may not consider a priority the questions raised by future-oriented visions of teaching given the overwhelming challenges that their education systems already face. The challenges for teachers individually and collectively, and the teaching profession more generally, are of a qualitatively and quantitatively different nature in developing countries compared to countries in the west. Rural, remote and crisis-affected areas face difficulties in ensuring a quality teaching and learning experience for all students. Displacements and migration caused by natural disasters, conflicts, HIV/AIDS and other acute health concerns cause major disruptions to the teaching-learning process and impact heavily on teachers'

working conditions and presence in the classroom.

Simply attracting, training and keeping qualified young candidates in the teaching profession at different education levels is also a gargantuan challenge. Over 69 million qualified, properly trained and adequately remunerated teachers must be recruited worldwide by 2030 for primary and secondary education to meet the SDG 4 education targets⁹. The most acute shortages are in Africa and South-east Asia. Added to this are issues related to working conditions, remuneration, professionalization and teaching standards. In these countries, future-looking governments will need to adopt smart policies to make the teaching profession more attractive, but also invest in support frameworks, incentives and rewards that motivate teachers, protect working conditions and keep teachers in the profession over the long term.

The diversity of learning and teaching experiences around the world underlines the co-existence of multiple realities, countries advancing at different speeds and the importance of context in any discussions and debates around the future of teaching. Country experiences may even suggest the absence of a universal truth on what the future of teaching will look like globally. The PDF offers a space to debate whether emerging trends are part of a common vision for the future of teaching globally, whether they are feasible (or imagined) realities for different countries and which, if any elements, can be adopted by low-middle income countries to accelerate progress. In all cases, an injection of fresh thinking is needed around how best to prepare teachers and education systems for the future.

4. Policy Dialogue Forum - 2019 thematic areas

Theme 1: Emerging trends in learning and their implications for teachers and teacher education and preparation

Guiding questions

A first set of questions relates to the implications of shifts in learning goals, skills expectations and technological developments for teaching and teacher education.

- How are changing learning goals being reflected in the teaching-learning process – beginning with classroom didactics and instruction models?
- How have modern technologies impacted on learning environments and what might be the implications for the organization of learning in the future?
- What is the impact of the emerging thinking and multidisciplinary approaches on teaching contents and the assessment of learning?

Next generation skills, next generation instructional models: While the one-teacher, one-classroom model still dominates classrooms in most education systems in the world today, the cultural dictum of a teacher standing in front of rows of students imparting knowledge through standardized pedagogy is gradually becoming a thing of the past.^{vi} Teachers and school leaders are being asked to let go of the mindset that “good teaching” means being in control of the learning process and commanding students’ attention for an entire class period.^{vii}

The skills expectations of the future necessitate other teaching approaches that allow learners to have more autonomy over their learning while engaging their natural curiosity and abilities, rather than simply presenting them with information. “Instead of just saying ‘here’s stuff to remember’, it says ‘here’s a problem to solve’ and the students get involved in that problem.”^{viii} Seeing education through this lens of ‘active learning’ or ‘problem solving’ requires opportunities for self-driven and team-based enquiry inside and outside of classroom, and for learners to seek out different sources of online and offline information to support their knowledge acquisition.

The move to greater autonomy underlines the importance of learner’s skills such as discipline, motivation, curiosity, time management, openness to collaboration and communications for managing learning tasks. In many countries, fluency with technology and educational software is also seen as critical as it influences students’ abilities to find and use information through independent research. More than this, and given the concerns about the ethical dimensions of scientific and technological innovation, teachers and students also need the skills to properly manage the ICT tools and learning spaces at their disposal, to be able to interpret search results, critically assess the quality and veracity of information and make ethical judgements about how to use it.^{ix}

In this scenario, teachers need the ‘know-how’ and capacities to employ the right mix of teaching approach and learning contents to help students develop a more diverse range of skills beyond academic knowledge. This includes learners being able to drive their own learning, reflect upon and apply critical analysis to their work, and adjust their tools and strategies accordingly.^x Teachers may develop such capacities and collaborate with other teachers in peer communities offline and online and use technologies to advance their own practice as they go along.^{xi}

Next generation technologies, next generation learning spaces: At the same time, and following on from the above, the fixed technologies that once anchored teachers and learners to blackboards, desks and classrooms are gradually losing their domination.^{xii} Technology is not only changing *what* skills are needed and *how* students acquire knowledge, but *where* they learn. A wide variety of online portals, networks and platforms are now available. Indeed the classroom has been opened up to virtual learning communities and students can now learn from anywhere in the world, at any time

and be a member of multiple learning environments.

Social media has further extended classroom work by providing opportunities for collaboration. Mobile devices enable teachers and learners to access educational resources, connect with others or create content, both inside and outside the classroom. In the higher education sector, where consortiums of universities come together to pool faculty resources in providing course content, Massive Open On-Line Courses (MOOCs) have already opened up new avenues for reaching wider audiences across the world.^{xiii}

Without doubt, such transformations have opened the door to experimentation and innovation.^{xiv} In the future, technologies may be leveraged further to expand the classroom, generating interactive learning spaces and virtual schools with no physical boundaries. There may be even more room for personalized, technology-based learning, perhaps with SIRI-type applications housing automated expertise and serving as a place for students to ask questions and find information.

At the same time, the transformation of the educational landscape in the virtual world has been accompanied by a growing recognition of the importance of learning outside formal institutions through community centres, religious organizations, technical and vocational training centres, literacy programmes, voluntary associations, youth groups, sports and arts programmes.^{xv} Mixed, diverse and complex learning landscapes are thus emerging in which formal, non-formal and informal learning occur through a variety of actors, third-party providers and educational spaces.^{xvi} The role of the teacher in this scenario is to curate/ navigate the multiplicity of learning supports, technologies and communities in ways that respond to collective/individual learner's needs and goals (see also Theme 2: Addressing Inequalities). In this vein, educationalist Erica McWilliams has suggested that the role of the teacher is evolving from one of the "sage on the stage" to the "guide on the side."^{xvii}

Putting teaching contents and assessment to the test: The skills of the future has implications for 'how' subjects are taught and assessed. In certain western countries, schools are beginning to teach beyond traditional curriculum boundaries. Topics are taught in a more holistic, inter-disciplinary way, instead of learning being split into different subject areas.^{xviii} In Finland, for example, a lesson about the Vikings may include learning about history or geography, writing stories or working in a group to design and build a boat.^{xix} Such approaches are seen to ignite students' intrinsic curiosity and motivation as well as emphasizing skills such as critical thinking, team work and collaboration. Under its *National Curriculum Framework 2016*, students in Finland now participate in at least one interdisciplinary module each year which they will help to plan and assess themselves.^{xx}

Given all of the above developments, a growing number of countries are also embracing an equally

significant paradigm shift in how they view the purpose of assessments. The adoption of skills and competency-based approaches has accelerated interest in teacher-led classroom level assessments that capture more complex student performances outside of academic knowledge. Such assessments are evidence-based and include portfolios, performance-based and student self-assessments. These enable teachers to observe and assess students' higher-order thinking and real-world problem-solving 'in situ' in the classroom, and use the insights and student feedback to work with them in drawing up more personalized learning plans. Such approaches have been deemed successful in stimulating, motivating and advancing learning amongst students that do less well on standardized recall tests or have a diversity of needs (see also Theme 2: Addressing Inequalities). In the future, technologies will help teachers generate and share more accurate data about student learning with their learners, policymakers and the public, thus boosting accountability.

Theme 2: Future role/s of teachers in addressing education inequalities

Guiding questions

A second set of questions for the PDF relates to how we can leverage the emerging thinking around the teaching-learning process to reduce disparities between learners, and to redress inequalities in learning outcomes rather than leaving certain categories of learners further behind.

- What are the skills, dispositions and knowledge needed for education professionals to work successfully
- in socially, culturally and linguistically diverse classrooms of the future so that education does not perpetuate the cycle of exclusion of vulnerable and 'at-risk' children?
- What kinds of pedagogical preparation and on-going training are needed?
- In what ways can technologies be leveraged to help reduce inequalities? Are the solutions relevant for all contexts?

Towards more socially and culturally responsive teaching practices: The spectrum of issues underpinning societal, economic and educational inequality is vast and requires the collaboration, efforts and expertise of more than one sector, actor or organization. Education alone cannot equalize outcomes, and changing the lives of children inside and outside the classroom calls for holistic approaches that tackle multiple societal, demographic and economic issues whilst bringing immediate solutions for the most vulnerable young people. While the causes of education inequality are linked to many factors including (and not limited to) access to education and equality of opportunity, instructional quality, availability of resources and equipment and gender dynamics, teachers and educators can still play a transformational role in the classroom.

The teacher-student relationship is, however, subject to perceptions and stereotypes that influence teachers' beliefs about how students learn and the ability of different groups to learn. Social and cognitive psychologists, anthropologists and other social scientists do recognize that children bring their own knowledge and life experiences into the classroom and that these can influence their ability to learn and outcomes.^{xxi} But evidence also connects disparities in levels of learning and education participation to the crippling influence of poverty, as well as ethnicity, gender and disability. This generates enormous pressure on teachers to cope with the diversity of learners' experiences in their classrooms. Many are unprepared.

In many contexts, teaching is gradually moving away from deficit models that identify certain children as 'disadvantaged,' to recognize student's individuality and uniqueness, to assist them in learning and building confidence and self-esteem in ways that connect with their prior learning, lived experiences and way of looking at the world. Teacher preparation based on personalized teaching and more context-responsive teaching practices is particularly needed to combat the exclusion and marginalization of historically disenfranchised, minority and indigenous population groups, including refugees.

This is increasingly urgent given that migration and human mobility are likely to increase in the future in the face of economic instability, climate change, wars and political crises – thus heightening diversity in the classroom further. This is as true for developed and developing countries. Over 9 per cent of the 50 million public school students in the United States are now first and second generation English language learners (ELLs).^{xxii} In short, socially and culturally responsive teacher education principles should involve every aspect of teaching and consider how learner's backgrounds, teacher-learner relationships, the learning environment, content, methodology and features of programme design all impact on the learner.

Moving away from standardization: In traditional public education systems, pedagogic models tend to suggest that all learners have a predisposition to benefit from certain methods of instruction. We now know that a 'one model of teaching and learning fits all' approach does not work for all learners and can lead to disengagement and poor outcomes.^{xxiii} When students are failed by traditional schooling because they do not fit into an 'academic' mold, they tend to absorb the idea that they lack ability and lose confidence. This can have an enduring influence on students' motivation, effort and perceptions of self-efficacy.^{xxiv}

Learners who fair less well in learning environments focusing on grades, progression, streaming etc. may be better served in learning spaces that place importance on practice, enquiry, collaboration and team-work. Some may benefit from using education software that enables them to learn at their

own different pace (see below) or require additional support. Recent research into the psychology of learning and neuroscience also offers new perspectives on how to facilitate learning in a ‘brain-friendly’ format in which learning transfer and retention is more likely. Indeed, the evolving research can provide significant insights that could help to customize and improve the design and delivery of education for children with special education needs (SEN) and therefore enhance learning effectiveness. Policy support has been visible, even if many aspects of education provision are still oriented to the needs of systems, rather than serving the needs of learners.^{xxv}

Leveraging technologies to address inequalities: In the face of expanded access to universal primary education around the world, strong arguments have been made for the ways in which technology may help to open up access to education (especially in rural and remote areas) and overcome inequalities in access to resources in low resources countries. But there are as many arguments for how technology and data-driven tools (including in Ed-tech) are often mismatched with contexts, teachers lack the required training to optimize the equipment and imposed technologies actually fuel inequality between schools within and across countries. Nonetheless, in the right conditions, the rise of educational technologies, Open Source and free online learning portals has made it easier than ever for learners to seek and retrieve information, gain access the newest subject contents, instructional videos and other content to bolster their studies.

In the future, technology-based solutions for addressing unequal learning outcomes will enable even greater levels of customized learning. Different types of educational software, such as Zearn, i-Ready and LearnZillion in the United States, already allow students to master concepts and advance at their own pace. Students listen to concepts from the teacher, in biology for example, then watch an engaging video online and play a game to solidify their understanding. The software then points them to additional resources.^{xxvi} For non-mother-tongue learners, translation tools built using Natural Language Processing, text-to-Speech and Speech-to-Text software also allow students to practice their enunciation and writing without the supervision of a teacher, while instructors focus on assisting all students.

In both of these cases, teachers and educators are able to learn from educational technologies *post ante* about students’ progress and struggles and tailor lesson plans appropriately. Going further, controversial predictive analytics tools are emerging which could help teachers *ex ante* to identify struggling students through various data points — including previous grades and test scores, family income-level, race, gender, ethnic origin and age. The ethical implications are muddy and the evidence still mitigated and unreliable. However, such tools may become part of a school’s armory in the future, so long as there is appropriate oversight and accountability in the use of the information gathered and measures to address potential bias.^{xxvii}

Theme 3: Innovations: Implications for teacher education and practice

Guiding questions

Looking to the future, we can see that emerging teaching and learning trends can have a powerful and positive impact on education systems. But to fully realize the potential of the opportunities available, we need to consider the implications for teachers, the types of skills and profiles needed, teacher training and education systems. A third set of questions thus relates to:

- What types of professional competencies, expertise and preparation will be required by teachers and schools of the future and what are the implications for the institutions surrounding teacher training and education systems?
- What are the options for updating teacher education programmes?
- How relevant are new and innovative forms of teacher training and staffing innovations for all countries?
- How relevant or realistic is the emerging thinking around how schools and teachers may manage their work in the future?
- Can any elements in the emerging thinking benefit low resource countries to accelerate their progress towards providing quality education for all?

Implications for teacher education: Given the expanding demand for education and current teacher gap, the most pressing question in low resource countries remains how to encourage the best and brightest to enter the teaching profession and how to train them? More places are needed on high quality training courses than countries can currently provide. A further consideration for the substance of teacher education is that teachers will need wider skills sets, more flexibility in their practice and the freedom to explore ways of working outside the walls of the classroom through physical and virtual communities to support the types of learning needed in the future.

For the moment, challenges slowing down the introduction of pedagogical innovations and new ways of working in some contexts include standardization in traditional teacher training courses, the lack of support frameworks, and opportunities for continuous professional development. There is little room to accommodate more humanistic, teacher and learner-based pedagogies in teacher

education curricula. This is particularly important for teachers working in schools with great diversity in classroom, minimum resources and difficult working conditions.

Many teachers feel unprepared for the realities of teaching in such contexts. Their belief in their personal efficacy to motivate and promote learning then affects the type of learning environments they create and has an influence on the level of academic progress their students achieve.^{xxviii} In relation to technological literacy, educators in low resource countries and schools also lack technology-integration training and struggle to explain the use of educational technologies to the students in their classrooms - leading to many students being unable to fully access resources, or educational resources being improperly utilized.

Given the high cost of reforming teacher training at systems level, or being able to update teacher's skills through continuous professional development, countries can explore successful innovative approaches to teacher training and cost-effective strategies that can generate immediate impact. One option for teacher training institutions is to generalize online courses through distance-learning programmes, MOOCs or other forms of technology-based learning community. This may be especially relevant for practicing teachers and potential recruits from rural and hard-to-reach areas in developing countries. In the same way, teachers could leverage MOOCs to develop digital portfolios to manage and represent their own continuous professional learning around emerging concepts. Other possibilities include enlisting college faculty to provide specific up-to-date training, or teachers self-organizing in a collaborative pool online to deepen their knowledge and provide a range of courses to fellow teachers.

New ways of managing teaching and learning: The management and organization of learning is rapidly changing. In the future, schools may need to employ an intricate balance of teachers, generalists and specialists to support learning. Observers in advanced countries suggest that specialists recruited from the workforce or community may provide more extra-curricula experiences, while specialized instruction in the sciences and other areas may be offered by practicing professionals, university experts and graduate students who work part time or offer virtual courses in technical subjects.^{xxix}

At the same time, the distinction between those who teach in schools and those who plan and lead will become more blurred. Teachers and school leaders may seek greater recourse to educational software to oversee administrative tasks, monitoring and the grading of learning. Schools of the future may also accommodate new roles such as 'teacherpreneurs,' or teachers who apply their expertise in other ways - for example by mentoring new teachers, developing learning goals with students and monitoring their learning, working with experts to design school-based interdisciplinary programmes, piloting new practices and orchestrating community partnerships.^{xxx}

New actors may come into the profession to relieve the massive pressure caused by the mountain of non-academic tasks that teachers tackle each day. This could include coordinators who work with teams of teachers to mark and assess student learning, ensure coherence across traditional and tech-based learning activities and manage administrative tasks - without providing any instruction themselves. This would leave educators more time and energy to focus on the aspects of their work that make the greatest difference to their students.^{xxxix}

Expanding who works with students, and in what ways, might already make the teaching profession more inviting for undergraduates and professionals already out there in the work force.^{xxxix} Entry points will then be needed that allow professionals with different skills and career trajectories to lend their strengths to teaching although it is unclear what types of incentives would bring outside experts into schools, what type of training they might need or how to manage quality control.^{xxxix}

Rethinking who is involved in teaching also challenges the status quo for employment arrangements and teacher credentials. The idea of teachers as 'learning agents,' for example, would require new job descriptions and additional resources. Countries therefore need to envision diverse forms of credentials, certificates and reputation markers to reflect the many ways in which teachers and non-teaching staff can be trained and demonstrate mastery.^{xxxix}

5. Expected Outcomes

The outcomes of the keynote speeches, group discussions, plenary sessions and exhibitions are expected to lead to the following outputs:

- i. The collection and consolidation of insights on the futures of teaching, including the identification and framing of emerging trends, good practices, questions and challenges related to the learning-teaching process and their implications for teacher education and continuous professional development. This could also input into UNESCO's Global Futures of Education project.
- ii. Better understanding of the implications of localized innovations in the organization of learning at systems level for teacher policy, including recruitment policy, teaching standards and the regulation of the teaching profession.
- iii. Recommendations to national governments on how to improve teacher education through international cooperation, the Teacher Task Force, the SDG 4 Steering Committee development partners and teacher education institutions.

In addition, the Forum will support the creation of collaboration and networking opportunities to promote further research and advocacy at the national, regional, and global levels.

6. Discussion articulation

During the PDF 2019, specific roundtables (Deans of Education, Teachers/principles/NGOs and civil society) will be convened on the opening day followed by regional group meetings. Following the Official Opening, a series of Ministerial Roundtables (closed discussion) and thematic meetings will then meet in parallel to look at the future of teaching.

The Ministerial roundtable is a noteworthy innovation. Ministers in charge of Education from the five UNESCO regions are invited to join the host Minister to share their perspectives on the critical issue of the future of teaching. They will talk about innovative reforms they have initiated to improve teacher training, address inequalities and introduce technological and other innovations. The discussions on the future of teaching will continue with 3 multi-stakeholders panels examining the three main themes of the Forum. Please see the proposed structure of the PDF Agenda in Annex 1 for a more detailed look at the proceedings.

Annex 1: Proposed structure of TTF Policy Dialogue Forum 2019

December 7	Arrival of international participants					
Day 1 – Dec 8	Morning	Steering Committee meeting 1	Deans of Education and UNESCO chairs roundtable (closed meeting)	Teachers / principals roundtable	NGOs and private sector organizations' caucus meeting	TBD
	Afternoon	AFRICA regional group meeting	ARAB States regional group meeting	ASIA regional group meeting	LAC regional group meeting	EUR/North America regional group meeting
	Side meetings	<i>Upon request</i>				
Day 2 -Dec 9	Morning	Plenary Session: Official Opening				
		Ministerial Roundtable (closed meeting)	Meeting of TTF Thematic group 1 (pre-primary Teachers)	Meeting of TTF Thematic group 2 (Inclusion and Equity)	Meeting of TTF Thematic group 3 (ICT & Distance education)	Meeting of TTF Thematic group 4 (Teacher management in Crisis and Emergencies)
	<i>Note: All parallel sessions above will look at the future of teaching in light of: (a) trends in learning and how to organize teacher education/training; (b) how to address inequalities, and (c) what innovations to bring to teacher development</i>					
	Afternoon	Plenary Session: Multiple stakeholders panel 1 (2 MoE, Dean, Teacher/principal, NGO/DP/Private organisation):				

	Yellow	Teacher Education/Training				
		Plenary Session: Multiple stakeholders panel 2 (2 MoE, Dean, Teacher/principal, NGO/DP/Private organisation) : Addressing inequalities				
		Plenary Session: Multiple stakeholders panel 3 2 MoE, Dean, Teacher/principal, NGO/DP/ Private organisation) : Innovations				
	Light Green	<i>Official Reception</i>				
Day 3 -Dec 10	Morning	Plenary Session: TTF's work on Teacher policy development : Launch of the Online & Full version of the Guide and Discussions of experiences of countries engaged in the development of their teacher policy				
		Plenary Session: Teaching Standards: Overview and discussion of the status of the work				
		Plenary Session: The Development of the Taxonomy of Teacher education: Progress report and discussion				
	Afternoon	Annual TTF members' meeting: 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				
	Side meetings	<i>Upon request</i>	<i>Upon request</i>	<i>Upon request</i>	<i>Upon request</i>	<i>Upon request</i>
Day 4 -Dec 11	Morning	Plenary Session: Conclusions and way forwards Steering Committee meeting 2 (outgoing and incoming members): Lessons learnt and way forward				

		Sightseeing – social activities (Host country)
	Afternoon	
	Side meetings	
Day 5 -Dec 12		Departure

End Notes

- ⁱ The Future of Education. <https://www.the-possible.com/future-of-education-digital-campus-learning-teaching/>
- ⁱⁱ How to Make Sure Every Child is "Innovation Ready"? Teach Entrepreneurship. Tapping into the entrepreneurial spirit teaches kids the skills they need for the knowledge-based economy of the future. <https://remakelearning.org/blog/2013/09/12/making-sure-every-child-is-innovation-ready>
- ⁱⁱⁱ
- ^{iv} Pedagogy of the Twenty-First Century: Innovative Teaching Methods. By Aigerim Mynbayeva, Zukhra Sadvakassova and Bakhytkul Akshalova. Published: December 20th 2017. <https://www.intechopen.com/books/new-pedagogical-challenges-in-the-21st-century-contributions-of-research-in-education/pedagogy-of-the-twenty-first-century-innovative-teaching-methods>
- ^v UIS Fact Sheet October 2016, No.39: The World needs almost 69 million new teachers to reach the 2030 Education goals <https://unesdoc.unesco.org/ark:/48223/pf0000246124>
- ^{vi} The Uncertain Future of Teaching Michael DeArmond, Christine Campbell, and Paul Hill. A collection of essays celebrating CRPE's 25th anniversary Robin J. Lake, Editor. <https://www.crpe.org/sites/default/files/crpe-thinking-forward-uncertain-future-teaching.pdf>
- ^{vii} Thomas Arnett of the Clayton Christensen Institute in: The Uncertain Future of Teaching Michael DeArmond, Christine Campbell, and Paul Hill. A collection of essays celebrating CRPE's 25th anniversary Robin J. Lake, Editor
- ^{viii} John Holm at SocioDesign quoted in The Future of Education. <https://www.the-possible.com/future-of-education-digital-campus-learning-teaching>
- ^{ix} The Future of Education. <https://www.the-possible.com/future-of-education-digital-campus-learning-teaching>
- ^x The Uncertain Future of Teaching Michael DeArmond, Christine Campbell, and Paul Hill. A collection of essays celebrating CRPE's 25th anniversary Robin J. Lake, Editor
- ^{xi} <https://www.crpe.org/sites/default/files/crpe-thinking-forward-uncertain-future-teaching.pdf>
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