Using AI to support teachers and teacher development

Mobile Learning Week 2019
The International Task Force on Teachers for Education 2030
Who are we?

- Creation at Oslo high-level meeting on Education for All (EFA) in 2008
- Global independent alliance of members working together on teacher and teaching related issues and topics.

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Teachers at the centre of the right to education

“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 dedicated target on teachers states that “By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing States.”
Our goal?

SDG 4: Ensure inclusive and quality education for all and promote lifelong learning

**Vision**
Teaching is a valued profession and every learner is taught by qualified, motivated and empowered teachers within well-resourced, efficient and effectively governed systems to achieve inclusive and equitable quality education for all.

**Mission**
To mobilize governments and other stakeholders for the advancement of teachers and teaching acting as catalyst of global, regional and national efforts through advocacy, knowledge creation and sharing, and country support.
Our work

The substance of the work the Teacher Task Force covers the following thematic areas:

- Teacher's education and professional development
- Teacher's status and working conditions
- Teacher management
- Financing teachers and teaching
- Monitoring and evaluation of teacher policies and practices
- Inclusion and equity in teacher policies and practices
Thematic groups are a working modality to share knowledge and ideas and advance technical work on particular topics. They foster discussion among members, encourage collaboration and facilitate national, regional and international activities to which group members can contribute. Their activities are aligned with the main lines of actions of the Strategic Plan. The potential topics of interest are not restricted.
The Thematic working group on ICT looks at technology in the broad sense of the way:
- How can technology facilitate teachers’ work?
- How can technology support teachers through all stages of their professional lives

Information and Communication Technology and distance education for teacher development.
What practical role can AI play in addressing the challenges faced by teachers
Main challenges

Missing: 69 million teachers to be recruited by 2030

- 24.4 million primary school teachers
- 44.4 million secondary school teachers
- A projected 29 countries will not have enough teachers by 2030

Main challenges

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- High pupil/teacher ratio in classrooms
- Not enough trained teachers
- 617 million children and adolescents have not mastered basic literacy or numeracy

Quality
Can AI replace teachers?

No

- perform routine cognitive tasks such as taking attendance, deliver content, and grade submitted work
- motivate the learner, provide constructive criticism, recognize students interest and provide moral support,
Questions we must explore in regard to AI and teachers

- Can AI play a role in the critical need for teachers preparation?
- Can AI support existing classroom teachers - especially in large class sizes?
- How should policy ensure AI is used appropriately to support teachers and the teaching profession?
- What are the ethical and moral implications of the use of AI in teacher preparation and teacher support?
- Will AI lead us to rethinking the roles of teachers?
Define Artificial Intelligence (AI) when it comes to teacher training and supporting teachers in education.
Part 1: Developing AI solutions adapted to different education settings

What technological means are available to quantify the feasibility of introducing AI in supporting teachers and teacher development? Where should the first investment for AI be within a developed world setting, in a developing world setting, in a refugee education setting? Is this cost justified – or could there be better use of available funding resources?

Dr Nicky Mohan, Director - InfoSavvy Group, New Zealand
Define Artificial Intelligence (AI) when it comes to teacher training and supporting teachers in education.

Today’s discussion

What are some of its potential uses for addressing the growing scarcity of teachers and better trained teachers globally?
Part 2: AI for teacher development.

Is AI a feasible option for helping meet Education 2030 teacher training goals? What current use of AI is feasible for developing teacher-training capacity for primary and secondary education? How will it address the shortage of teachers today?

**Dr. Stan van Ginkel**, lecturer and researcher, the Archimedes Institute and the Research Group Intelligent Data Systems, University of Applied Science Utrecht, Netherlands
Today’s discussion

Define Artificial Intelligence (AI) when it comes to teacher training and supporting teachers in education.

What are some of its potential uses for addressing the growing scarcity of teachers and better trained teachers globally?

What are the ethical and moral implications of the use of AI in teacher preparation and teacher support?
Part 3: Ethical and moral considerations of AI to support teachers and teacher development

What is the current or potential social impact of AI in education? Will AI bridge or widen the 'digital' divide? Should we be concerned that AI could replace the teachers themselves? Are there racial, gender and cultural biases involved in implementing AI systems? Framing AI in the lens of previous innovations in education. Learning from our past so we don't make the same mistakes.

Dr George Saltsman, Director of Educational Innovation, Office of the President, Lamar University, USA
Define Artificial Intelligence (AI) when it comes to teacher training and supporting teachers in education.

What recommendations can our panel make to those who need to align current teaching policies to making best use of AI in education?

What are some of its potential uses for addressing the growing scarcity of teachers and better trained teachers globally?

What are the ethical and moral implications of the use of AI in teacher preparation and teacher support?
Open Discussion: Impact of AI solutions on teachers

What do we view as the potential future of AI to support teacher training capacity - 2030 goals: on both its possible uses as well as its impact to current policies and guidelines. What key conclusions and possible recommendations can we generate from Strategy Lab this morning?

Bijay Dhungana, Vice-President - International Centre of Excellence for Innovative Learning (ICEFIL)
• Q1: Considering the stated need for 69 million new teachers by 2030, what role should AI play in teacher preparation?

• Q2: Considering that our most vulnerable populations (refugees, high-poverty, under-privileged, special need, etc.) are often those who lack qualified teachers, can AI play a role and how?

• Q3: Considering that the populations above are often the most digitally disconnected what strategies can we use in teaching and learning to address the disparity in the digital-divide?

• Q4: Considering that AI can harbor biases and is susceptible to inappropriate use, what safeguards should be adopted by policy makers to protect and empower teachers?
Thank you

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