

Teachers at the Heart of Education Transformation



Carlos Vargas,
Head of the Secretariat of the International Task Force on Teachers for Education 2030 and Section for Teacher Development, UNESCO

The COVID-19 pandemic showed us that we can only overcome great challenges if we work together as a global community. And we know that more challenges are ahead: climate change, rapid technological development, mounting inequality, armed conflict, and the rollback of democracy demand an unprecedented response from all of us. Education is key to providing people with the tools they need to address these challenges and build just and sustainable futures, but to fulfil this transformational role, education itself must be transformed. As the pandemic demonstrated, teachers are the front-line actors in innovating and implementing education system changes, and to succeed in their essential role, they need to be supported.

More and better-qualified teachers are needed

At the Transforming Education Summit (TES), convened by the Secretary-General of the United Nations in September 2022, teachers, teaching and the teaching profession were recognised as fundamental in getting the world back on track

towards meeting Sustainable Development Goal 4 (SDG4), particularly after the disruptions caused by school closures and the shift to remote education during the pandemic. The Summit also confirmed that the single most important thing we can do to ensure quality education and the well-being of students and communities is to put more qualified and motivated teachers into classrooms. But in too many places, especially in remote and disadvantaged areas, classrooms are overcrowded, and teachers are too few. When teachers are overworked, demotivated and unsupported, they cannot contribute to improving learning and transforming education for the future.

Globally, we need millions more teachers: in [sub-Saharan Africa alone](#), 16.5 million extra teachers are needed. But the profession is facing enormous difficulties in attracting and retaining the best candidates. Poor working conditions, low professional status and meagre salaries discourage talented young people from joining the profession and force many of the best teachers to change careers. In too many countries, teachers are paid less than comparably qualified people in other career paths, and in crisis-affected areas, they are often paid late or not at all. The gender imbalance persists, with women over-represented in the profession as a whole and



under-represented in leadership roles. Meanwhile, the increased use of contract teachers across many regions and countries means that too many teachers have inadequate job security and do not receive the same benefits as their public sector counterparts. In order to attract more and better teachers, all teachers need to be respected and properly resourced.

The teacher gap is not just quantitative; not enough teachers have the minimum required qualifications and training to perform their important role, and this has heavy implications on the quality of education. All teachers need to be provided with quality initial

education and continuous professional development throughout their careers, but this is not happening everywhere: even before the pandemic, one in three teachers in sub-Saharan Africa and one in four teachers in Southern Asia lacked the minimum required qualifications and training. In-service training is crucial to help teachers deal with crises and changing education environments. It can also help prevent stress and burnout and instil a sense of belonging to a professional community. However, teachers do not always have access to the continuing professional development that they need; in 2019 in Pakistan, for example, only 62 per cent of primary school teachers had received

in-service training in the previous year. UNESCO and the TTF's [Global Report on Teachers](#) will aim to capture the complexity of teacher shortages in its first edition, planned for the end of 2023.

Teachers need recognition and support to innovate

Emerging demands have made the need for teachers to develop new skills even more stark. During the pandemic, teachers had to find new ways of working in extremely difficult conditions, transforming learning content and methodologies and contributing to supporting the

“ Education is key to providing people with the tools they need to address these challenges and build just and sustainable futures, but to fulfil this transformational role, education itself must be transformed.”

well-being of students and parents, while frequently receiving little socio-emotional support themselves. A joint [UNESCO, UNICEF, World Bank and OECD](#) survey showed that only a little more than half of countries provided the psychosocial support needed to promote teacher well-being. Teachers achieved great things in difficult times. In [Uganda](#), for example, teachers from one school broadcasted lessons on local television, in an initiative that became so successful that it has now spread to 45 channels across Africa. This kind of innovation needs to be supported, and teachers need to be given the autonomy and flexibility to put their ideas into practice in the classroom. Teachers are best placed to identify and address the needs of learners and communities, and this is part and parcel of their everyday work; this should be recognised. With the proper training and support, they can exercise their pedagogical judgement to determine how to help their students achieve their full potential. Empowering teachers and preparing school leaders to support them can help to achieve bottom-up as well as system-wide transformation.

The pandemic showed that digital technology holds great promise for opening up learning to more children and young people, with many schools in different education systems working to facilitate continued student learning through Information and Communication Technology (ICT)-enabled distance education. But access to technology is uneven, both for teachers and for learners. In sub-Saharan Africa and low-income countries, on average, fewer than [one](#)

[in three schools](#) have computers that students can use for learning, and fewer than one in five have internet. Teachers need not only access to devices and infrastructure, but also training on how to use ICTs as a means to an end, rather than as an end in themselves. The trend towards digitalisation will continue when the COVID-19 threat recedes, and to fully participate in the 21st century, both teachers and students need training in digital literacy and advanced digital skills. [Peer-to-peer collaboration](#), can be a powerful tool in helping teachers share best practices on digital technology in teaching methods. Facilitating teacher collaboration and experimentation through communities of practice can help teachers to take full advantage of existing research and drive innovation.

Transforming education means investing in teachers

If the effort to transform education is to succeed, teachers need to be respected and properly supported. [Consultations](#) held as part of the TES have signposted three ways to do this. First, teachers' status and working conditions must be improved, and teachers' voices must be heard. Teachers are central to the transformation of education, and as the interface between learners and education systems, their perspectives must be central to policy debates and systemic changes. To facilitate this, robust social dialogue should be fostered, and teachers should be empowered to participate in every stage of education decision-making, from the classroom to the policy level.

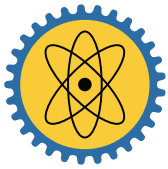
Second, national policies for the teaching profession need to be formulated and implemented. These policies should cover ways to improve the recruitment and deployment of teachers, as well as their continuous professional development, linking teaching standards and quality frameworks to curricula and accreditation processes and teachers' careers. They should also lay out ways to promote innovation and enable teacher leadership.

Finally, countries need to invest more in improving teacher wages, professional development and working conditions. Governments have committed to spending 20 per cent of annual public expenditure on education, and they must honour this commitment. Annual donor budgets, too, need to increase to meet international aid benchmarks. The world needs more and better-qualified teachers who are capable of carrying out their essential role in forming global citizens prepared to change the planet – so the world must be prepared to pay for them.

As posited in UNESCO's recent publication on [Reimagining our futures together: a new social contract for education](#), education goes beyond the intergenerational transmission of knowledge. To achieve the futures we want, education must inculcate the values and norms and shape the attitudes needed to arrive at more peaceful, just and sustainable societies. Teachers are the defining force that can bring about this transformation. So, as a matter of priority, we need to ensure that all teachers have the support, respect and resources they need to contribute to the future of education, and of the world. ■

“// The pandemic showed that digital technology holds great promise for opening up learning to more children and young people.”

BUSITEMA UNIVERSITY, A CENTRE OF EXCELLENCE IN TRAINING, RESEARCH AND INNOVATION IN UGANDA



BUSITEMA UNIVERSITY
Pursuing excellence

Established in 2007 in the rural communities of Eastern Uganda, Busitema University is a multi campus science and technology University with six faculties of Engineering, Science and Education, Agriculture and Animal Sciences, Natural Resources and Environmental Sciences, Health Sciences and Management Sciences. The University also runs a Maritime Institute and a Clinical Research Institute. To accelerate its contribution to the socioeconomic transformation of the rural society, the University has established centres of excellence in Space Science, Soil Science, Materials and Energy Engineering, Maternal and Child Health, Natural Products Research and Innovation and Artificial Intelligence.

VISION: "A Centre of academic and professional excellence in science, technology and innovations."

MISSION: "To provide high standard training, engage in quality research and outreach to support industrialisation and sustainable development."



Busitema University Main Library, Centre of Information Science and Digitalisation.



Prof. Paul Waako, The Vice Chancellor of Busitema University steering the University towards Research, Innovation and Product development.



The Rt. Hon. Robinah Nabbanja, The Prime Minister of the Republic of Uganda inspecting TAZCOV stall, a new medicine developed by Busitema University for management of COVID-19 during the National Science Week 2022 at Kololo.

Busitema University Embraces Open Distance e-Learning (ODEL) Strategy.

Busitema University (BU) has since 2019 run distance learning programmes, but adoption of e-learning was slow. However, in an effort to live up to the expectations of BU strategic plan (2020/2030), the University adopted blended learning with the Busitema University Online Learning Environment (BUOLE) – which is a Moodle-based Learning Management System (LMS) as integral to this approach. The need to fully adopt BUOLE was heightened by 'social distancing' and prohibition of social gathering that the country adopted for the control of the COVID 19 pandemic to continue the teaching and learning process even during the lockdowns. Unprepared for this highly demanding approach regarding digital tools and human capacity, Busitema University empowered its ODeL Unit to foster the online implementation of all its academic programmes. The number of courses hosted on the University LMS (BUOLE) has since increased from less than 100 at the beginning of 2020 to 1,446 courses as of 23rd March, 2023. At determined intervals, students are periodically allowed to develop hands-on skills during face-to-face sessions with their facilitators.



Members of Busitema University management receiving a CISCO switch from the Research Education Network Uganda (RENU), an internet service provider whose internet is zero-rated for access by students via their mobile devices. This enhanced the attendance of both synchronous and asynchronous online sessions by students.

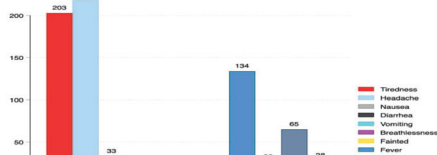
The Government of Uganda is emphasizing the development of Science, Technology and Innovation as the main driver to its middle income state aspirations with Universities and other tertiary institutions as its changing agents.



Hon. Dr. Monica Musenero Masanza, The Minister of Science, Technology and Innovation inspecting the TAZCOV Facility. She is spearheading the government agenda of having 'a science-led economy' through accelerating the development of Science, Technology and Innovation.

Busitema University's Contribution To Knowledge, Solutions and Evaluation of Public Health Interventions and Pandemics.

Through its Community and Public Health Department, established in 2015, the researchers designed, implemented and evaluated interventions used during the COVID-19 pandemic. Vaccine hesitancy was a key challenge to COVID-19 vaccinations, which have proven to be the most effective strategy against the pandemic. We explored the levels and drivers of COVID-19 vaccine hesitancy, and one of the key themes was fear of side effects. We followed up with 2,204 participants to ascertain the nature of side effects experienced by recipients to distinguish facts from myths. Below are the side effect profiles that our participants experienced.



Local Side effects following Oxford/AstraZeneca COVID-19 Vaccine in Tororo District

The researchers also explored treatment outcomes, and experiences of participants treated under the home-based care interventions rolled out hurriedly during the pandemic. We found that COVID-19 home-based care was associated with fear, anxiety, loneliness, depression, economic loss and stigma. We recommended that policy makers consider various home-based follow-up strategies and strengthen counselling of COVID-19 patients at all stages of care.

Busitema University Developed a Medicine for COVID-19 and other Acute Respiratory Illnesses.

Busitema University Natural Products Research and Innovation Centre (BUNaPRIC) was started in 2020 by Dr. Samuel Baker Obakiro (PhD) with support from the Presidential Scientific Initiative on Epidemics (PRESIDE) at the peak of the COVID-19 pandemic when there was a desperate need for therapeutics to manage COVID -19 patients. Our Scientists, inspired by their previous research works as well as the traditional medicine practices, developed a unique natural therapeutic (TAZCOV) for symptomatic management of acute respiratory infections (ARIs) like COVID-19, common cold, influenza (flu), sore throat, parainfluenza, respiratory syncytial virus infection, rhinitis, pharyngitis, bronchitis, pneumonia and bronchiolitis.

TAZCOV underwent a rigorous scientific process of preclinical evaluation and was notified by the National Drug Authority (THA1087). It is currently undergoing an independent clinical trial at Makerere Lung Institute under the Clinical Trial on Natural Therapeutics (CONAT) programme supported by the Government of Uganda through the Secretariat of Science, Technology and Innovation. Besides TAZCOV, our scientists have developed several other promising medicines from our rich biodiversity for malaria, HIV/AIDS, tuberculosis, diabetes mellitus and are at different stages of product development.

One of the ways we give back to the community is by improving the quality of medicines prepared by traditional healers to meet acceptable standards. The Centre is also building sustainable relationships with traditional medicine practitioners to ensure proper documentation and preservation of indigenous knowledge and practices. The Centre welcomes partners and donors who share our vision of building a one-stop centre for training, research, community outreach, innovation and technology development in natural products, promoting local manufacturing, import substitution, and poverty alleviation.



The minds behind TAZCOV; Dr. Andima Moses, Dr. Gavamukulya Yahaya, Dr. Obakiro Samuel Baker, Dr. Oriko Richard Owor, Dr. Kiando Peter.

For more Info: Contact Us On
 Busitema, 236 Tororo - Uganda
 +256 45 444 8838 / 45 444 8808
<https://busitema.ac.ug>
 @BusitemaUni
 vc@adm.busitema.ac.ug

