

Education

Both ‘Innovating Education’ and ‘Education for Innovation’ can make strong contributions to the overall SDG implementation. **Scientific knowledge and innovative thinking should, therefore, be organized in the context of global sustainability.**

Education must benefit from an innovative ‘industry’, developing resources that improve its effectiveness and efficiency. G-STIC 2018 concluded that innovation should offer the education sector the means to new practices, organizations, and technology - improving standards, quality, and access.

G-STIC 2018 confirmed that innovation and technology have an important role to play to expand both access to education and the quality of the education being provided in the developing world. G-STIC 2018, therefore, looked in detail at technological challenges for teacher training, and how technological innovations can support and stimulate a pedagogical transformation in higher education.

The proliferation of digital and other innovative forms of education should be used for increasing the provision of quality education services in developing countries, aiming at **achieving larger access and better quality with lower costs.** Proper application of technology can solve educational issues not only related to access, but also to lack of proper physical infrastructure and lack of trained teachers.

Beyond technology, innovation can take many forms, and indeed it will have to take many forms. Especially in low-income countries, Ministries of Education are not equipped to deal with the massive increase in the cohorts of students completing their primary education and aiming to pursue their education at the secondary level. Current models of service delivery may not be financially sustainable. Partnerships with the private sector can reduce costs, while not compromising on quality. Even issues related to the core curriculum to be taught in lower secondary schools may need rethinking.

Technology must be tailored to specific populations that may vary by language, usable infrastructure, and end-user adaptations. Context and adaptation are essential for reaching marginalized populations, and thereby reaching the SDGs through improved learning and education.

Technological innovations can help to implement and fasten the realisation of a paradigm shift in pedagogy towards transformational learning, supporting students (1) to solve complex problems in an interdisciplinary setting in connection with real society and ethical reasoning and (2) to activate the networks of knowledge in their brains thanks to discussions, feedback and reflection.

Technological innovations in education should be encouraged by educational institutions, legislators and government at-large by providing an open space for such innovation and not limiting it by restrictive standards and regulations.