

## UNESCO Institute for Information Technologies in Education

Medium-Term Strategy 2022–2025

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#### Introduction

This strategic document of the UNESCO Institute for Information Technologies in Education (IITE) was formulated in a time when the world arrived at a crossroad and faced major global challenges. The COVID-19 pandemic has led to a major set-back for the world, in particular for lower-income countries, and to the largest disruption to education in history. Today, technological progress, with Artificial Intelligence (AI) and other digital technologies at its core, facilitates widespread changes at a speed never evidenced before, but raises new challenges, for example, those related to defining ethics required for AI use and identifying the ways that would ensure quality and equality in the process of digital transformation of education. The global community has agreed on the 17 Sustainable Development Goals (SDGs). UNESCO is responsible for coordinating its Member States in their activities focused on achieving SDG 4 which aims to 'ensure inclusive and equitable quality education and promote lifelong learning opportunities for all'.

IITE shall find its way, building on existing partnerships and activities, to mobilise new partners and additional resources to address the challenge of equitable and inclusive digitalisation of education in order to achieve SDG 4 targets.

#### **UNESCO** and **UNESCO** family

UNESCO as a specialised United Nations agency contributes to building peace, poverty eradication, sustainable development and intercultural dialogue through education, the sciences, culture, social sciences and humanities, as well as communication and information.

UNESCO has two global priorities – Africa and Gender Equality, to be integrated into its programmes with due regard to a renewed and strengthened focus on Africa to affirm the need for solidarity with the most vulnerable and most affected by crisis and emergency situations.

UNESCO has seven Category 1 Institutes that work as part of <u>UNESCO's Education Sector</u> to assist Member States in tackling their education challenges. Category 2 Centres are important extensions of UNESCO's programme delivery arm and a means to raise UNESCO's profile in its Member States. In addition, UNESCO works through several important networks and with key educational partners to optimise its actions and impact together with all the parties concerned.

UNESCO has the responsibility for leading and coordinating the activities related to SDG 4 through <u>Education 2030 Agenda</u> and contributes to a number of other SDGs.

## The context and the challenges

UNESCO is aware of today's global challenges and focuses on tackling them. They include extreme poverty and growing inequalities, particularly in terms of gender, but also in terms of:

unequal access to quality education and sustained learning opportunities;

- effects of climate change on the environment and society at large;
- the degradation of biodiversity;
- depletion of ocean resources and access to water;
- impact of frontier technologies in all areas of life and the digital divide;
- the rise of racism, xenophobia, exclusionary discourse and discrimination;
- mass disinformation and violations of press freedom;
- threats to the integrity of cultural heritage;
- fragility of support systems for creativity and the diversity of cultural expressions.

The whole UNESCO family is acting together with other UN agencies to meet these challenges in order to achieve the SDGs by the approaching deadline of 2030.

#### UNESCO meets the challenges in education caused by COVID-19

During 2020-2021, the COVID-19 pandemic led to the closure of schools and universities all over the world, which resulted in the worst ever disruption of education. The closure was the longest and had the most serious consequences for lower- and middle- income countries, especially for girls and young women in least developed countries in Africa. The pandemic is not over yet. The COVID-19 spread and school closures will continue, though the fight against COVID-19 shows important progress in many countries. Safe re-opening of schools is a priority of UNESCO support to Member States during the pandemic.

Students are forced to leave schools because of the pandemic and when face-to-face education is replaced by the remote learning the quality of learning becomes an important issue. Some students are excluded from education because of the digital divide, others experience a loss in learning caused by inadequately organized remote learning and lack of traditional face-to-face interaction with peers and teachers. However, quality online and blended learning has demonstrated to be as good as face-to-face learning or even more efficient in certain cases and for older learners. Therefore, the challenges related to the pandemic and other crises necessitate developing capacities, approaches and infrastructure for inclusive, quality online and blended learning – learning that also capitalises on high-quality open content and pedagogy.

Inclusive quality online and blended learning offer tempting opportunities for accelerating the achievement of SDG 4 targets. However, rapid digitalisation results in stress for all levels of education systems, policy, governance, management, as well as for parents, teachers and learners. IITE will address these challenges by providing sound policy advice and promoting inclusive digital transformation to leave no one behind.

Education systems are under pressure in many countries and face increased competition for funding during the crisis, which has again affected the most disadvantaged. In addition to securing sufficient funding for education, inclusion in education remains a key issue to be addressed.

UNESCO has organised a massive response to the disruption of education caused by the pandemic. IITE and its partners from the affected countries and beyond have joined efforts to act within <u>'Combat on the COVID-19</u>: <u>Keep learning</u>. <u>Together we are move!</u> Initiative, as part

of UNESCO global emergency response. Using its unique strengths, IITE, together with partners, was able to come up with new technical solutions, resources for distance learning, guidance, training opportunities, and a call to share expertise and good practices.

Based on the lessons learned from this action, IITE is prepared for crisis response and will provide support for Member States in crisis, for example, in their efforts to deliver education for students who are out of school or the ones with special needs.

# Institute for Information Technologies in Education (IITE) IITE and its unique position and competitive advantage

IITE is the UNESCO Category 1 Institute with a unique global mandate for ICT in education. Inclusive and equitable digital transformation of education has become the key success factor for achieving SDG 4 in the times of COVID-19 disruption; thus, IITE advantages make it well positioned to play the role requested by UNESCO Member States to transform their educational systems more resilient and inclusive with the use of digital services, platforms and facilities to achieve SDG 4. The Institute has proved that it has:

- sufficient experience and expertise in the field of ICT in education to assist in inclusive digital transformation of education, as well as the capability to add complementary competencies when needed;
- a holistic intersectoral and cross-sectoral approach to ICT in education integrating analytical research, policy advocacy, collection and dissemination of best practices, teacher professional development and technical assistance;
- a successful track record in mobilising partners and support for learners in crisis (e.g., during the COVID-19 pandemic) and for building capacity for ICT in education in various regions (e.g., in Eastern European and Central Asian countries);
- a widespread network of education experts, public, private and industry partners, and increasing partnerships with other UNESCO and UN entities.

#### Trends and challenges for education worldwide

The most important challenges and global trends from IITE perspective are as follows:

- digital transformation of education;
- students excluded from education;
- insecurity and security breaches of IT systems;
- increased financial pressure on education;
- issues related to reliability of information.

The Institute will meet these challenges, find opportunities to strengthen its position and play on its strengths when implementing its strategic objectives.

#### Digital transformation – further accelerated by COVID-19

Because of the pandemic, digital transformation has been accelerated globally. The concept of digital transformation is not new, but interest in it, including from non-commercial sector, has much increased over the last years.

There are various definitions of digital transformation. IITE adheres to the definition by <u>Technovation (April 2021)</u>: 'A fundamental change process enabled by digital technologies that aims to bring radical improvement and innovation to an entity [e.g., an organization, a business network, an industry, or society] to create value for its stakeholders by strategically leveraging its key resources and capabilities.'

Digital transformation is a prerequisite for inclusive and quality online and hybrid learning and teaching. Inclusive smart education is a part of digital transformation.

#### Creating momentum for the new strategy, IITE – on the move

IITE strives to contribute to the implementation of the UNESCO global Strategy on education, which requires a will, capacity, capability and actions to move IITE in the right direction: to accelerate achieving SDG 4 with the unique power of inclusive and equitable digital transformation of education.

UNESCO Member States should not only recover from the shock of the still ongoing pandemic, they should also rebuild and extend education to serve all and to create resilient education systems prepared for future crisis. Inclusive digital transformation based on UNESCO values can play a critical role in ensuring the success of this process.

#### Activities and resources for inclusive and equitable digital transformation of education

Time will be needed to prepare IITE for its new role, the same is valid to new partners and resources. Therefore, IITE will build momentum for the new direction step by step. The first step is to clarify the role of IITE in supporting Member States in inclusive digital transformation of education. The next step is to identify the needs of Member States for support on the levels of policy, sectors and institutions. A review of existing digital transformation initiatives and readiness analysis as a preparation and diagnosis of initiatives that do not work well are among further steps.

#### Cluster actions and initiatives – building momentum

To better understand the needs, issues and success factors, IITE will cluster the actions, projects and networks that have the potential to deliver to the stepwise approach to digital transformation.

#### Build partnerships with UNESCO Chairs and UNESCO networks

While IITE has a long-term partnership with the UNESCO Chairs having a priority on ICT in education, the paradigm shift accelerated by COVID-19 requires to reconsider and reinforce IITE's partnership with those UNESCO Chairs that give priority to digital transformation.

#### Ensure regular communication and outreach with stakeholders

The stakeholders to IITE's activities are among the frontrunners in the field of ICT in education. Among them, there are partner universities and IT companies, UNESCO Chairs, IITE Governing Board members and their organizations, the host country (the Russian Federation) and Member States. IITE will extend and improve its networks and enhance cooperation with strong global players, in particular with those interested in and giving priority to a human-centred, inclusive and equitable digital transformation of education. To support this move, IITE will strengthen its communication and networking and organize flagship events at regional and global levels.

### The UNESCO framework and strategies

The new UNESCO Medium-Term Strategy for 2022-2029 represents a framework for the new IITE strategy.

#### UNESCO Strategy on Technological Innovation in Education for 2021-2025

As one of the responses to the comprehensive evaluation of UNESCO's work on ICT in education, UNESCO has drafted the <u>UNESCO Strategy on Technological Innovation in Education (2021-2025)</u>, which was approved by the UNESCO Executive Board in September 2021.

The document puts forward a will to better support the efforts of Member States to harness technological innovation for education with equity and inclusion as guiding principles. It outlines three core functions UNESCO fulfils in this domain: (1) observatory of technological transformations in education; (2) technical assistance and capacity development; and (3) development and implementation of normative tools. These functions will be realized through (1) expanding access to educational opportunities by prioritising the most marginalised; and (2) enhancing the quality and relevance of teaching and learning. Activities that will be implemented will take into account the division of responsibilities among the Headquarters, regional bureaus, field offices and UNESCO Category 1 Institutes. UNESCO/UNITWIN Chairs Networks and ASPnet will also contribute to the implementation of these activities.

#### UNESCO Medium-Term Strategy and Major Programme I Education

UNESCO has five Major Programmes, of which the Major Programme I is devoted to Education. In the resolution of the 41<sup>st</sup> UNESCO General Conference, IITE is requested to contribute to the Major Programme I Output 2.ED9 and Output 8.ED8. In addition, through its engagement in UNESCO global HIV and health education programme implementation and guided by UNESCO global Strategy on Education for Health and Well-being, IITE has been designated to contribute to Output 7.ED3.

Output 2.ED9: Education and learning reimagined through interdisciplinary research, foresight and public policy debate.

Output 2.ED9 is under the UNESCO Strategic Objective 1 and its Outcome 2:

- Strategic Objective 1: Ensure quality equitable and inclusive education and promote lifelong learning opportunities for all, in order, inter alia, to reduce inequalities and promote learning and creative societies, particularly in the digital era
  - Outcome 2: Strengthen international coordination for the achievement of SDG 4 targets and develop the global education agenda based on research, foresight and innovation.

Output 7.ED3: Learners are empowered through transformative education to lead healthy lives, promote sustainable development and engage with the world as creative and responsible global citizens

Output 7.ED3 is under UNESCO Strategic Objective 3 and its Outcome 7:

- Strategic Objective 3: Build inclusive, just and peaceful societies by promoting freedom of expression, cultural diversity, education for global citizenship, and protecting the heritage
  - Outcome 7: Promote inclusion and combat discrimination, hate speech and stereotypes.

## Output 8.ED8: Technologies and digital innovations leveraged to ensure more inclusive, effective and relevant learning

Output 8.ED8 is under UNESCO Strategic Objective 4 and its Outcome 8:

- Strategic Objective 4: Foster a technological environment in the service of humankind through the development and dissemination of knowledge and skills and the development of ethical standards
  - Outcome 8: Foster knowledge sharing and skills development in the digital age.

The connection between the UNESCO Strategic Objectives and IITE Strategy is illustrated in Figure 1.

#### Delivering to the UNESCO strategies

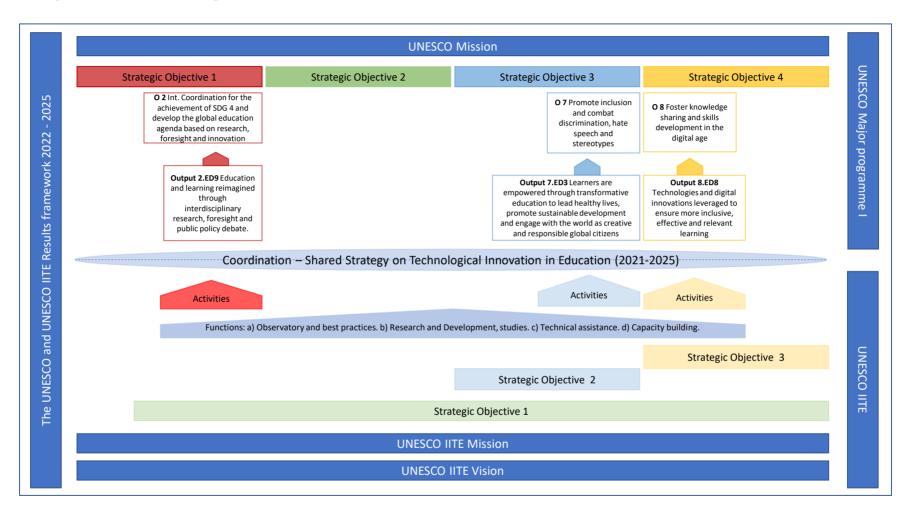


Figure 1: The UNESCO and UNESCO IITE Results Framework 2022-2025

The first upper part of the figure shows UNESCO Strategy, as taken from the document for the General Conference – Draft Programme and Budget for 2022-2025 (41 C/5). The second lower part of the figure illustrates the IITE Strategy for 2022-2025 and how it delivers to the three outputs.

IITE's Strategic Objective 1: Facilitate inclusive and equitable digital transformation of education for SDG 4 is an overarching objective, which delivers to all three outputs through its activities. While the Strategic Objective 2: Human-centred e-learning for inclusion, health and wellbeing primarily delivers to the Output 7.ED3, and the Strategic Objective 3: Smart education in post-pandemic world and future education primarily delivers to the Output 8.ED8.

## IITE's vision, mission, priorities and functions

#### IITE as a global player contributing to UNESCO strategies

IITE is the UNESCO Category 1 Institute with a unique global mandate for promoting ICT in education. Inclusive digital transformation of education and ethical AI have become the key success factors for achieving SDG 4 in times of COVID-19 disruption and aftermath. IITE's strengths make it well positioned to play a role to assist Member States in digital transformation of education towards resilient and inclusive systems supported by digital services, platforms and facilities that would facilitate achievement of SDG 4.

#### Vision

Achieving the Sustainable Development Goal 4 (SDG 4) with the unique power of human-centred, inclusive and equitable digital transformation of education.

The vision is that fostering digital transformation of education with proven UNESCO values as its foundation [or at its heart], the speed and quality of movement towards achieving SDG 4 targets will be geared up.

#### Mission statement

The mission of IITE as the UNESCO Category 1 Institute for ICT in Education is to promote the innovative and ethical use of Artificial Intelligence and digital technologies in education, supporting Member States and the global education community as a facilitator and enabler for achieving the Sustainable Development Goal 4 (SDG 4). IITE is committed to human-centred, inclusive and equitable digital transformation of education.

#### Global priorities

IITE shares UNESCO's global educational priorities. To contribute to the achievement of UNESCO's goals, IITE will develop programmes on inclusive and equitable education, including those with a special emphasis on gender equality and the African region as priority.

The Global Education Monitoring Report (<u>UNESCO 2020</u>) stated that only 68% of countries have definition of inclusive education, and only 57% of them cover multiple marginalised groups. Teachers and learners with disabilities and/or learning difficulties have been at the vanguard of education technology from its infancy and will continue to be the first users of

new technologies, such as AI. These students should be included, and their needs should be addressed. For Africa, the focus of inclusion should be education – from basic to tertiary levels – for women and men, especially for those belonging to vulnerable groups, particularly through targeted measures for crisis-affected people on the move.

IITE is engaged in a few initiatives with African Member States. While implementing the Strategy, IITE will build up its actions with Member States in Sub-Saharan Africa, in particular focusing on inclusive digital transformation of education, teachers and gender equality. Furthermore, African countries have repeatedly shown leadership in implementing the concept of openness as applied to education. IITE will build on that when promoting Open Science, Open Education and Open Education Resources (OER) to assist the development of African education.

For IITE it will be important to find the right local stakeholders with capacities for digital transformation when engaging interested Member States. The initiatives will be tailored to their particular context, culture and resources. The implementation should happen in close cooperation with Member States, relevant NGOs and other actors.

IITE aims to broaden initiatives in Sub-Saharan Africa for human-centred, inclusive and equitable digital transformation of education to support the implementation of the Digital Transformation Strategy for Africa (2020-2030). The new <u>UNESCO Operational Strategy for Priority Africa 2022-2029</u> is of high importance for the achievement of this goal. The flagship Programme 1: Campus Africa: Reinforcing Higher Education in Africa – will be a priority as well.

#### **Regional priorities**

IITE is a global player that creates partnerships to contribute to regional initiatives and to strengthen global UNESCO partnerships. The Arab region, Eastern Europe and Central Asia are examples of the regions where IITE implements projects to support Member States in their activities related to SDG 4.

#### Commonwealth of Independent States (CIS)

Since its creation, IITE has been supported by its Host Country – the Russian Federation and has been actively working in nine CIS countries — Armenia, Azerbaijan, Belarus, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, and Uzbekistan. IITE will ensure continuity in its work as a regional priority in the process of implementation of the new Strategy.

#### **IITE's functions**

According to its Statutes, the Institute has five functions to:

- 1) promote the collection, analysis, dissemination and exchange of information on the use of information and communication technologies in education;
- 2) provide at the request of Member States advisory services and promote studies in Member States on the application of information and communication technologies in education;

- 3) offer technical assistance based on research findings in the design of curricula and courses on the use of information and communication technologies in education;
- 4) organise pre- and in-service training, including open and distance education, for educational personnel on the use of information and communication technologies in education, giving priority to developing countries and countries in transition;
- 5) foster the development of UNESCO's programmes on the application of information and communication technologies in education in all Member States.

The Institute will continue to fulfil its functions and adapt its work to the UNESCO priorities, in particular through:

- developing the role of observatory of digital transformation in education and knowledge sharing;
- prioritising evidence-based policy research, analytical studies and the collection and dissemination of best practice on the use of ICT in education;
- providing technical assistance, knowledge and information sharing with Member States on the application of ICT in education, with a focus on inclusive digital transformation of education and a particular emphasis on teachers, learners and on the digital content of curricula and digital health and wellbeing in formal and nonformal education.

### IITE strategic objectives

#### 1. Facilitate inclusive and equitable digital transformation of education for SDG 4

Speeding up digital transformation can facilitate significant progress towards achieving SDG 4 targets. The successful implementation of digital transformation in the education sector requires a platform and should be governed in line with UNESCO's humanistic values and Education 2030 Framework for Action. Weakly prepared digital transformation, if its goals are not aligned with the UNESCO Education 2030 Framework for Action, can do more harm than good by magnifying existing and creating new divides.

While UNESCO through its normative power can provide a robust framework for inclusive digital transformation, IITE in close cooperation with the UNESCO family and partners, can advocate and support the implementation of inclusive digital transformation of education. Firstly, IITE will build up the momentum, its capacity and connection to expertise to be able to play a significant role in assisting Member States with inclusive digital transformation of education. Depending on the needs and situation in Member States, IITE could support the following activities:

- mapping and analysing the needs and assessing the readiness for digital transformation of education on national, regional, sectorial or institutional levels;
- conducting dialogues with relevant ministries and other stakeholders on challenges and pathways to success for digital transformation of education;
- collecting and sharing best practices of ICT use in education in different parts of the world;

- preparing concepts, frameworks and policies for digital transformation of education at different levels;
- building capacity for digital transformation of education;
- connecting to relevant expertise, complementary competencies and partners for building successful initiatives for digital transformation of education;
- building partnerships with donors to support significant initiatives;
- establishing partnership with UNESCO Chairs, UNESCO and UN entities interested in and prioritising digital transformation of education;
- developing and disseminating publications on digital transformation of education;
- building observatory functions;
- organising a biannual flagship event on digital transformation of education.

#### 2. Mainstream human-centred e-learning for inclusion, health and wellbeing

Education is, at its heart, about human connections – between students, teachers, parents, caregivers, and broader communities. The COVID-19 crisis has exposed inadequacies and inequalities in access to education outside of school, limiting the quantity and quality of these connections. In order to minimise social inequalities and to support human engagement, educational policies and initiatives should embrace an inter-related set of several principles as applied to E-learning. Human-centred E-learning should be guided by a clear purpose and focus on educational objectives to reach all learners, empower teachers, engage an ecosystem of partners, and rigorously and routinely use data to learn what strategies, policies and programmes can effectively maximise learning for students.

The activities under this priority will support Member States in adopting e-learning to improve quality and access to education, bringing education to all learners anytime and anywhere, contributing to the wellbeing and health of youth. In particular, the following major activities and outcomes are envisaged:

- supporting human-centred approaches in e-learning by disseminating good practices, building capacity and promoting innovative solutions;
- developing and accumulating free and open E-learning tools, courses and other resources in an online library to support teacher professional activity and capacity building;
- establishing global and regional partnerships in Member States for networking and helping them to localise human-centred E-learning strategies for teacher capacity building;
- conducting needs assessment and developing recommendations on open and distance learning solutions for the most vulnerable groups of students;
- ideating, designing and promoting digital resources to empower young people to live healthy lives and develop healthy relationships;
- supporting teachers for delivering good quality, rights-based, grounded in evidence and gender-transformative health and well-being education that includes comprehensive sexuality education, addresses HIV, fosters social and emotional learning and builds life skills;

- supporting schools and communities to ensure safe, inclusive learning environments free from all forms of violence, bullying, stigma and discrimination;
- addressing emerging critical issues in education, health and well-being during COVID-19 and beyond.

#### 3. Promote smart education in post-pandemic world and future education

The smart education paradigm suggests a convergence of information and learning technologies and social media combining E-learning, mobile learning (M-learning), ubiquitous learning (U-learning) and social learning with the use of smart devices and social services as educational instruments. The evolution to smart learning is expected to improve the educational environment to advanced level regarding device, network, educational programme, etc. This will help identifying the future potential scenarios of education development in the face of an increasingly volatile, uncertain, complex and ambiguous world. To promote effective, intelligent tailored-learning, self-regulated, motivating, adaptive, resource-enriched and technology-enhanced smart education focused on the humans – rather than on devices and based on IT infrastructure, IITE envisages the following major activities and outcomes:

- research and organization of events on the use of digital technologies in education and trends in ICT use in education within the Futures of Education Initiative;
- rethinking and redesigning national smart education strategies;
- research and promotion of innovative digital pedagogical approaches to support inclusive digital transformation of education.
- support Member States in the development of initiatives on open education, OER and MOOCs; exploration and dissemination of best practices through research and experience sharing events;
- promotion of the improvement of soft skills through media and information literacy building and social and emotional learning opportunities;
- promotion of Education Management Information Systems (EMIS) and data analytics.

#### IITE's action areas

Three action areas deliver to the IITE strategic objectives and the UNESCO outcomes and outputs as shown in Figure 1: The UNESCO and UNESCO IITE Results Framework 2022-2025.

#### Action Area 1: Digital transformation and pedagogy innovation for future education

This Action Area contributes to the UNESCO Output 2.ED9 and the Output 8.ED8, IITE Strategic Objective 1 and 3.

#### Shaping the future agenda and fostering inclusive digital transformation of education

The current global pandemic has changed anticipated futures across the globe. The COVID-19 crisis is both world-shattering and world-making. There is a widely shared sense that humanity is at a defining moment for rethinking the future. Reflection on probable/anticipated and possible/alternative futures is underway within UNESCO's Futures of Education: Learning to

Become Initiative and the UN@75 reflections on shaping the future together. IITE will explore deep and fundamental transformations in societies, politics, economies and cultures that can happen in the future. Under the current situation, the focus will be on lessons learned broadly from the COVID-19 crisis and on the actions needed to protect and transform education for the sake of humanity and the planet, in particular:

- generating and sharing knowledge about trends and emerging issues;
- collecting, analysing, synthesising and disseminating related knowledge and information;
- developing individual and institutional capacities and providing technical support and advice as well as other services to UNESCO Member States;
- promoting and advocating evidence-based policy dialogue;
- partnering with academic and policy-oriented entities to support original, applied and action-oriented research initiatives and to analyse, synthesise and disseminate research findings;
- promoting global policy dialogue among education ministries and other relevant stakeholders worldwide with regard to improving the quality of education for all.

Supporting equitable access to quality education through the use of OER and Open education, education data collection and EMIS

UNESCO has adopted two important recommendations on <u>Open Education Resources</u> (OER) and <u>Open Science</u>.

Openness in education involves many related concepts including open classrooms, open textbooks, OER and open educational practices (OEP), massive open online courses (MOOCS, open pedagogy, open learning, open universities, open access, open data, open licenses, free and open software, open policy, open research, etc. OER, MOOCS and open universities are among the most important factors that are considered to have the greatest potential for contributing to achieving SDG 4 targets. The transformation and development of higher education institutions, including open universities, is to be promoted in the context of the era of lifelong learning to provide a basis for decision-making on open education policy throughout the world and contribute to the international dissemination of experience.

OER can play an important transformative role in supporting the SDG 4 goal. OER can be used to increase access to learning for those living in unfavourable circumstances and can also be used to address the issues of cost, quality and equity. IITE's activities in this field will include:

- supporting openness in education to a wider audience of potential students;
- providing support for the development and contextualising OER policies, including research and policy advocacy;
- facilitating the exchange of pedagogies and instruction methodologies in using OER;
- development of capacity-building in the use of OER in non-English-speaking countries;
- supporting open universities, summarising their experiences into case studies and elaborating guidelines and/or recommendations for open universities;

• promoting networking among global open universities to discuss current challenges, share lessons learnt and contribute to the development of more open universities.

Education Management Information Systems (EMIS) are evolving from a tool which plays a purely monitoring and statistical role through the collection and reporting of headcounts of students and teachers to a more sophisticated, integrated and dynamic education management solution. While local EMIS are at different stages of maturity in design, deployment and use of data, it is necessary to support Members States in leveraging diverse data and information systems that support and inform student learning and resource management. IITE's activities in this field will include:

- fostering data-driven decision making, transparency and accountability through the use of EMIS;
- summarising and disseminating insights on challenges, achievements and innovative solutions in leveraging EMIS;
- stimulating a debate on the future of EMIS by exploring ways to optimise existing systems;
- developing training programmes and IT technical guidelines tailored to the needs of Member States to empower all data users benefiting from them;
- conducting trainings on competency development to strengthen EMIS and ensure availability and use of real-time and accurate data.

#### Promoting media and information literacy in education

UNESCO IITE will work consistently through a variety of projects to promote media and information literacy (MIL) that is crucial for ensuring the quality and inclusiveness of learning and teaching and vital for the success of lifelong learning. MIL is a complex concept proposed by UNESCO in 2007, which covers all competencies related to information literacy and media literacy that also include digital or technological literacy. It focuses on different and intersecting competencies to transform people's interaction with information and learning environments online and offline.

MIL constitutes a composite set of knowledge, skills, attitudes, competencies and practices that allow effectively access, analyse, critically evaluate, interpret, use, create and disseminate information and media products with the use of existing means and tools on a creative, legal and ethical basis. It is an integral part of so-called '21st century skills' or 'transversal competencies'. IITE's activities in this field will include:

- raising awareness and policy advocacy on the significance, role and scale of MIL for education;
- contributing to the development of MIL-related policies and professional strategies at national, international and regional levels;
- providing MIL-related training for educators and university and school librarians, and developing relevant education materials and tools;
- facilitating cross-sectoral and interdisciplinary collaboration among stakeholders.

#### Action Area 2: Innovative use of ICT in health and wellbeing education

This Action Area contributes to the UNESCO Output 7.ED3, IITE Strategic Objective 1 and 2.

## Harnessing ICT for HIV prevention, health and wellbeing education and awareness raising among young people

Health is identified as one of the core outcomes of good quality education, while effective skills-based education develops knowledge, attitudes and values that support informed decisions and healthy and fulfilled lives. School environment has a huge impact on learning outcomes and learners' social and emotional development. Globally, one out of three school students is bullied in some form by their peers. The experience of bullying has long-lasting negative effects on physical and mental health and academic achievements of victims, witnesses and perpetrators. With over 70% of the world's youth aged 15-24 online, many adolescents and young people are turning to digital sources to seek information about bodies, health and relationships in order to get advice and support. Many platforms are developed and led by young people themselves, targeting their peers. ICT offer unprecedented opportunities to help adolescents and young people develop knowledge, attitudes, values and skills they need to grow up healthy and become proactive contributors to a more peaceful, tolerant, inclusive, sustainable and secure world. IITE will work with multiple stakeholders, including education, health and youth sectors, UN agencies, media, IT industry, civil society and academia, engage with young people, their parents, teachers and influencers to catalyse innovation in ICT-powered health and well-being education and violence prevention. Appreciation of youth diversity along with youth empowerment will be central for reaching out to young people in different contexts, including those where connectivity might be an issue or barriers may exist for comprehensive health and sexuality education in formal settings. IITE will also continue strong cooperation with UNESCO's Section for Health and Education that coordinates programming in this thematic area across UNESCO entities and provides overall guidance and technical expertise. IITE's activities in this field will include:

- knowledge generation, guidance development and experience sharing at global, regional and country levels, jointly with UNESCO's Section for Health and Education;
- engaging with social media networks, youth influencers and young people themselves to explore and support new promising approaches and platforms for health and wellbeing education with correct and relevant content and high reach and impact;
- development, testing and promotion of online counselling and support services for youth with special attention to safety measures to protect users from harm, ensure anonymity and confidentiality;
- evidence-based advocacy and awareness raising to gain greater appreciation of, demand for and support to health and well-being education, including sexuality education, among decision makers, educators, parents, community leaders and young people themselves;
- building capacities to ensure that all children and young people benefit from uninterrupted health and well-being education, including HIV and sexuality education, provided in a safe and inclusive environment free from violence and discrimination;

- cooperating with media, education and civil society organizations to empower parents support their children in the course of transition from childhood to adulthood and help them realise their health and well-being throughout their lives;
- supporting education sector to prevent discrimination and bullying against learners and educators living with or affected by HIV and enable them to fulfil their right to education in a supportive learning environment;
- jointly with UNAIDS, other stakeholders and partners, supporting communication activities using multiple media and platforms, ICT-powered solutions and involving influencers to raise public awareness about HIV, reduce HIV-related stigma and discrimination as well as violence, bullying and cyberbullying.

#### Action Area 3: Digital capacity building and e-inclusion of education

This Acton Area contributes to the UNESCO Output 2.ED9 and Output 8.ED8, IITE Strategic Objective 2 and 3.

#### Leveraging smart education during and after the COVID-19 pandemic

The COVID-19 pandemic has forced a massive shift away from teaching and learning in traditional settings. Global education systems now aspire to keep abreast by placing particular emphasis upon digital technologies to enable quality distance and blended education and meaningful communication and to serve as an essential tool for equitable innovation and expanded potentials.

By safeguarding the right to education under the unprecedented circumstances through and beyond the crisis, facilitating the cross-border and inter-sectoral collaboration, mobilising resources towards rethinking and redesigning national smart education strategies, IITE reaffirms dedicated commitment to the 2030 Agenda and its pivotal SDG 4 targets, UNESCO's Major Programme I and the new Strategy on Technological Innovation in Education for 2021-2025, through promoting technologies and digital innovations leveraged to ensure more inclusive, effective and relevant learning; enabling technological transformations in education and knowledge-sharing, encouraging open, inclusive and sustainable technology solutions for education, and integrating technological innovations in the service of education systems. Through its strategic activities, IITE will contribute to the UNESCO Major Programme I Output 8.ED8, aimed at leveraging technologies and digital innovations to ensure more inclusive, effective, and relevant learning, leading further to promoting and strengthening the capacity of individuals, groups, organizations, and regions to learn and make deliberate choices in favour of inclusive digital transformations in education for sustainable development, and thereby improve the quality of life during and after the pandemic. IITE's activities in this field will include:

- strengthening the role of digital innovations in learning and teaching in view of the predicted, feasible and preferred futures, share a forward-looking vision of what education might yet become and offer the most up-to-date policy agendas;
- dedicating intensive efforts towards development and implementation of rewarding smart education strategies and solutions to expand access to quality education and lifelong learning opportunities;

 designing viable synergies of teaching/learning methodologies and tools to equip people with knowledge and skills essential for the "new normal", to add to their confidence in sustainable development, and to increase opportunities for selfsufficient life with competent concern for social values, gender equity and cultural diversity.

#### ICT Capacity Building for Teachers and Schools in the Digital Era

The global education crisis has awakened the conscious appreciation of teachers' role, work, professionalism and commitment among communities, most notably parents. Reconsidering education delivery modalities during and after the pandemic adds up to teachers' roles, imposes novel obligations. To ensure the effectiveness of educators, it is crucial to support their professional confidence and personal resilience by equipping them with the training, guidance and technology needed to ensure continuity of teaching, and what is more, to add value to their pedagogical efforts. IITE's activities in this field will include:

- developing and accumulating free e-learning open tools, online courses and other resources (e.g., E-library) to support teaching and capacity building for educators, establishment of global and regional partnerships to ensure rewarding networking and localising human centric e-learning strategies for capacity building among educators;
- promoting cooperation, solidarity, and resilient response to emergencies among educators at all levels; introducing and supporting interdisciplinary approaches towards sustainable development in and through education;
- fostering continuous teacher competency development in the era of smart learning by unleashing the potential of ICT and AI; promoting reasonable autonomy and individual performance patterns among teachers to facilitate motivation, commitment and professional proactivity.

#### Ensuring inclusion and gender equality in education through ICT

Distance learning provides a lifeline to education to those who can access it, but the shift to remote online learning is widely feared to compound social inequalities across borders and communities. Increasing awareness and appreciation of learners' diversity, recognising various learning needs and abilities, improving educational settings and making learning contents, modes and tools universally accessible will serve as the basis for the more beneficial and equitable revival of public education, thus, significantly contributing to the achievement of the global goals and commitments on education.

IITE's strategic activities focus on inclusive, engaging, adequate education that enables quality and equally efficient learning for all learners at all levels of education. Staying attuned to situation on the ground and foreseeing potential changes in learning environments worldwide. IITE's activities in this field will include:

 addressing acute issues of inequity and disparities in education, risks of major learning losses, massive dropouts and general unpreparedness for digital transformation, distance learning and EdTech integration;

- supporting Member States in policy development to ensure that vulnerable groups of students are included in learning programmes in safe environments, with diverse accommodations, accessible instrumentality and appropriate teaching services;
- facilitating the training of teachers, instructors, support staff and Internet technology administrators on accessibility issues, assistive technologies, and open solutions to effectively work with students with disabilities;
- striving towards removal of major obstacles to learning, including disability barriers, gender disaggregation, digital divide, etc., by virtue of technology and innovative pedagogy;
- promoting viable opportunities for unfolding and harnessing the potential of AI and digital innovations towards strengthening inclusion and equity in and through education;
- involving in the development of learning content that is easily understood by all, promoting comprehension, confidence and performance of students of different contexts, locations and abilities; facilitating research on the use of open solutions for education to improve accessibility;
- endorsing active and ongoing dialogue and consultation with key stakeholders and beneficiaries, including vulnerable learner groups, their parents, families, advocates, representatives from civil society and ICT professionals; promoting cooperation and partnership to share best practices, ideas and solutions for flexible, equitable, and truly inclusive education systems across borders.

# Enabling environment for the efficient and effective delivery of IITE's priorities

#### Global partnerships and networks

During the last years, IITE has built a large collaborative network that includes government and civil society organizations, universities, companies, other UNESCO and UN entities and networks. Expansion and consolidations of this network will be an important task that would enable the implementation of the strategy. In this regard, IITE will:

- ensure greater involvement of partners in different activities including webinars, conferences and publication preparations;
- encourage partners to make in-kind contributions to IT-products and services which can help Member States to improve the quality, inclusiveness and reach of education;
- mobilise partners and networks for inclusive digital transformation of education for achieving SDG 4 targets;
- strengthen the partnership with UNESCO Chairs that give priority to digital transformation;
- using the communication plan to support the partner and network building.

#### Communication and outreach

Strengthening programme communication and outreach will be instrumental to support IITE's efforts to better serve Member States in human-centred, inclusive and equitable digital

transformation of education. Having an annual communication plan that considers needs, interests and capacities of different stakeholders will support IITE to implement its strategy.

#### Budget and resource mobilisation

The ambitious goal to focus on digital transformation, while continuing work in the abovementioned areas, will require a significant amount of resources. IITE itself will need to transform to be able to assume this new role.

So far, IITE has managed to mobilise resources from donors and partners to extend and increasingly globalise its work. Now the Institute is at a crossroad where additional resources are needed more than ever to support Member States for accelerated actions to achieve SDG 4 targets.

The 41<sup>st</sup> UNESCO General Conference (November 2021) in its resolution on IITE (1) requested the Governing Board of IITE to continue to work with the Director-General to mobilise the necessary human and financial resources to enable IITE to accomplish its Mission and (2) appealed to Member States, intergovernmental and international non-governmental organizations, donor agencies, foundations and the private sector to grant or renew their financial and other appropriate contributions to enable IITE to contribute towards the priorities of the Major Programme I and the strategic objectives of UNESCO for 2022-2029.

At the same time, the General Conference expressed its gratitude to the Government of the Russian Federation for its regular financial contribution to IITE and for providing premises free of charge. It also thanked all Member States and organizations that contributed intellectually and financially to IITE's activities and invited them to continue their support for 2022-2023 and beyond.

These important statements provide foundation for IITE to increase its resource base.

While the budget for 2024-2025 is still to be approved, the General Conference has noted that the integrated budget for IITE for the period 2022-2023 is \$2,554,600. Of this, \$717,600 comes from the regular budget of the Major Programme I as a UNESCO regular contribution to the IITE core funding. In addition to the integrated budget, the Russian Federation will continue providing its annual financial contribution to the Institute (the amount for 2022 will be RUB 36,636,853 – about \$500,000). Along with already mobilised extrabudgetary funding, IITE will strengthen its efforts in increasing the range of extrabudgetary projects — including decentralised funding from UNESCO HQs and, therefore, attracting more new funds. IITE will:

- ensure and enable that resource mobilisation is a part of each staff member's responsibility;
- share the Strategy with partners and donors and consider the opportunity for joint efforts and potential extrabudgetary projects;
- approach Member States and National Commissions for UNESCO with the request to share their needs to achieve SDG 4 targets, as applied to IITE's expertise.

#### Management and human resources

IITE manages its resources, including financial and human resources, in strict compliance with the relevant financial, administrative and HR policies and regulations of UNESCO. The Institute will continue and strengthen the application of provisions of these policies in close consultation with central services in charge of financial and human resources management.

The organizational structure of IITE is well established and proved to be efficient. It includes Director's Office, Administrative Office and three Programme Units: 1) Unit of Digital Pedagogy and Learning Materials, 2) Unit of Teacher Professional Development and Networking, and 3) Unit of ICT in Health Education. The Administrative Office provides support to Institute's activities in terms of its financial and human resources management, maintenance, security and other administrative activities.

IITE reports to its Governing Board from whom the Institute receives strategic vision and direction further implemented by dedicated professional staff utilising results-based management. IITE will:

- strengthen staff performance management and make use of internal and external available resources for staff professional development to meet IITE's objectives;
- further promote the culture of trust, openness and transparency in the team in order to benefit from diverse cultural and professional backgrounds of the IITE staff.

#### Risk handling, monitoring and evaluation

Risk handling, monitoring and evaluation will be implemented by IITE in line with the UNESCO Enterprise Risk Management Policy to ensure consistent application of risk management processes. The current risks identified for IITE with relevant measures of risk management include the maintenance of strategic programme focus and measures to keep the sustainability of the core team and funding. IITE will continue maintaining the risk register for the proper risk management to ensure programme implementation and achievement of Institute's objectives. IITE's monitoring and evaluation of management and programmes will strictly follow UNESCO annual and biennial evaluation exercises as well as reporting to the IITE Governing Board.