



Concept Note

1. Background

The **Central Asia Symposium on ICT in Education (CASIE)** has served as a convening platform for the Central Asian republics to collectively discuss ongoing challenges in education and identify possible solutions through effective utilization of ICTs in education since its inception in 2011. As a region that shares a unique social, cultural and historical background different from the rest of the Asia and Pacific region, the participating countries in the past CASIEs celebrated the rare opportunity to exchange their views and experiences in integrating ICT in education, and collectively deliberate on effective solutions to various challenges.

Central Asia has indeed shown continuous progress in achieving the core goals of Education for All (EFA). According to the UNESCO Global Monitoring Report (2015)¹, most of the countries in Central Asia have reached nearly universal literacy, as well as high primary and secondary enrolment rates with complete gender parity. Such key strengths of these education systems, if sustained with quality, can act as influential contributing factors to leading the nations toward competitive economies.

For the last few decades, the Central Asian region has gone through considerable changes in its economic landscape, becoming a competitive actor in the global economy. For example, the added value from the service sector in Central Asia has been drastically increasing while the economic share from agricultural and industrial sectors has declined.² Although this is a global trend, the growth spurt in the service sector of the region is remarkable, compared to other regions in Asia and the Pacific. This is an encouraging yet challenging movement for the Central Asian countries. It is encouraging that the countries have been diversifying their economies beyond the traditional sources of economy, such as industrial and natural resource sectors. It is however challenging as the service sector requires different skillsets from the ones of the agriculture and industrial sectors that are yet to be integrated in the

¹ UNESCO. (2015). *EFA Global Monitoring Report 2012: Education for All 2000-2015-Achievements and Challenges*. Paris: UNESCO. Retrieved from <http://unesdoc.unesco.org/images/0023/002322/232205e.pdf>

² UNESCAP. (2015). *Value added by sector: Agriculture, industry and service* [Data file]. Retrieved from <http://www.unescap.org/stat/data/statdb/DataExplorer.aspx>

education and training system of Central Asian countries.³ The expansion of the service sectors and diversified economy calls for development of a strong human capital that is responsive to the changing demands of work.

Considering that many Central Asian countries, such as Uzbekistan, Tajikistan or Kyrgyzstan still have significantly more and static rural populations⁴ (64%, 73% and 64%, respectively) than the rest of the Asia and Pacific (42%), preparing the workforce for the future of work remains a challenge and is oftentimes exacerbated in these areas. Worldwide in general and the Central Asian countries in particular, “curricula often do not reflect the needs of the rural economy, and the quality of education suffers from poor infrastructure and unqualified teachers”.⁵ This may be a root cause for the high unemployment rate in the Central Asia (8.7%, as the world average is 5.9%), despite its greater achievement in universal primary education and high literacy rate.

Indeed, low employment rates, particularly for youth, are a startling global issue, raising a great sense of urgency to review our education systems and identify the root causes. A recent ILO’s report shows that the global youth unemployment rate (13.1%) is three times higher than the adult unemployment rate (4.6%).⁶ According to the report, the youth attributed this to their lack of skills and experience, more so than to the lack of employment opportunities.⁶ UNESCO’s recent Technical and Vocational Education and Training (TVET) progress review⁷ in the Asia and Pacific region indicates similar phenomena, stating that “skills mismatches have grown across the region, and Asia-Pacific youth are now three to six times more likely than adults to be unemployed”. A recent OECD report supports this evidence, as the “mismatches between employers’ needs and what the education and training system provides lead to skills gaps, over-reliance on imported labour, domestic unemployment and a less competitive economy”.³

Developing a well-educated and skilled society is key to the successful development of any nation. Education and training have to be responsive and relevant to the demands of employers and requirements of the increasingly changing and unpredictable job market. With a sizeable young population, the Central Asian countries can increase their competitiveness by raising youth employability through a stronger alignment of the outcomes of education and training with the skills requirements of the labour market. It is in this context that this year’s CASIE seeks to examine challenges in skills development in Central Asia, and explore how ICTs can contribute to addressing the issues, such as improving employability, quality of education and training, and create a more labour market responsive and relevant education and training sector.

³ OECD. (2013). *Private sector development policy handbook: Developing skills in Central Asia through better vocational education and training systems*. Retrieved from <http://www.oecd.org/globalrelations/VocationalEducation.pdf>

⁴ UNESCAP. (2015). *Population data sheet*. Retrieved from <http://www.unescap.org/sites/default/files/SPPS%20PS%20data%20sheet%202015%20final%20online.pdf>

⁵ FAO. (2014). *Rural Women in Eastern Europe and Central Asia*. FAO Regional Office for Europe and Central Asia, p. 15. Retrieved from <http://www.fao.org/3/a-i3840e.pdf>

⁶ ILO. (2014). *Global Employment Trends 2014*. Geneva: ILO. Retrieved from http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_233953.pdf

⁷ UNESCO. (2015). *Enhancing relevance in TVET: Review of progress in the Asia-Pacific since 2012*. Retrieved from <http://www.unescobkk.org/resources/e-library/publications/article/enhancing-relevance-in-tvet-review-of-progress-in-the-asia-pacific-since-2012-1/>

Centering CASIE 2016 around the theme of ICT-supported skills development is therefore timely for Central Asia and the global community, and has been reflected and been given considerable attention in the new Education 2030 agenda.⁸ In this global agenda, skills development is identified as one of the priority areas in achieving the Sustainable Development Goal 4 (SDG4) on education⁹, “ensuring inclusive and equitable quality education and promoting lifelong learning opportunities for all”. Specific regard is given to affordable and quality TVET; the acquisition of technical and vocational skills for employment, decent work and entrepreneurship; as well as elimination of gender disparity and ensuring equal access for the vulnerable. Stemming from the “Shanghai Consensus”¹⁰ and further supported by the “Asia Pacific Conference on Education and Training”, the role of ICT has been actively explored to “ensure quality education and skills development for sustainable future”.¹¹ More recently, the International Conference on ICT and Post-2015 Education, and its ensuing Qingdao Declaration¹² also underscores that “ICT be used to deliver education and training, including TVET, in both formal and non-formal settings, at all times and in all places, as it can improve and diversify learning pathways, improve quality, and further reach vulnerable and underserved groups including rural youth and adults, women and girls, out-of-school youth, and people with disabilities”. Thus ICT can pave the way towards lifelong learning opportunities for all, the key guiding principle of the new education agenda.

Given the renewed attention to skills development in Education 2030 agenda and its association with ICT to unleash the full potential for skills development, the CASIE 2016 will focus on the following four themes:

- 1) ICTs to facilitate open, flexible and blended learning opportunities for all
- 2) ICTs to support practical oriented authentic learning experiences
- 3) ICTs to strengthen data-informed education and training policy development to adapt to job market trends
- 4) Partnerships for mainstreaming ICTs in education and training

With the theme of **Unleashing the Potential of ICT for Skills Development**, CASIE 2016 will be organized in **Astana, Republic of Kazakhstan** on **27-29 June 2016**, in collaboration with the Government of the Republic of Kazakhstan and the Korea Education and Research Information Service (KERIS), supported by UNESCO Almaty, UNESCO Tashkent and UNESCO Institute for Information Technologies in Education (IITE), as well as Intel Corporation. The Symposium will examine policies, strategies, and initiatives to address the growing need for adequate skills development that meet the demands of today’s and tomorrow’s labour markets. Through various formats, such as plenary and break-out workshop sessions, the Symposium will serve as an opportunity for the Central Asian countries to further explore the issues surrounding skills development and support to mainstream holistic and effective use of ICT in TVET at the ground level. The daily reflection sessions will bring together participants at all levels, including policy makers, international and national experts in ICT for skills development, TVET teacher educators,

⁸ UNESCO. (2015). *The Education 2030 Framework for Action*. Retrieved from:

http://www.unescobkk.org/fileadmin/user_upload/efa/TWG/39th_TWG/Framework_for_Action_Education_2030.pdf

⁹ SDG4 <http://www.un.org/sustainabledevelopment/education/>

¹⁰ UNESCO. (2012). *Shanghai Consensus: Recommendations of the Third International Congress on Technical and Vocational Education and Training*. Paris: UNESCO. Retrieved from <http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/ED/pdf/concensus-en.pdf>

¹¹ UNESCO. (2015). *Kuala Lumpur Declaration*. Retrieved from http://www.unescobkk.org/fileadmin/user_upload/epr/TVET/ACET_2015/KL_Declaration_final.pdf

¹² UNESCO. (2015). *Qingdao Declaration*. Retrieved from <http://unesdoc.unesco.org/images/0023/002333/233352E.pdf>

and Ministerial officials to discuss shared and individual challenges in order to initiate partnerships, as well as share perspectives on suitable policies and programmes. Collectively, this format would encourage a link between policy, research, and practice.

2. Themes of CASIE 2016

The main theme of CASIE 2016 is “**Unleashing the Potential of ICT for Skills Development**”. Discussions will be organized around the following sub-themes:

1) ICTs to facilitate open, flexible and blended learning opportunities for all

One of the grand benefits of ICTs is to enable students to participate in online training courses any time, from any place, and at any pace. Not only does this ICT-enhanced access provide opportunities for the unreached, it also lessens the burden for those who already work but wish to further develop their skills and knowledge, encouraging the development of a lifelong learning culture. Indeed, the introduction of quality and localized open educational resources (OER), blended learning, online open and distance learning (ODL), and massive open online courses (MOOCs) have created an opportunity for vulnerable, disadvantaged and non-traditional learners to attain their educational goals through multiple and flexible pathways. Given the geographical challenges and shared languages in the Central Asian countries, establishing a policy mechanism to promote the fluid sharing of quality open educational resources and distance learning materials across the region seem to be a viable solution in synergizing and enriching skills development among the countries, ensuring equitable skills development opportunities for all.

2) ICTs to support practice oriented authentic learning experiences

The rapid development of technologies in the workplace demands education and training systems to develop a workforce that can adapt to the changing dynamics in the world of work and more accurately project skills and competencies that are being required. ICT, in this regard, can be a source for rethinking the relevance of current education and training curricula for skills development and ways to deliver training to enable students achieve the needed qualifications. For example, ICT can augment learning experiences by engaging students in authentic project-based activities, supplementing classroom learning through ‘virtual simulation’ of the actual workplace setting and offering dual training, where students could learn theories and practice with technologies used at the workplace. Additionally, connecting students with well-established subject experts in the industry is of fast-growing relevance in the innovative use of ICT for education and training. All of these can only be possible when teachers are capable of using technologies to enhance the training practice. In fact, ICTs can make teaching more effective, but they cannot substitute teachers. Unfortunately, teachers in TVET sectors oftentimes do not have adequate qualifications for teaching, nor are provided with continuous opportunities to develop their pedagogical and didactical skills, compared to their counterparts in general academic-stream schools. Teachers and trainers would benefit from being capacitated in leveraging the full potential of ICTs in their teaching delivery so as to enhance students’ learning experiences. In this way, ICTs can also help students develop higher order thinking and transversal skills needed for the changing world of work.¹³

¹³ Majumdar, S. (2011). Emerging Trends in TVET in Asia and the Pacific Region: CPSC’s Response. In S. Majumdar (ed.), *Emerging Challenges and Trends in TVET in the Asia-Pacific Region* (pp. 3-17). Rotterdam: Sense Publishers.

3) *ICTs to strengthen data-informed education and training policy development*

An OECD study³ on skills development in Central Asia highly recommended strengthening sophisticated database and local capacity to formulate data-informed policies. ICTs can be used for labor market data analysis to identify skills gaps between TVET programs delivered and the skills needed for the job market. ICTs are also a great tool for improving the collection and analysis of big data in order to measure the outcomes and impact of education and training (e.g., tracer studies), project skills for greater employability, and improve databases for career and TVET study options. This will boost the evidence-based policy development to better match the needs of employers, TVET institutes, and students.

Another important area for consideration and further investigation is the development of the National Qualification Framework (NQF), which has been in the process of development in a few of Central Asian countries and has been seen as a priority issue. However, much work remains to be done in this direction, as NQF can be of strong support for the TVET systems, but have not been fully utilized. Moreover, it has been suggested that linking NQFs with assessment tools can enhance the ability of formulating tailor-made TVET policies. At the same time, ICTs can facilitate in strengthening these linkages.³

4) *Partnerships for mainstreaming ICTs in education and training*

Successful introduction and use of ICTs require strong partnerships among governments, industry partners and all other education stakeholders as well as innovative funding mechanisms to secure the financial resources needed to unleash the full potential of ICT for learning, in line with the 2030 education agenda.

3. Objectives

The CASIE 2016 aims to:

- bring together national education policy makers, practitioners and development partners to explore the potentials of ICT to strengthen education and training system in the region
- provide a platform for the Central Asian republics to discuss ongoing challenges and identify possible solutions for relevant and demanded skills development, with a particular focus on effective utilization of ICT in TVET
- promote collaboration and partnerships among the Central Asian countries in the identification of solutions in response to similar issues and challenges toward effective and efficient use of ICT in TVET

4. Date and venue

27-29 June 2016 (3 days) in Astana, Republic of Kazakhstan

5. Language of the symposium

Russian and English with simultaneous translation in both languages

6. Expected participants: (around 60 participants total)

- Participating countries: Kazakhstan, Kyrgyzstan, Mongolia, Tajikistan, Turkmenistan, and Uzbekistan.
- Three participants from each of the six countries: 1) Policy Maker (e.g. high level official from a ministry of education which governs TVET), 2) Head of TVET division, 3) Head of ICT-in-Education Division. More participants from the host country might be present.
- Officials from the Ministry of Education of the Republic of Kazakhstan
- Representatives from the Korea Research and Education Information Service (KERIS)
- Experts from UNESCO and other international organizations/NGOs
- Partner representatives from the private sector

7. Expected output

A publication containing the following will be produced and disseminated:

- A status review of issues and trends in skills development of the Central Asian countries, with special focus on the use of ICT in education and training
- Promising cases from the region and beyond
- Policy recommendations from workshop
- Follow-up activities for cooperation

UNESCO contacts

The Symposium is organized by UNESCO Bangkok and Almaty Offices, with the Secretariat located in UNESCO Bangkok.

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