Research Study
for the “Asia-Pacific Regional Strategy on Using ICT to Facilitate the Achievement of Education 2030”
- Executive Summary -

Introduction

The main purpose of this research study was to provide the theoretical ground and evidence for the “Asia-Pacific Regional Strategy on Using ICT to Facilitate the Achievement of Education 2030” (hereafter the “Regional Strategy”) at the Asia-Pacific Ministerial Forum on ICT in Education (AMFIE) 2017 in Seoul, Korea on May 11-12, 2017. The Regional Strategy was formally adopted on 11 May 2017 by the Asia-Pacific Member States.

The Regional Strategy aims to support Member States’ implementation of a set of concrete and feasible actions to leverage the affordances of ICT in achieving the Education 2030 agenda over the next five years (2017-2022), with the 15-year long-term vision in mind. This executive summary presents 1) the current status in Asia-Pacific of progress towards SDG 4 targets and ICT integration in education; 2) the research method; and 3) the initial priority action areas derived from the research study. In addition, this summary presents the drafting process of the final Regional Strategy with the set of Four Priority areas and Six Action Points for the next five years (2017-2022).

Current status of attaining SDG 4 and ICT integration in Education

The existing literature and data indicate that Asia Pacific has been facing unique challenges in achieving the universal education goals and improving the quality of education. Moreover, the lack of coordinated actions and monitoring and evaluation systems have been identified as one of the major impediments to achieve the SDG 4 goals in this region. SDG 4 calls for bold breakthroughs in education toward the goal of quality education and lifelong learning for all. ICT is positioned as a critical mechanism that can help improve access, inclusion, equity, and quality issues in education. The role of ICTs with respect to the corresponding targets in SDG 4 can be categorized into three dominant views: 1) ICT as a competency - Targets 4.4 (skills for work), 4.5 (equity), 4.b (scholarships) and 4.c (teacher quality); 2) ICT as a delivery mechanism - Targets 4.5 (equity) and 4.6 (literacy & numeracy); and 3) ICT as resources - Target 4.a (education facilities & learning environments).

Research Method

This research study adopted a holistic integrated approach, including the situational analysis based on the various statistical data sources, the review of relevant literature, and the pre-forum survey. In March 2017, the pre-forum survey was sent out to 46 Member States and 26 responses were received. The responses were analyzed to measure the region-specific data regarding the quantitative and qualitative nature of integrating ICT in education for achieving SDG 4. In particular, Importance-Performance Analysis (IPA) was used to derive the areas requiring prioritized actions by analyzing the difference between the self-perceived importance and the current level of performance for a range of SDG 4 areas.

1 The SDG 4 targets are explained in detail at UNESCO’s website: http://en.unesco.org/gem-report/sdg-goal-4.
2 Under Importance-Performance Analysis (Martilla & James, 1977), four areas are derived according to the level of importance and performance. The area with both high importance and high performance should be
Pre-Forum Survey: Key Findings

1. **National ICT Master Plan**: About 75.6% of Member States responded that ICT is stated in the national policy, and about 56.4% have stand-alone ICT in Education Master Plans.

2. **IPA of SDG 4 Targets**: IPA analysis indicates that Target 4.3 (TVET and higher education) was perceived to be important, but the current performance was relatively low, indicating the need for higher prioritization. Overall, Member States reported a high level of performance for the targets that they considered important. Targets that received both high performance and high importance include 4.1 (access to education), 4.5 (equity), 4.6 (literacy & numeracy), 4.a (education facilities & learning environments), and 4.c (teacher quality). On the other hand, targets with both low performance and low importance include 4.2 (early childhood), 4.4 (skills for work), 4.7 (global citizenship and cultural diversity), and 4.b (scholarships) (See Figure 1). At the sub-regional level, Target 4.2, 4.3 and 4.4 in Eastern and South-Eastern Asia, Target 4.3 in the Pacific, and Target 4.b in South Asia are their specific areas of priority.

![Figure 1. Importance and performance Analysis of SDG 4 targets (n=26)](image)

3. **Feasibility of ICT Integration in SDG 4**: ICT integration was perceived to be the most feasible for attaining Targets 4.6, 4.5, 4.3, 4.a, and 4.c. On the other hand, Target 4.2 received the lowest rating. (See Figure 2)

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maintained at the current level, while those with low importance and low performance remain a low priority. The area with high importance and low performance should receive concentrated efforts, while the area with low importance and high performance can be considered to be an overinvestment. See the final Research Study to be published by the end of 2017 for more details.
4. **ICT for enhancing access to education**: It was found that the current performance to utilize ICT for enhancing access at all school levels was insufficient compared to its importance. Among all school levels, TVET and higher education appears as the most important area that needs ICT for enhancing access.

5. **Mobile technology for learning**: Most Member States considered mobile technology to increase access to primary and secondary education, TVET and higher education, and to improve skills for employment. Financial support, training for capacity building, and content development were reported as important considerations for promoting mobile learning.

6. **Teachers’ ICT competency and delivery of teacher education/training**: Regarding teachers’ ICT competency, significant differences between the importance and the current performance were found in both pre-service and in-service teachers, indicating that it is important for both groups of teachers to develop ICT competency. In several Member States, pre-service teacher education/training is delivered only in a face-to-face mode, whereas in-service teacher education/training takes various modalities, including face-to-face learning, online learning, and blended learning.

**Initial Priority Areas**

Based on the synthesis of the key research findings, this research study identified the following five priority areas that can be best addressed by the use of ICT under SDG 4-Education 2030:

1) ICT for Transforming and Expanding TVET and Higher Education;
2) ICT for Improving Teacher Quality;
3) ICT for Improving Access to and Quality of Secondary Education;
4) ICT for Enabling Inclusive and Equitable Learning; and
5) ICT for Monitoring and Evaluation.

**Regional Strategy Drafting Process**

Following the research study, a rigorous drafting process for the Regional Strategy commenced. The drafting process focused on obtaining and incorporating the input of all Asia-Pacific Member States and was coordinated by UNESCO Asia and the Pacific Regional Bureau for Education (UNESCO Bangkok).
A Drafting Committee was set up to ensure that the diverse voices of Member States from each of the sub-regions are heard. The Drafting Committee was regionally balanced with a representative from each of the five Asia-Pacific sub-regions – Bhutan (South & West Asia), Uzbekistan (Central Asia), People’s Republic of China (East Asia), Thailand (Southeast Asia) and Cook Islands (Pacific). In total, the Regional Strategy went through three rounds of reviews from Member States, Drafting Committee members, international organizations, and other relevant stakeholders.

In the first round of review, the Regional Strategy was circulated to the Drafting Committee Members, international organizations and other relevant stakeholders for their review and feedback. Based on their feedback, revisions were made to the language, and narrowing the list of concrete action points. In addition, key thematic amendments were made including combining Technical and Vocational Education Training (TVET) and secondary education into one priority area, and ensuring learning is learner-centered and participatory.

In the second round of review, the amended Regional Strategy was then circulated to all Member States for their comments and feedback. Member States’ responses were taken into consideration during the meeting of the Drafting Committee on 10 May 2017. At this final meeting of the Drafting Committee, final revisions were made to ensure clarity of language, and a clearer demarcation of the roles of stakeholders and international organizations at all levels.

Finally, on 11 May 2017 during AMFIE 2017’s Ministerial Dialogue, the attending Ministers, Vice-Ministers and Ministers of State and other participants collectively reviewed and adopted the Regional Strategy, with the understanding that final amendments would be undertaken by UNESCO Bangkok. The key amendment proposed and agreed at the Ministerial Dialogue was for Higher Education to be included in the first priority area.

On 23 May 2017, after further review and completion of key amendments, the final Regional Strategy was circulated to all Asia-Pacific Member States. It set out Four Priority Areas and Six Action Points for the next five years (2017-2022) as follows:

**Four Priority Areas**

1) ICT for Expanding Relevant Skills Development in Secondary Education, TVET and Higher Education;
2) ICT for Improving the Quality of Teaching and Teaching Practices;
3) ICT for Enabling Inclusion and Equality in Education; and
4) ICT for Monitoring and Evaluation

**Six Action Points**

The following six action points were agreed on to achieve progress in the Four Priority Areas and SDG 4:

i. Member States to develop ICT in Education policies that are an integral part of sector-wide national education plans and aligned with the national ICT strategy.

ii. Member States to engage in cooperation and partnerships across the Four Priority Areas, with the support of sub-regional and international organizations, to set up platforms for localized educational solutions, initiate research, and share good practices from the progress and lessons learned on common challenges.
iii. On Secondary Education, TVET and Higher Education, Member States to allocate resources to maximize the full potential of ICT tools to expand flexible access to and enhance the quality and relevance of secondary education, TVET and higher education in formal, non-formal and informal sectors.

iv. On the Quality of Teaching and Teaching Practices, Member States to develop competency standards for teachers towards ICT-integrated transformative pedagogies, and establish learning spaces and communities of practices to support teachers and share innovations.

v. On Inclusion & Equality in Education, Member States to take explicit and concrete measures in their national ICT in Education policies to tackle the learning divide, unleashing the potential of assistive technology, mobile technology, OERs, open and distance learning platforms.

vi. On Monitoring & Evaluation, Member States, in coordination with the SDG 4-National Coordinators, to closely monitor progress of the Four Priority Areas using the potential of new technologies, such as mobile technology, cloud computing and big data, and to develop SDG 4-targeted EMIS.