Out-of-School Children and Youth

A Rapid Evidence Review for the
Southeast Asian Region

INTRODUCTION

This Rapid Evidence Review (RER) outlines the potential for using EdTech for various educational needs for Southeast Asian learners as part of the Association of Southeast Asian Nations and the United Kingdom's Supporting the Advancement of Girls' Education programme (ASEAN-UK SAGE). This is a UK Foreign, Commonwealth and Development Office (FCDO) programme for ASEAN member states and Timor-Leste. Other partners include the ASEAN Secretariat, the Southeast Asia Ministers of Education Office (SEAMEO), the British Council, EdTech Hub and the Australian Council for Educational Research (ACER).

OVERVIEW AND SCOPE

Despite recent progress, significant numbers of children and youth continue to miss out on education across Southeast Asia. In 2017, UNESCO (2017) estimated that around seven million primary and lower secondary school-age children were out of school in the region. This review summarises how EdTech is being harnessed to address the needs of children and youth unable to attend school in Southeast Asia. It explores the potential benefits of using technology to improve access to and the quality of educational opportunities for this group, as well as its limitations and challenges.

For the RER, we used the UNESCO Institute for Statistics (2020) definition, which describes out-of-school children and youth (OOSCY) as "Children and young people in the official age range for the given level of education who are not enrolled in pre-primary, primary, secondary or higher levels of education." We analysed 21 sources after a two-stage screening process. The rapid nature of the review required a focused approach to literature discovery and a thematically guided analysis process.[1] As such, the search strategy was not designed to be exhaustive.

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[1] Details on the inclusion criteria, as well as the associated limitations, can be explored in the methodology section of the report, see https://docs.edtechhub.org/lib/IIAMD77T.

The following explains some core thematic analysis of the relevant literature on technology for OOSCY, structured according to four main themes.
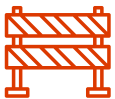
Key themes include:

The nature of EdTech for OOSCY, highlighting the modalities of available OOSCY-focused EdTech interventions that have been reported in the region.

The effectiveness of different EdTech interventions according to the available evidence.

The barriers to EdTech use, examining what prevents OOSCY in the region from fully benefiting from EdTech.

Lessons in EdTech for OOSCY from the Covid-19 pandemic, highlighting lessons learnt in the region about how EdTech can be used to support OOSCY.

KEY FINDINGS

01 **High-quality research on using EdTech with OOSCY in the Southeast Asia region is limited.** The selected studies lacked analytical depth, which may suggest that the use of EdTech for OOSCY is relatively nascent in Southeast Asia. For this reason, initiatives that focus on OOSCY may require rigorous cycles of testing, iteration, and evaluations. However, according to a 2023 meta-analysis of studies on the effects of active learning on Asian students' performance in science, technology, engineering, and mathematics (STEM) subjects, more evidence on using low-tech methods, including television, is available (⬆Ting et al., 2023). We recommend that future research explores the challenges and opportunities of leveraging technology for OOSCY by interviewing programme implementers and that future interventions accommodate margins for testing and iteration.

02 Before the Covid-19 pandemic, OOSCY primarily accessed education through broadcast media or learning centres. OOSCY used learning centres to access general educational content or develop their digital skills, or a combination thereof. Evidence of the effectiveness of such engagement remains limited. While broadcast media is relatively more accessible to OOSCY than high-tech devices, there is little empirical evidence supporting its impact on learning outcomes. Thus, there is a need to study how educational broadcasts could be leveraged to positively impact learning outcomes regionally. Furthermore, while infrastructural development is crucial to effective implementation, community engagement (↑Waring & Sacchanan, 2008) and advocacy can play a vital role in the prevalence of EdTech.

03 Several barriers continue to prevent OOSCY from using EdTech to access education, including:

- Infrastructure and device access issues in rural and remote areas
- Lack of stakeholder readiness for tech innovations
- Lack of technology contextualisation
- Lack of OOSCY-targeted government support

As per the ↑UNESCO Global Education Monitoring Report on Southeast Asia (2023), infrastructural issues persist in rural and deprived areas, further widening the learning gap for disadvantaged learners and OOSCY. Parts of Southeast Asia (Brunei Darussalam and Singapore) have increased the provision of high-speed internet access and devices for schooling using private-sector partnerships, indicating their potential effectiveness (↑Tarricone et al., 2021).

However, programmes for OOSCY in Thailand and the Philippines revealed that teachers face several challenges despite adequate infrastructure, including their capacity to use EdTech (↑Unwin et al., 2007). Thus, there is a need to prioritise further infrastructure investments, especially in remote areas, including programmes for OOSCY to foster teacher capacity.

Valuable lessons from the Covid-19 pandemic show how EdTech can make education accessible to OOSCY. However, the literature on education responses in the region to the pandemic conspicuously lacks direct mentions of OOSCY. Evidence emerging from responses to the pandemic can be applied to EdTech design for OOSCY across Southeast Asian countries. For example, TV and radio broadcasts emerged as "crucial flexible learning strategies" during the pandemic (↑Tarricone et al., 2021), and government-supported digital websites or apps were also made available to learners with internet access. The literature further suggests that out-of-school learning requires structured distance learning guidance for teachers, students, and families, multi-stakeholder collaboration, and government priorities (↑Waring & Sacchanan, 2008).

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LICENCE

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