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EdTech for Girls' Education

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

The Covid-19 pandemic increased learning poverty, affecting 140 million children regionally ([UNICEF & UNESCO, 2021](#)). Consequently, investments in EdTech have increased and, by 2021, there were an estimated 108 K-12 EdTech suppliers in Southeast Asia ([Better Purpose et al., 2021](#)). There is evidence to indicate that despite high achievement rates for girls in Southeast Asia ([UNICEF, 2021](#)), education quality and employment outcomes are inconsistent.

This RER consolidates evidence through a rigorous thematic analysis of literature on leveraging technology to support girls' education during the pandemic. The study involved a systematic review of literature focusing on technology-enabled education for girls in Southeast Asia. For the study, girls' education is defined as:

The process of achieving gender equity and equality in educational systems, including access to and participation in education. This is not at the expense of boys' education, as "only by involving boys and men can we address harmful gender stereotypes and improve the barriers holding girls and women back." ([Foreign, Commonwealth & Development Office, 2024](#)).

¹Details 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>.

Our review focused on recent publications from the last two decades to ensure relevance to current educational contexts. Key research questions include identifying emergent themes and extracting targeted recommendations. This evidence aims to guide educators, policymakers, and donors to optimise technology use for girls' education.

Girls' education remains a priority within the region. Although access to basic education in many Southeast Asian countries is relatively equitable, the potential of technology to promote equitable outcomes beyond education (e.g., in employment) for girls in Southeast Asia is an important goal ([UNICEF East Asia and the Pacific Regional Office, 2023](#)). The literature from the region underscores the need for strategic interventions and investments in technology-enabled educational initiatives.

Key themes emerging from the analysis include:



Girls' engagement with technology in education, exploring how technology can promote educational equality for girls in Southeast Asia.



Equity of access to technology, addressing the barriers that hinder girls from accessing educational technologies on an equal footing with boys.



System readiness, assessing the preparedness of educational systems and infrastructure in Southeast Asian countries to leverage technology for girls' education.

KEY FINDINGS

01

Access to technology can open up opportunities in both education and employment for girls in Southeast Asia. Flexible learning arrangements in EdTech, such as asynchronous learning opportunities, play a pivotal role in accommodating women's varied responsibilities and schedules in Southeast Asia ([Ramos et al., 2007](#)). Additionally, engagement in information and communication technology (ICT) initiatives and programmes positively contributes to female economic participation through the development of transferable digital skills.

02

A significant gender digital divide still exists in some contexts in the region, influenced by cultural biases and gendered assumptions limit girls' access to technology despite overall equal access to education. Rooted in gender biases ([↑Kinyanjui, 2016](#); [↑Okudi, 2016](#)), concerns about teacher training and professional development, as well as systemic issues with curricula and pedagogy, underscore the need for comprehensive reforms to address gender disparities in technology access and education. Moreover, the literature highlights how internalised gender beliefs may lead girls to self-regulate their technology use.

03

Parents and teachers play crucial roles as gatekeepers to girls' access to technology. This highlights the importance of their involvement in programme development and training. Girls encounter barriers to technology access outside of school, including gendered household attitudes, cost constraints, and security concerns ([↑Vilakati, 2014](#)). Within classrooms, teacher biases and assumptions further limit girls' opportunities to engage with technology, perpetuating the disparity. These factors limit girls' access to educational content and shape their technological engagement and literacy.

04

Governments and other education providers should explore diverse technology options, such as mobile phones, to overcome gender barriers and infrastructural challenges. Focus on traditional devices like computers and tablets overlooks the potential of more accessible technologies, such as mobile phones and radios, to bridge the digital divide ([↑Pruet et al., 2016](#)). Research suggests that mobile phones are underutilised in classroom teaching and learning. Girls in the region have a demonstrable familiarity with mobile phones, so it can be effective to use this modality for learning programmes to target girls ([↑Hanif et al., 2018](#)).

05

More targeted and high-quality research is needed across Southeast Asia to leverage EdTech better to support girls' education. Despite higher enrolment rates, girls still lag behind boys regarding returns to education, employment, and well-being in the region. Furthermore, research is needed to explore the potential of technology to support gender-responsive pedagogies and teacher training initiatives. There is also a critical need to address safeguarding issues specific to female students, ensuring their safety and well-being in the digital age. The role of governments and stakeholders is crucial to prioritise equitable access to technology-enabled education for all girls.



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ABOUT ASEAN-UK SAGE

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