Australian Government

Department of Foreign Affairs and Trade

GENDER EQUITABLE EDUCATION IN SOUTH AND SOUTHEAST ASIA AND PACIFIC ISLAND COUNTRIES

COMPARING GIRLS' AND BOYS' PRE- AND POST-COVID 19 EDUCATIONAL OUTCOMES

Australian Aid

KORE GLOBAL

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ACRONYMS

CONFEMEN	La Conférence des Ministres de l'Éducation des États et gouvernements de la Francophonie
ICCS	International Civic and Citizenship Education Study
ICILS	International Computer and Information Literacy Study
IEA	International Association for the Evaluation of Educational Achievement
OECD	Organization for the Economic Co-operation and Development
PBCWE	Philippine Business Coalition for Women Empowerment
PIC	Pacific Island Country
SDG	Sustainable Development Goal
SEAMEO	Southeast Asian Ministers of Education Organization
SSEA	South and Southeast Asia
UNESCO	United Nations Educational, Scientific, and Cultural Organization
UNICEF	United Nations Children's Fund

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ACKNOWLEDGEMENTS

EXECUTIVE SUMMARY

This study explores gender equality in education in the regions of South and Southeast Asia (SSEA) and Pacific Island Countries (PICs) before and after the COVID-19 pandemic. Synthesising the most recent available sex-disaggregated data for 20 countries, the report explores progress towards the Sustainable Development Goals (SDGs), and in particular SDG4: access to quality and equitable education and lifelong learning for all. It draws on UNESCO Institute for Statistics data for the pre-pandemic education landscape and integrates grey literature and recent comparative assessments to highlight the impact of the pandemic on girls' and boys' participation in schooling and learning.

Key findings regarding gender equitable education prior to COVID-19:

- **Girls are more likely to complete schooling and make it to the later grades.** They generally have higher completion rates across all levels of the education system and in all countries, except for **Afghanistan**. However, in some countries (e.g., **Bangladesh** and **Papua New Guinea**), girls' advantage at the primary level dwindles, and in some cases even reverses at the lower or upper secondary level. Conversely, **Tuvalu** has reached gender parity at the primary level, but girls have higher completion rates at the secondary level.

- **Girls are more likely to learn than boys.** Across most countries with national examination data, girls outperform boys in all subjects (reading, writing, mathematics, science). However, there is a significant evidence gap here in that many countries do not have learning assessment data that is nationally representative, internationally comparative, and/or evaluates student learning in the wide range of skills set forth by SDG4.

- **Girls are less likely to be in post-school employment, education, or training.** Youth unemployment rates are higher for girls and young women when compared to boys and young men, and women are less likely to hold positions of leadership. This means educational attainment does not always translate into better livelihoods or financial security for women.

- **Girls are also less likely to pursue higher education or careers in STEM subjects.** Gender norms in the early years of schooling shape what fields of study girls and young women pursue at the post-secondary level. This leads girls to have fewer economic opportunities, especially in the formal sector, and fewer high-paying jobs, such as in engineering or architecture.

- **Girls and boys from poorer households and rural communities are also amongst the most at risk of educational exclusion.** Gender intersects with poverty and rurality to shape educational outcomes for girls and boys. Poverty increases the risk of various barriers and risks of dropping out, including young people's increased need to participate in paid or unpaid labour, and risks of child, early, and forced marriage. Gender norms shape pressures for boys to participate in paid labour to support families, as well as girls' roles in the household supporting unpaid domestic work. Girls' envisaged roles as mothers and wives also make them more at risk than boys of child and early forced marriage.

- Other barriers to education for girls and boys prior to the pandemic include experiences with violence in and around schools and general low levels of learning leading to grade repetition for overaged students. While these two risks affect both girls and boys, the evidence suggests that boys may be most affected by these factors, resulting in increased dropout rates and explaining their lower levels of basic education completion.

EXECUTIVE SUMMARY (CONTINUED)

Key findings regarding the impacts of the COVID-19 pandemic on gender equality in education:

- **Existing inequalities have been exacerbated by the pandemic – especially for girls and boys from the poorest households.** The economic shocks of the pandemic have increased girls' and boys' risks of participating in paid or unpaid child labour and/or early, child, and forced child marriage. The pandemic has also led to increased risks of violence for girls and boys. These are all factors that shape girls' and boys' engagement in schooling and increase their risks of dropping out.

- **Challenges to young people's mental health have increased for both girls and boys,** due to isolation during lockdown, exposure to violence, and education-related stressors. Children and youth who experience mental health challenges are likely to face more challenges when studying whether at home or in school.

- New challenges have particularly hindered educational access for girls, such as the gender digital divide and new forms of technology-facilitated violence. Although these risks existed prior to the pandemic, school closures and the need to shift to digital and online forms of learning revealed the urgent importance of bridging the gender digital divide. Educational technology can either widen or narrow learning gaps, and norms around girls' safety and protection often limit girls' access to online learning modalities.

- Due to gender norms, young women – especially mothers – have often had to bear the brunt of childrearing duties during initial school closures. More women than men have lost their jobs, and/or have been pushed into the informal sector to engage in unpaid domestic work. This has long-term implications for women's and girls' opportunities for economic empowerment and financial inclusion.

Eight key recommendations are provided for donors, policymakers, bilateral/multilateral agencies, and other international development practitioners working in SSEA and PICs:

1. **Improve school- and community-level data collection and monitoring to focus on student achievement in a range of skills.**

2. **Address financial barriers for the poorest learners.**

3. **Identify and address gendered barriers for students who are out of school or at-risk of dropping out.**

4. **Provide flexible education modalities and pathways for students to re-enter school and/or transition between mainstream and vocational tracks and subjects.**

5. **Focus on improving teaching and learning, especially in foundational literacy and numeracy, but also in all subjects, including STEM, digital literacy, and life skills.**

6. **Create safe, inclusive, learner-friendly school and classroom environments.**

7. **Address gender norms in schools and communities.**

8. **Use a whole-of-government and multisectoral approach to education policy and programme design and implementation.**

INTRODUCTION

1

Gender equality in education is a fundamental aspect of the Sustainable Development Goals (SDGs). Great strides have been made over the past several decades, and many countries in SSEA and PICs have narrowed gender gaps.

However, the COVID-19 pandemic has thwarted progress towards gender equality in education and other domains of life (UN Women, 2022).

This study delves into some of the evidence on gender equity in education before and after the COVID-19 pandemic in 20 SSEA and PICs[1,2]. It synthesises available regional and country-level educational data pre- and post-COVID-19 to explore what was known about gender equality in education before the pandemic and to describe how the pandemic has impacted gender equality in education.

The case study focuses largely on indicators related to the SDGs, including access to inclusive and equitable quality primary and secondary education (Target 4.1), pre-primary education (Target 4.2) and vocational education and training, including higher education and skills for work (Target 4.3). Though focusing on gender equity in SSEA and PICs[1,2], we recognise that

generalisations regarding gender disparities "tend to mask the possible interaction of gender with other factors like urban-rural location, provincial/regional location, and wealth quintile that tend to shed more light about gender realities in each country" (UNESCO Bangkok, 2017: p.38). Thus, where possible, we include intersectional data, especially accounting for wealth and household location; other factors such as disability, ethnicity, migration/displacement are beyond the scope of this paper, though some evidence is included where possible. Box 1 provides a brief note on global and regional education data indicators. While we prioritise data from the UNESCO Institute for Statistics (UIS), especially for pre-pandemic education trends, post-pandemic data comes mainly from academic and grey literature. Our analysis is not exhaustive of all marginalised groups, nor all education-related barriers that school-aged girls and boys face. Major evidence gaps exist, which are noted throughout.

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[1] This thematic case study is part of a series of research outputs published by KORE Global and funded by the Australian Department of Foreign Affairs and Trade (DFAT). Accompanying outputs include two rapid evidence reviews of the impact of COVID-19 on girls' education and wellbeing in SSEA and in PICs, a country case study of Papua New Guinea, and of the impact of COVID-19 on child marriage in Indonesia, as well as thematic study exploring the importance of sex-disaggregated data to understand the pandemic's impacts on girls and boys.

[2] The 20 countries include nine from South and Southeast Asia (Afghanistan, Bangladesh, Cambodia, Indonesia, Laos PDR, Myanmar, Philippines, Timor Leste, and Vietnam) and 11 Pacific Island Countries: Cook Islands, Federal States of Micronesia (FSM), Fiji, Kiribati, Nauru, Papua New Guinea (PNG), Samoa, Solomon Islands, Tonga, Tuvalu, and Vanuatu.

BOX 1:
A NOTE ON GLOBAL AND REGIONAL EDUCATION DATA INDICATORS

The UNESCO UIS monitors the SDGs through various indicators, including student completion rates, out-of-school rates, and student proficiency levels in certain skills and subjects. These indicators draw on diverse data sources, including national and international comparative exams, censuses, or household survey data. Comparative national or regional exams relevant to SSEA and PICs include the Programme in International Student Assessment (PISA), South East Asian Primary Learning Metrics (SEA-PLM), the first large-scale learning assessment to be specifically designed for the Southeast Asian region (Dixon & Marivin, 2019); Pacific Islands Literacy and Numeracy Assessment (PILNA); and the Trends in International Mathematics and Science Study (TIMSS) (see Table 8 in Appendix 1 for full list). This case study prioritises evidence that draws on this assessment data, as it is nationally-representative and permits international comparability.

GENDER EQUALITY IN EDUCATION PRE-COVID-19

2
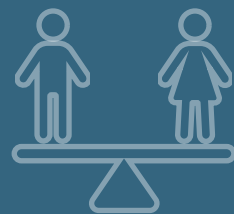
2.1 EQUITABLE AND QUALITY PRIMARY AND SECONDARY EDUCATION

SDG Target 4.1 commits to ensuring "all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes."

This section draws on the available pre-COVID-19 data to describe what we know about gender equality in primary and secondary education before the pandemic. In particular, it synthesises completion rate data (Target 4.1.2), out-of-school rates (Target 4.1.4) and evidence on student proficiency in literacy and numeracy (Target 4.1.1), and other relevant subjects, such as science and technology.

2.1.1 PRIMARY AND SECONDARY LEVEL COMPLETION RATES

Prior to COVID-19, girls were generally more likely to complete all levels of education in all SSEA and PICs, except for in **Afghanistan**, where girls were largely disadvantaged. Table 1 below synthesises sex-disaggregated completion rates for all SSEA and PICs with data from the last ten years, as well as regional averages and differences between boys and girls. The data suggest that, in various countries, gender parity has been nearly (or fully) reached at the primary level

(e.g., in **Indonesia**, **Vietnam**, **Fiji**, and **Tonga**), lower secondary (e.g., **Cambodia**, **Laos**, and **PNG**), or upper secondary levels (e.g., in **Bangladesh** and **PNG**). In other countries, however, significant gender disparities exist at least at some level of education – and sometimes across all levels of education. Further, boys are often at a disadvantage when compared to girls. For example, girls are at least ten per centage points more likely than boys to complete schooling at various levels (e.g., in **Bangladesh**, the **Philippines**, and **Tuvalu**). Although **Afghanistan** is the only country where girls are consistently disadvantaged, it is also where some of the largest gender disparities are observed (over 20 per centage points). However, differences also exist across grade levels.

Gender disparities vary across grade levels, with girls' advantage dwindling in the later years. In several countries (e.g., **Bangladesh, PNG**, and **Vanuatu**), girls' advantage either narrows or reverses at the secondary levels. In **Vanuatu**, gender disparities reverse at the upper secondary level, where girls are four per centage points less likely than boys to complete school. Similarly, in **Bangladesh**, although girls are over 10 per centage points more likely than boys to complete primary and lower secondary, this large gender gap narrows at the upper secondary level, where girls are slightly less likely to complete schooling (<1 per centage point). In other countries, especially in the Pacific region, however, gender disparities favouring girls grow in the later grades (e.g., in **Kiribati**, **Samoa**, **Tonga**, and **Tuvalu**). This suggests that older boys face particular barriers to school completion.

Completion rates tend to curtail in the later grades for both girls and boys. In other words, more students complete the primary level, but as they transition to lower and upper secondary, they begin to either suspend or delay schooling, leading to increased dropout rates and out-of-school students (especially older students). For example, although nearly all students in **Kiribati** finish primary school, only 13 per cent of boys and 21 per cent of girls finish the upper secondary level. This poses significant barriers to young people's future economic prospects and livelihoods.

TABLE 1. COMPLETION RATES, BY COUNTRY, AND STUDENT SEX

EDUCATION LEVEL	PRIMARY			LOWER SECONDARY			UPPER SECONDARY		
COUNTRY (YEAR)	FEMALE	MALE	DIFFERENCE	FEMALE	MALE	DIFFERENCE	FEMALE	MALE	DIFFERENCE
SSEA AVERAGE	**84.2**	**79.7**	**4.6**	**65.2**	**61.4**	**3.8**	**42.2**	**39.5**	**2.7**
Afghanistan (2020)	54.9	77.0	-22.1	34.7	61.3	-26.6	16.8	37.3	-20.5
Bangladesh (2020)	86.9	73.3	13.6	70.3	57.6	12.7	28.4	29.2	-0.8
Cambodia (2020)	82.6	67.5	15.1	48.0	47.2	0.8	26.4	20.9	5.5
Indonesia (2020)	97.7	96.4	1.3	90.9	84.1	6.8	62.7	58.4	4.3
Lao PDR (2020)	86.9	83.6	3.3	64.2	63.7	0.5	42.7	39.0	3.7
Myanmar (2020)	85.5	79.1	6.4	57.7	50.5	7.2	26.0	19.1	6.9
Philippines (2020)	94.6	84.2	10.4	86.0	64.1	21.9	80.3	62.6	17.7
Timor Leste (2016)	84.9	76.5	8.4	69.6	62.7	7.0	54.4	49.3	5.2
Vietnam (2020)	98.3	97.2	1.1	90.5	84.3	6.2	62.9	50.7	12.2
	91.1	**87.9**	**3.3**	**81.6**	**74.3**	**7.3**	**43.2**	**34.4**	**8.8**
Cook Islands	–	–	–	–	–	–	–	–	–
FSM	–	–	–	–	–	–	–	–	–
Fiji (2020)	98.0	97.6	0.4	95.4	91.5	3.9	89.4	83.7	5.7
Kiribati (2019)	96.5	92.1	4.3	88.7	69.1	19.6	20.7	12.8	7.9
Nauru	–	–	–	–	–	–	–	–	–
PNG (2020)	62.0	51.3	10.7	50.2	50.2	0.0	8.9	8.3	0.6
Samoa (2019)	98.0	96.9	1.0	98.6	95.0	3.6	65.5	48.1	17.4
Solomon Is.	-	–	–	–	–	–	–	–	–
Tonga (2019)	98.6	97.8	0.8	94.0	90.8	3.3	44.0	27.1	16.9
Tuvalu (2020)	100.0	98.5	1.5	94.8	77.2	17.7	63.7	47.4	16.3
Vanuatu	84.9	80.9	4.0	49.5	46.2	3.3	10.2	13.7	-3.5

Source: UNESCO-UIS (2022), drawing on most recent available data from past ten years for SDG indicator 4.1.2: Completion rate (primary education, lower secondary education, upper secondary education).

Country-level averages also mask significant differences for girls and boys from poorer and rural households. Figure 1 (below) provides evidence from nine countries with completion rate data disaggregated by socio-economic level and rural/urban households. The data points to significant disparities based on wealth, whereby boys from poor rural households are generally the most vulnerable, and girls/boys from rich urban households are generally most likely to complete primary. **Afghanistan** and **Cambodia** have some of the highest wealth disparities: in **Cambodia**, while 99 per cent of the richest urban girls and 98 per cent of the richest urban boys complete primary school, only 54 per cent of the poorest rural girls and 42 per cent of the poorest rural boys do. Gender disparities in completion rates in **Southeast Asia** in particular tend to be more prominent among the poorest households (UNICEF & UNESCO, 2021). **Laos** is the only country in which gender disparities reverse when considering intersectional data: girls from poor rural households are 10 per centage points less likely than their male peers from poor rural households to complete primary school. In **Afghanistan**, girls continue to be disadvantaged: fewer than one in three girls from the poorest rural households finish primary, compared to eight in ten boys from the richest urban households.

FIGURE 1.
PRIMARY COMPLETION RATES, BY SEX, SOCIO–ECONOMIC LEVEL, AND HOUSEHOLD LOCATION
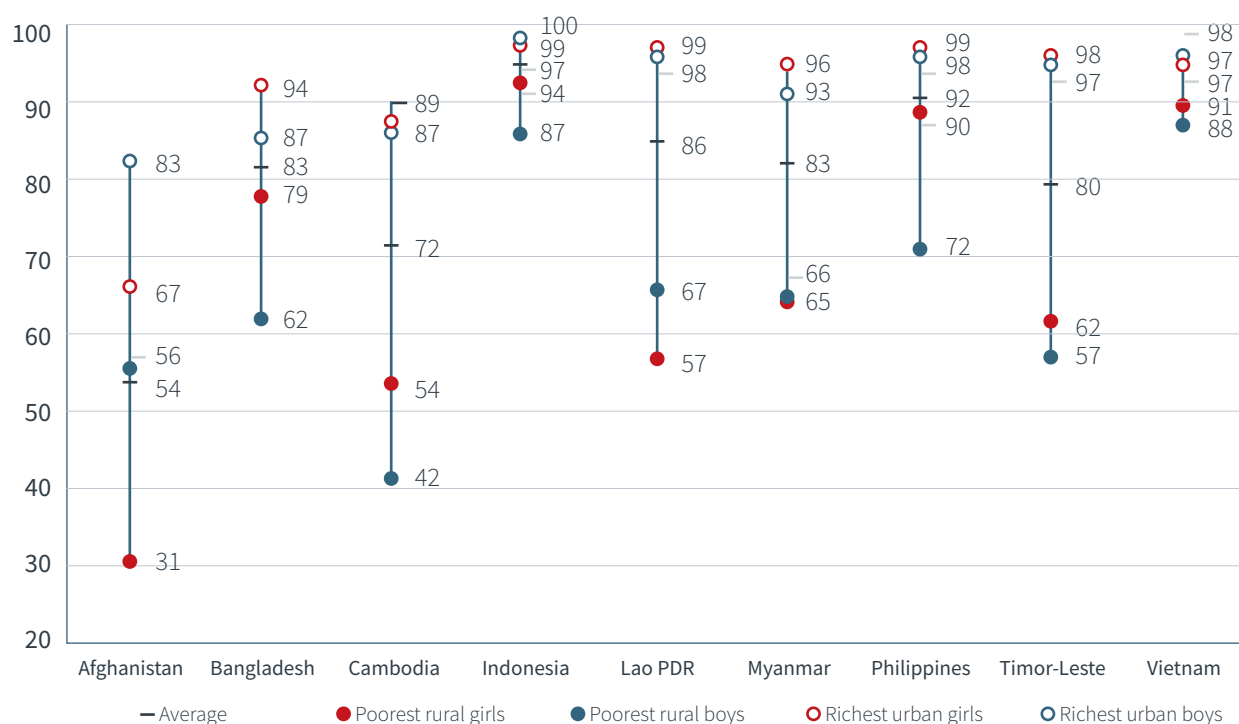
Source: UNESCO-UIS (2022), drawing on most recent available data from the past ten years for SDG indicator 4.1.2: Completion rate (primary education, lower secondary education, upper secondary education).

Girls and boys from rural and poor households are much more likely than their peers to be out of school. Available sex-disaggregated data on out-of-school children, adolescents, and youth from the past ten years is synthesised in Table 9 in Appendix 2, reinforcing the same findings above: gender disparities differ by country and grade level. However, when looking at household characteristics, findings are much more consistent across countries: learners from rural and poor households are more excluded from education than their peers. For example, in **Indonesia**, children from the lowest wealth quintile are almost five times more likely to be out of school than those from the highest quintile; and the proportion of primary school-age out-of-school children is three times higher in rural areas than in urban areas (UNESCO Bangkok, 2017). In **Timor-Leste**, non-attendance in schools is more than two times higher in the lowest income distribution than in the highest; and in **Laos**, children living in the poorest households are nine times more likely to not attend school than those in the richest households (UNESCO Bangkok, 2017). Likewise, in the **Philippines**, about two third of all primary school-age children that are out of school are based in rural locations, and the trend is the same among lower secondary

school-age children (ibid). In **Cambodia** and **Vietnam**, out-of-school rates in rural areas are almost twice as high as those in urban areas (ibid).

Young people with disabilities, ethnic and linguistic minorities, refugees and displaced persons are also less likely to complete school. Even in **Indonesia** and **Vietnam** – two countries with some of the smallest wealth disparities (Figure 1) – 15-to-29-year-olds with disabilities were half as likely to have attended school before the pandemic (UIS, 2018, cited in UNESCO, 2020). The UN Economic and Social Commission for Asia and the Pacific reported an average of almost 20 per cent of primary school-aged children with disabilities attending special schools but reaching as low as zero per cent in **Timor-Leste** (United Nations, 2018, cited in UNESCO, 2020). In **Bangladesh**, primary-aged children with disabilities are more than twice as likely as their peers without disabilities to not be in school (6 per cent compared to 13 per cent, respectively) (UNICEF, 2021). Exclusion intensifies at the lower secondary level; for example, although in **Bangladesh** the difference remains twofold, more students are out of school (23 per cent of children with disabilities, compared to 12 per cent of

children without disabilities) (ibid). In **Kiribati**, children of lower secondary school age with disabilities are almost three times less likely than their peers to be in school (eight per cent compared to 21 per cent respectively) (ibid).

Although UNESCO-UIS does not track completion rates for ethnic or linguistic minority groups, evidence suggests learners from these communities are also more disadvantaged than their peers. An ESCAP (2018) report draws on census data to indicate lower rates of secondary level attainment for Pashto, Uzbek and Turkmen-speaking students in **Afghanistan** (when compared to Dari-speaking students) and for non-Lao, Hmong or Kammu students in **Laos** (when compared to Lao or Phoutai ethnic students). For example, as of 2013 in **Vietnam**, students who were Christian, Buddhist, or of other minority religions were ten per centage points less likely to finish secondary school than those who did not practice religion (14 per cent compared to 24 per cent) (ESCAP, 2018). Rohingya refugees in both **Myanmar** and **Bangladesh** have been historically persecuted and discriminated against, hindering their access to education and improved educational outcomes (UNESCO, 2020). Indeed, the ESCAP (2018) report notes that the "relationship between ethnicity and education often intersects with other circumstances, such as coming from a poor or rural household".

2.1.2 LITERACY AND NUMERACY LEARNING OUTCOMES

Learning outcomes point to significant cross-country variation, though in most countries with data girls were learning more than boys before the pandemic, especially in literacy, but also to a smaller extent in maths. Table 2 below synthesises evidence from nine countries with UNESCO-UIS data from the past ten years. The proportion of students achieving at least a minimum proficiency level in reading at the end of primary education ranges from as low as two per cent in **Laos** to 82 per cent in **Vietnam**. In all countries with data, girls perform better than boys, though gender differences in several countries (e.g., **Laos**, **Myanmar**, the **Philippines**) are minimal due to the already very low levels of learning. The biggest gender differences, all of which favour girls, are seen in **Indonesia** (ten per centage points) and **Cambodia** (six per centage points). Similar patterns are seen in the proportion of students achieving at least a minimum proficiency level in numeracy at the end of primary. Average figures range from eight per cent in **Laos** to 91 or 92 per cent in **Solomon Islands** and **Vietnam**, respectively. Gender disparities are also similar, with girls performing slightly better than boys in all countries, except for in **Myanmar** where only 12 per cent of girls and 12 per cent of boys achieve minimum numeracy proficiency. Unlike in reading, in maths there are no significant disparities between girls and boys; gender differences do not surpass 3 per centage points.

TABLE 2. PROPORTION OF STUDENTS ACHIEVING AT LEAST MINIMUM PROFICIENCY IN LITERACY AND NUMERACY AT THE END OF PRIMARY, BY COUNTRY AND SEX

SUBJECT	LITERACY				NUMERACY			
COUNTRY	AVERAGE	FEMALE	MALE	DIFFERENCE	AVERAGE	FEMALE	MALE	DIFFERENCE
Afghanistan (2013)	13	–	–	–	11	–	–	–
Bangladesh (2017)	53	–	–	–	47	–	–	–
Cambodia (2019)	11	14	8	6	19	20	17	3
Indonesia (2011, 2015)	66	71	61	10	18	18	17	1
Laos (2019)	2	3	2	1	8	9	8	1
Myanmar (2019)	11	12	10	2	12	12	12	0
Philippines (2019)	10	11	8	3	17	18	16	2
Solomon Islands (2015)	58	–	–	–	91	–	–	–
Vietnam (2019)	82	84	80	4	92	92	91	1

Source: UNESCO-UIS (2022), drawing on most recent available data from past ten years for SDG indicator 4.1.1: Proportion of children and young people (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex.

In addition to gender disparities, poorer students, ethnic and linguistic minorities, and students who receive little parental support at home, are less likely to reach minimum proficiency levels. Results from the 2018 PISA, in which **Indonesia** and the **Philippines** participated, show that children belonging to the poorest households had the lowest levels of achievement, and children belonging to the richest households had the highest levels of achievement. The same held true for all countries that participated in the 2019 SEA-PLM reading and maths assessment (**Cambodia**, **Laos**, **Myanmar**, **Philippines** and **Vietnam**) (UNICEF & SEAMEO, 2020), and 2018 PISA (**Indonesia**, and the **Philippines**). Likewise, evidence from **Afghanistan** suggests that even prior to the pandemic there was significant variation across schools and within classrooms, with students from urban schools performing better than their peers in rural schools in both literacy and maths, and with significant differences in certain literacy task scores for students of Dari and Pashtu languages (Molina et al., 2018). SEA-PLM results also suggest that children who spoke the language of instruction more often at home consistently achieved higher levels of reading, writing and mathematics than those who did not in all counties (**Cambodia**, **Laos**, **Myanmar**, **Vietnam**) except for the **Philippines** (UNICEF & SEAMEO, 2020). Likewise, students who receive little parental support at home often underperform their peers: in all countries participating in SEA-PLM, lower levels of parental engagement were associated with lower reading, writing and maths scores (ibid). Indeed, parental support at home is likely linked to poverty, ethnicity, and language: parents from poorer households, or whose native language is other than the language of instruction, are likely less able to support their children's education. Importantly, across all countries participating in SEA-PLM, girls on average continued to outperform boys, regardless of household wealth or location (Pascua-Valenzuela & Benavides, 2021).

2.1.3 SCIENCE AND TECHNOLOGY LEARNING OUTCOMES

Only two countries – **Indonesia** and the **Philippines** – have sex-disaggregated learning outcome data in science and, though evidence is mixed, it generally shows that girls outperform boys. In **Indonesia**, 15-year-old girls who participated in the PISA scored on average seven points higher than boys (OECD 2019a). In the **Philippines**, however, girls and boys who participated in PISA generally performed similarly in science (OECD, 2019b). Nevertheless, according to science test scores from the Trends in International Mathematics and Science Study (TIMSS), boys consistently underperform compared to girls, and these gender disparities have grown over time (Welmond & Greggor, 2022). Indeed, women's limited participation in STEM careers and subjects in higher education (Section 2.2) has been associated with lack of interest/motivation, rather than ability (UNESCO Bangkok, 2020). This lack of interest and motivations is often shaped by gender norms, as explored further below in Section 2.2.2.

Only four countries have sex-disaggregated data on digital literacy skills, and evidence points to cross-country variation in gender disparities (see Table 3 below). Digital literacy proficiency is measured by boys' and girls' ability to demonstrate certain information and communication technology (ICT) skills, such as copying or moving folders and files, connecting and installing new devices or software, creating electronic presentations, or sending emails with attachments. In **Laos**, boys and young men are generally more likely to perform these skills, while in **Tonga**, girls and young women tend to be more likely. In **Cambodia** and **Kiribati**, gender differences are minimal, slightly favouring girls in some skills and slightly favouring boys in others. None of the 20 SSEA and PICs have data on the proportion of youth who have achieved at least a minimum level of proficiency in digital literacy skills (SDG Target 4.4.2). Importantly, cross-country comparison also points to significant gaps in digital literacy, especially in **Laos**; for example, while fewer than 5 per cent of female and male youth and adults in **Laos** have sent emails with attached files, nearly 40 per cent of female and male youth in **Cambodia** have.

TABLE 3. STUDENTS ICT SKILLS, BY SEX

	COPIED OR MOVED A FILE OR FOLDER		CONNECTED OR INSTALLED A NEW DEVICE		CREATED AN ELECTRONIC PRESENTATION WITH PRESENTATION SOFTWARE		USED COPY AND PASTE TOOLS TO DUPLICATE CONTENT		SENT EMAILS WITH FILES AS ATTACHMENTS		TRANSFERRED FILES BETWEEN COMPUTER AND OTHER DEVICE	
	F	M	F	M	F	M	F	M	F	M	F	M
Cambodia (2017)	28.6	27.7	1.6	1.5	2.6	2.5	27.6	26.7	38.6	37.6	21.2	20.6
Laos (2017)	5.7	9.1	1.7	4.3	2.4	4.81	5.7	8.7	2.9	4.5	4.1	7.4
Kiribati (2019)	18.7	25.0	10.4	11.4	13.7	13.43	21.0	27.0	16.4	14.3	14.4	21.2
Tonga (2019)	27.4	17.1	10.7	7.2	20.9	13.14	30.2	15.7	30.6	19.8	25.0	17.5

Source: UNESCO-UIS (2022), drawing on most recent available data from past ten years for SDG indicator 4.4.1: Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill.

This section has drawn on nationally representative data from UNESCO-UIS to explore how countries in SSEA and the Pacific are performing in relation to global comparative indicators that monitor the SDGs. It has also revealed, however, that large evidence gaps exist – especially for certain countries, and in relation to learning outcomes beyond literacy and numeracy. Researchers often draw on these international comparative exams to explore how learning outcomes are shaped by myriad factors at the individual, household (e.g., wealth, parental education level, hours studying at home, spending on private tutors) or school level (e.g., teachers' pedagogical knowledge) (e.g., REsearch on Improving Systems of Education research in **Vietnam**: Dang et al., 2020; and **Indonesia**: Beatty et al., 2021). There is an urgent need for governments to invest in data and evaluation systems that support the monitoring of SDGs and other global commitments. The DFAT-funded Australian Council for Educational Research (ACER) multi-study research seeks to fill these evidence gaps by drawing on a range of data sources (e.g. classroom observations, teacher and education stakeholder data, and fit-for-purpose student assessments) to provide a more holistic view of teaching quality and effectiveness in three countries in the region: **Laos**, **Timor Leste**, and **Vanuatu** (Cassity & Wong, 2022).

2.2. LIFELONG LEARNING AND SKILLS DEVELOPMENT

This section turns to the available data related to students' access to educational opportunities at the pre-primary and post-secondary levels. SDG Target 4.2 seeks to "ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education."

Target 4.3 and Target 4.4, respectively, focus on ensuring "equal access for all women and men to affordable quality technical, vocational and tertiary education, including university" and improving youth's development of "relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship." This section synthesises available sex-disaggregated data monitoring these SDG targets.

2.2.1 ACCESS TO EARLY CHILDHOOD EDUCATION

Children's participation in early childhood education (ECE), also known as the pre-primary level, impacts their "readiness" for basic education, and ultimately their chances for achieving higher educational outcomes. An example of this is seen in the SEA-PLM assessment, where in all countries children who participated in one year of ECE performed better than their peers (UNICEF & SEAMEO, 2020). Available sex-disaggregated data on pre-primary enrolment rates is provided in Table 4 below. Most gender disparities in pre-primary enrolment rates are minimal, especially in SSEA. However, in **Kiribati** and **Cook Islands**, boys are eight per centage points and 14 per centage points, respectively, less likely than girls to be enrolled at the pre-primary level. Likewise, girls are

10 per centage points less likely than boys to be enrolled in **Tuvalu**. Further, cross-country differences show that in countries such as **Solomon Islands**, **Vanuatu**, **Cook Islands**, and the **Philippines**, at least nine in 10 students enrol in ECE centres, while only approximately one in four early age learners are enrolled in school in **Cambodia**, **Laos**, **Timor-Leste**, **FSM**, and **Marshall Islands**. In the region of East Asia and the Pacific alone, an estimated four million (13 per cent) of pre-primary school age children do not attend ECE centres, with boys slightly more likely to be excluded and poorer students significantly more likely to be excluded (UNICEF EAPRO, 2019). Intersecting vulnerabilities exacerbate inequality; for example, in **Laos**, children with disabilities are three times less likely than their peers without disabilities to enrol in ECE (33 per cent compared to 11 per cent, respectively) (UNICEF, 2021).

TABLE 4. EARLY CHILDHOOD EDUCATION GROSS ENROLMENT RATES, BY SEX

COUNTRY/REGION	AVERAGE	FEMALE	MALE	DIFFERENCE
SSEA AVERAGE	**43.9**	**44.3**	**43.5**	**0.8**
Bangladesh (2020)	45.6	46.8	44.4	2.4
Cambodia (2020)	17.2	17.5	16.8	0.7
Indonesia (2018)	47.7	49.5	46.0	3.5
Laos (2020)	25.9	26.2	25.6	0.6
Philippines (2020)	89.0	87.0	90.8	-3.8
Timor-Leste (2020)	27.9	28.5	27.2	1.3
Viet Nam (2020)	54.1	54.7	53.4	1.3
PICS AVERAGE	**58.8**	**59.4**	**58.1**	**1.4**
Cook Islands (2020)	81.8	89.3	74.6	14.7
Fiji (2020)	33.9	32.9	34.6	-1.7
Kiribati (2020)	88.8	93.0	85.0	8.0
Marshall Islands (2020)	20.7	20.0	21.4	-1.5
FSM (2020)	6.0	5.9	6.0	-0.1
Nauru (2020)	61.3	58.5	63.9	-5.4
PNG (2018)	45.9	45.4	46.2	-0.8
Samoa (2019)	40.5	41.7	39.4	2.3
Solomon Islands (2019)	93.3	94.3	92.3	2.0
Tonga (2020)	48.3	50.6	46.2	4.4
Tuvalu (2020)	78.9	73.7	83.8	-10.1
Vanuatu (2019)	105.8	108.0	103.7	4.3

Source: UNESCO-UIS (2022), drawing on most recent available data from past ten years for SDG indicator 4.2.4: Gross enrolment ratio, early childhood education (%).

2.2.2 TRANSITIONS TO HIGHER EDUCATION OR WORK

Even in countries where girls complete higher levels of basic education than boys, they may have fewer opportunities to transition to the university level. Sex-disaggregated tertiary data from the past ten years in 15 SSEA and PICs suggest that girls generally have higher enrolment rates in all countries except for **Afghanistan**, **Bangladesh**, and **Cambodia** (see Table 5 below). However, gender disparities are minimal in **Cambodia** (less than one per centage point), as well as in **Laos**, where boys have slightly higher enrolment rates (less than two per centage points). Gender disparities are highest in **Fiji** and **Tonga**. In **Fiji**, nearly two thirds of all girls (64 per cent) enrol in tertiary education, compared to fewer than half of all boys (44 per cent). In **Tonga**, while tertiary enrolment rates are substantially lower for all young people, boys are less than half as likely as girls to be enrolled (11 per cent compared to 27 per cent respectively).

In many countries, women and girls have fewer opportunities to engage in formal labour markets. Youth unemployment rates are provided in Table 6 below. In SSEA, youth unemployment rates are generally low, with minimal differences between girls and boys. The highest gender disparities are found in **Bangladesh** and **Timor Leste**, where females are more than 5 per centage points more likely than males to be unemployed. Across nine PICs with data, the female youth unemployment rate is on average ten per centage points higher than that of males. **Kiribati** is the only PIC where the male youth unemployment rate (22 per cent) is greater than that of females (seven per cent), though by a substantial amount (15 per centage points). Likewise, girls are between four and 36 per centage points more likely to be unemployed in the other seven PICs with data.[3] The greatest difference was seen in **Tuvalu**, where nearly half (46 per cent) of all girls and young women (15+ years) are unemployed, compared to only ten per cent of boys (World Bank, 2022). Again, this is despite the fact that girls are 17 per centage points more likely than boys to complete secondary school (Table 1, Section 2.1.1). Educational attainment thus does not always translate into substantive gains in labour market opportunities for women. This is in partly due to the types of subjects and careers that women pursue, as explored in the following section.

TABLE 5. GROSS ENROLMENT RATES, TERTIARY LEVEL, BY SEX

COUNTRY/REGION	AVERAGE	FEMALE	MALE	DIFFERENCE
SSEA AVERAGE	**22.3**	**23.1**	**21.6**	**1.5**
Afghanistan (2020)	10.6	5.8	15.1	-9.2
Bangladesh (2020)	22.8	19.8	25.7	-5.9
Cambodia (2019)	14.7	14.3	15.2	-0.9
Indonesia (2018)	36.3	39.0	33.8	5.2
Laos (2020)	13.5	14.4	12.6	1.8
Myanmar (2018)	18.8	22.0	15.6	6.4
Philippines (2020)	33.4	37.8	29.2	8.5
Vietnam (2016)	28.6	31.7	25.5	6.2
PICS AVERAGE	**25.7**	**30.2**	**21.5**	**8.7**
Cook Islands (2012)	39.1	42.7	35.8	6.9
Fiji (2019)	53.5	64.1	43.5	20.6
Kiribati (2012)	0.0	0.0	0.0	0.0
Marshall Islands (2019)	25.8	27.4	24.4	3.1
Samoa (2020)	17.2	20.3	14.4	5.9
Tonga (2020)	18.4	26.7	10.8	16.0

Source: UNESCO-UIS (2022), drawing on most recent available data from past ten years for SDG indicator 4.3.2: gross enrolment rates at the tertiary level.

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[3] Fiji (11 per centage points), FSM (20 per centage points), Nauru (17 per centage points), Samoa (12 per centage points), Tonga (eight per centage points), Tuvalu (36 per centage points), Vanuatu (four per centage points)

TABLE 6. YOUTH (AGES 15-24) UNEMPLOYMENT RATES, BY SEX

COUNTRY/REGION	FEMALE	MALE	DIFFERENCE
SSEA Average	9.3	8.0	1.3
Afghanistan	9.4	8.4	1
Bangladesh	17	10.8	6.2
Cambodia	1.5	1.8	-0.3
Indonesia	12.6	14.7	-2.1
Laos	5.4	6.5	-1.1
Myanmar	5.8	4.1	1.7
Timor Leste	15.9	10.9	5
Vietnam	7	7	0
PICS Average	21.7	11.5	10.3
Kiribati	7.4	22.2	-14.8
Fiji	22.4	11.9	10.5
FSM	29.9	10.4	19.5
Nauru	37.5	20.9	16.6
Samoa	25	13.3	11.7
Solomon Islands	1.6	1	0.6
Tonga	11.7	3.4	8.3
Tuvalu	45.8	9.8	36
Vanuatu	14.4	10.3	4.1

Source: World Bank (2022) Indicators database, drawing on data from International Labour Organization (ILO).

2.2.3 PURSUING STEM AND VOCATIONAL SUBJECTS AND CAREERS

Women and girls are particularly under-represented in Science, technology, engineering, and mathematics (STEM) subjects and careers, and this disengagement begins at the basic education level. Many girls aspire to pursue careers in STEM from a young age, but their interests are later stifled by gender norms or limited opportunities to cultivate and sustain their curiosity. A survey of more than 2,000 girls (ages 15-19) in Asia and the Pacific found that over half considered studying STEM, but changed their minds by the time they reached adolescence; only 12 per cent continued their studies in STEM subjects (Mastercard, 2018). Reasons to stop pursuing STEM included perceptions of gender biases or the difficulty of STEM subjects, and a lack of support from parents and teachers (see Section 3.2). Currently, the **Philippines** is the only Asian country that ranks in the top ten globally for closing the STEM gender gap; however, historical data points to decreasing enrolment for women in STEM college courses in the country (PBCWE et al., 2019). While women comprised 52 per cent of STEM researchers in the **Philippines** in 2017 (UNESCO Bangkok, 2017), greater gender disparities are seen in certain fields, such as engineering (PBCWE et al., 2019). Data from the 2016-2017 academic school year suggests that the proportion of Filipino students enrolled in university engineering and technology courses was just 29 per cent

female, compared to 71 per cent male (Commission on Higher Education, 2018, in UNESCO Bangkok, 2020). In all countries with data, boys' and girls' participation in technical and vocational training (TVET) was very low, though girls are consistently under-represented in vocational tracks. Only 12 SSEA and PICs provide data on the proportion of female students enrolled in secondary vocational institutes (see Table 7 below). Fewer than one in five enrolled secondary TVET students are females in **Afghanistan** (13 per cent), **Myanmar** (18 per cent), **Fiji** (19 per cent), **Tonga** (14 per cent), and **Tuvalu** (16 per cent), while fewer than one in three are female in **Bangladesh** (28 per cent) and **PNG** (31 per cent). One bright spot in the data, however, is found in **Vanuatu**, where 51 per cent of students enrolled in vocational secondary schools are female.[4] Likewise, girls make up nearly half of secondary vocational students in **Timor-Leste**, **Indonesia**, **Laos**, and the **Philippines** (between 42 and 45 per cent). However, a second data point (SDG Indicator 4.3.3) suggests overall low levels of participation for both girls and boys in SEA and PICs. Of 17 countries with data from the past ten years, 15 report that less than five per cent of all 15-to-24-year-olds enrol in TVET institutes; of these, 11 countries (including nine of ten PICs) report having virtually no female or male students enrolled (i.e., less than 1 per cent) (Table 10, Appendix 2). This is surprising, given TVET constitutes an important area of opportunity for youth when transitioning from school into labour markets.

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4   Importantly, Vanuatu only has one national institute which is open to Year 10 leavers plus adults, which may explain the high female enrolment rates.

TABLE 7. SECONDARY EDUCATION, VOCATIONAL PUPILS (% FEMALE)

COUNTRY	PROPORTION OF FEMALE STUDENTS
Afghanistan (2018)	13
Bangladesh (2018)	28
Indonesia (2018)	43
Laos (2018)	45
Myanmar (2018)	18
Philippines (2017)	45
Timor-Leste (2018)	42
Fiji (2012)	19
PNG (2016)	31
Tonga (2015)	14
Tuvalu (2018)	16
Vanuatu (2015)	51

Source: World Bank (2022) Indicators database, drawing on UNESCO-UIS data.

BARRIERS TO GIRLS' AND BOYS' EDUCATION PRIOR TO COVID-19

3

3.1 WHY WERE BOYS AND GIRLS NOT FINISHING SCHOOL?

Myriad barriers affect girls' and boy's access to quality and equitable education, including a lack of schools, especially in rural and remote areas, or poor and unsafe school infrastructure.

Certain barriers particularly hinder girls' access and participation, such as an absence of gender-specific sanitation facilities or female teachers. However, these topics are outside the scope of this case study. This section instead looks at key reasons that boys and girls are not finishing school, in order to explain the low completion rates presented in Section 2.1. In particular, it draws on two regional reports that present out-of-school student data from 19 of the 20 SSEA and PICs (UNESCO Bangkok, 2017: UNICEF EAPRO, 2019) (**Bangladesh** is the one country not included in this sample).

3.1.1 POVERTY

Poverty is a leading cause of students dropping out of school, or not starting school to begin with. A situational analysis of out-of-school children in nine of ten SSEA countries,[5] clearly states that, although gender disparities vary by country, out-of-school learners "overwhelmingly belong to the poorest households" including child labourers, children with disabilities, child brides, and stateless or undocumented children (UNESCO Bangkok, 2017).

A second report, this time in the region of **East Asia and the Pacific**, points to similar findings: wealth, rural or urban residence, child labour, disability status and ethnicity largely increased the risks of children and adolescents being out-of-school (UNICEF EAPRO, 2019). Poverty brings with it various challenges. Although public education is free in policy in most SSEA and PICs, in practice many families may still need to incur certain costs. For example, some schools still collect fees or levy 'voluntary contributions', and in many places families still have to pay for education-related costs such as uniforms, school materials, and transportation (e.g. in the **Philippines**), or private tutoring to prepare for national exams (e.g., in **Bangladesh**) (Smith et al., 2021). Further, in some countries, such as **Bangladesh**, **Myanmar**, **Philippines**, and **Samoa**, governments still charge fees for secondary education, creating financial barriers for students from poorer households to transition to the upper grades (ibid; UNESCO, 2022). Further, many households cannot afford "hidden costs" of education, such as transportation, supplies, and daily allowance (UNESCO Bangkok, 2017). Poverty may also result in child malnutrition, which leads to poorer student attendance and performance (ibid). Students who come from poorer households are less likely to receive parental support, own books and reading materials, or have a stimulating early childhood environment (UNICEF & UNESCO, 2021).

[5] Cambodia, Indonesia, Laos, Myanmar, the Philippines, Timor-Leste and Vietnam.

3.1.2 PAID AND UNPAID CHILD LABOUR

Poorer families often expect their children to engage in paid or unpaid labour to support the household and/or earn an income. Child labour[6] affects a large portion of students (ages 5-17), especially boys: **Tonga** (33 per cent boys, 19 per cent girls), **Afghanistan** (23 per cent boys, 20 per cent girls), and **Kiribati** (19 per cent boys, 15 per cent girls) (UNICEF, 2022). On the other hand, girls are slightly more likely than boys to be engaged in child labour in **Laos** (29 per cent girls, 27 per cent boys), **Solomon Islands** (19 per cent girls, 17 per cent boys), **Vanuatu** (16 per cent girls, 15 per cent boys), **Vietnam** (14 per cent girls, 13 per cent boys) and **Cambodia** (14 per cent girls, 12 per cent boys), though gender disparities are minimal. There are no gender disparities in **Myanmar**, though the data is still noteworthy as 1 in 10 girls and boys (ages 5-17) are engaged in child labour. Gender norms shape expectations around girls' and boys' participation in labour; for example, boys are more likely to be engaged in paid labour, since they are often seen as the family breadwinners or contributors of household income; while girls usually take care of siblings or fulfil domestic obligations. Older girls and boys tend to be more at risk of child labour: for example, in **Cambodia**, although less than 6 per cent of 7-11-year-olds were involved in child labour, this figure increased to 17 per cent for children ages 12-to-14 (UNESCO Bangkok, 2017). Children's participation in paid or unpaid labour is often seen as having more direct benefits than education, thus leading parents (and sometimes older students) to choose work over schooling, and leading child labourers to having consistently lower educational outcomes than their peers. In **Cambodia**, 23 per cent of child labourers (aged 7 to 14) do not attend school; in **Laos** around 12 per cent of child labourers (aged 6 to 13) are not in school; in Timor-Leste, more than a third (37 per cent) of out-of- school children are engaged in child labour; and in **Vietnam**, more than half of the 1.7 million child labourers are not in school and 5 per cent will never attend school (UNICEF Bangkok, 2017). In **Myanmar**, the difference in enrolment rates between the general student population and child labourers is more than 60 per centage points (78 per cent compared to just 12 per cent, respectively) (ibid). In both **Myanmar** and **Laos**, there is a particularly strong association between working and being out-of-school at the primary and lower secondary level (UNICEF EAPRO, 2019).

3.1.3 CHILD, EARLY, AND FORCED MARRIAGE AND ADOLESCENT PREGNANCY

While child, early, and forced marriage affects both girls and boys in SSEA and PICs, girls tend to be more vulnerable due to gender norms around motherhood and childbearing, which may lead to girls postponing or discontinuing schooling. Girls are far more likely to marry before the age of 18 than boys in Asia and the Pacific: one in eight girls (or 19 million) and one in 50 boys (or four million) aged 15-19 years were married or in union before the COVID-19 pandemic (UNFPA, 2021b). South Asia has the highest rates of child marriage in the world, with almost half (45 per cent) of all women aged 20-24 years reported being married before the age of 18 (UNICEF, n.d) These high rates of child marriage put the education of girls at risk. In **Indonesia**, for example, 87 per cent of girls who married early stopped going to school upon marriage (UNESCO Bangkok, 2017); and girls who marry under the age of 18 years are four times less likely to complete secondary education than their peers (Bappenas, 2020). Child marriage is also especially tied to girls' dropout rates in **Bangladesh** (Bajracharya et al., 2019), the country in South Asia with the highest number of child brides (51 per cent of girls marry before their 18th birthday) (UNICEF, 2020). In addition to educational impacts, child marriage also increases girls' risks of experiencing violence, poor mental health, and adolescent pregnancy (Cameron et al., 2020). Adolescent fertility rates, measured by the number of births per one thousand 15–19-year-olds, range from 17 per cent in **Myanmar**, to 36 per cent in **Vietnam**, 47 per cent in **Indonesia**, between 50 and 60 per cent in **Timor Leste**, **Cambodia**, and the **Philippines**, but as high as 94 per cent in **Laos** (UNICEF, 2019). While up to a third of all adolescent pregnancies in the region of Asia and the Pacific are conceived before marriage (UNFPA, 2021b); up to 63 per cent are unintended (UNFPA et al., 2015), and they are often a result of gender-based violence or rape (Safe to Learn, et al., 2019).

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[6] The definition of the child labour indicator is the per centage of children 5 to 17 years old involved in child labour at the moment of the survey. A child is considered to be involved in child labour under the following conditions: (a) children 5 to 11 years old who, during the reference week, did at least one hour of economic activity and/or more than 21 hours of unpaid household services, (b) children 12 to 14 years old who, during the reference week, did at least 14 hours of economic activity and/or more than 21 hours of unpaid household services, (c) children 15 to 17 years old who, during the reference week, did at least 43 hours of economic activity.

3.1.4 LOW LEVELS OF LEARNING AND GRADE REPETITION

Overall low levels of learning may lead students to repeat grades, ultimately leading to increased risk of dropout; the evidence suggests this is particularly a challenge for boys. Myriad factors shape the often poor quality of teaching and learning in schools of SSEA and PICs.[7] While the learning poverty rates discussed in Section 2.1 point to overall low levels of learning for many students, evidence suggests grade repetition is particularly a risk factor for boys. Grade repetition is a significant predictor of dropout for boys in **Bangladesh**, for example, where boys' completion rates in the upper grades are low (Sabates et al., 2013). In **Kiribati**, one reason for dropout reported by boys was embarrassment or shame due to falling behind and being older than the rest of the peers in their classroom (Kiribati Education Improvement Program III, 2018). Indeed, analysis of 2018 PISA data found that among 15-year-olds who took part in the learning assessment, both boys and girls who had repeated a grade were significantly more likely to have been bullied compared with their peers who were promoted to the next grade (Lian et al., 2021). Similar risks of dropout occur for students who begin school late and are thus classified as "overage." Table 11 in Appendix 2 synthesises available sex-disaggregated data on overaged students for select SSEA and PICs. Boys are particularly likely to be overage at the secondary level in several East Asian and Pacific countries, including **Cambodia**, **Laos**, **Marshall Islands**, the **Philippines**, **Timor-Leste**, and **Vanuatu** (see also UNICEF EAPRO, 2019). Thus, the evidence points to dropout risks specific to overage students, and especially boys.

3.1.5 VIOLENCE AND SAFETY IN AND AROUND SCHOOLS

Bullying and school violence lead to educational exclusion and poorer learning outcomes, and although this affects both girls and boys, boys may be more exposed to physical violence, while girls may be more at risk of psychological and sexual violence. A UNESCO (2017b) report provides sex-disaggregated data on students' experiences with school violence in 16 countries of SSEA and PICs. Results indicate that boys were more likely than girls to report being bullied or physically attacked in schools in 12 countries; and in six of these countries (**Bangladesh**, **Kiribati**, **Samoa**, **Timor-Leste**, **Tonga**, and **Tuvalu**) they were 10 per centage points or more likely to report it. The only countries where girls were more likely to report experiences with violence were **Afghanistan**, **Cook Islands**, and **Solomon Islands**; however, the difference was minimal (not surpassing four per centage points). In **Vietnam**, on the other hand,

there were no differences between girls' and boys' reported experiences with violence. However, evidence from the Young Lives study in **Vietnam** found that girls are more likely to face psychological forms of bullying, while boys are at greater risk than girls of being physically and verbally bullied (Pells & Morrow, 2018). Boys are also more likely to experience corporal punishment by teachers (Orgando Portella & Pells, 2015). More than half of all students in **Vietnam** identified violence in schools, including physical and verbal abuse by teachers and peers, as their top reason for disliking school; students' experiences with corporal punishment have been linked to lower learning outcomes (Orgando Portella & Pells, 2015). Evidence from **Vietnam** prior to the COVID-19 pandemic also suggests that exposure to corporal punishment at home had a strong negative effect on learning outcomes and even spill over effects on peers' learning (Le & Nguyen, 2019). Data from the 2019 SEA-PLM comparative assessment found that students who reported feeling safe at school, or exhibited positive feelings and attitudes (e.g. liking school or having a sense of belonging), were more likely to score higher on tests; **Myanmar**, **Cambodia** and the **Philippines** observed the greatest differences in learning outcomes related to children's perceived safety at school, in all three subjects (Literacy, Maths, Science) (UNICEF, 2022).

3.2 HOW DO GENDER NORMS SHAPE WHAT AND HOW GIRLS AND BOYS LEARN?

The following sections provide some explanations of why girls and young women are less likely to pursue STEM subjects or TVET, or secure the same sort of high-paying jobs as their male peers.

In particular, it looks at how gender biases reveal themselves in teaching and learning materials and school curricula, as well as teachers and employer attitudes towards.

3.2.1 GENDER BIASES IN TEACHING AND LEARNING MATERIALS

Gender norms permeate classroom walls and shape curricula, teaching and learning materials and classroom practices. In textbooks in **Afghanistan**, for example, women and girls are often presented in passive and domestic roles as mothers, caregivers, daughters and sisters, and rarely in positions of economic independence, with the exception of teaching positions (Sarvarzade & Wotipka, 2017). In other cases, women are

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[7]   Many of these factors are outside the scope of this study. They include, for example, inadequate pre-service and in-service teacher training and support; limited access to appropriate teaching and learning materials and technologies; and challenging classroom conditions due to high student-teacher ratios, overcrowded classrooms, and inadequate infrastructure.

under-represented in textbooks: the share of females in secondary school English language textbook text and images was only 44 per cent in **Indonesia** and 37 per cent in **Bangladesh** (UNESCO, 2020). Stereotypical images of women and girls, and the absence of diverse representations of women (e.g. as scientists, doctors, and researchers), thwarts girls' interest and aspirations to pursue careers in male-dominated subjects such as STEM (UNESCO Bangkok, 2020). In **Indonesia**, Grade 7 science textbooks only show boys engaging in science, while in **Cambodia**, Grade 9 science textbooks display gender discriminatory attributes of female and male characters (UNESCO, 2017a). Research in **Vietnam** found that TVET institutions also tend to reproduce gender biases observed in the wider economy, channelling boys and girls into gender-stereotypical training opportunities (Kabeer et al., 2005, cited in UNESCO, 2017a).

3.2.2 GENDER BIASES IN TEACHERS AND EMPLOYER ATTITUDES

Teachers may have certain implicit gender biases and these are often revealed in the sort of expectations they have for their students, or the ways they treat them. Evidence from **Laos** and the **Philippines** suggest teachers play an integral role in building a positive experience for girls studying STEM, and encouraging them to pursue careers in the field (UNESCO Bangkok, 2015). At the same time, teachers may reinforce discriminatory gender norms, or hold low expectations for girls in STEM or vocational subjects, and they may call on boys more to participate or to take on leadership roles in the classroom (UNESCO Bangkok, 2019). For example, in one study in **Vietnam**, classroom observations revealed that 65 per cent of all student-teacher interactions in mathematics classes were with boys, and 61 per cent were with boys in science (UNESCO, 2017a). Evidence from **Bangladesh** suggests that these negative gender stereotypes may be even stronger in religious schools, such as madrasahs (Asadullah, 2017). Indeed, teacher attitudes are often a reflection of wider patriarchal norms, and they affect girls and young women at all stages of their life. Employers' discriminatory attitudes hinder women's access to competitive and higher-paying jobs or positions of leadership. For example, women in STEM are significantly more likely to cite experiencing discrimination in hiring and promotion practices (Funk & Parker, 2018). In many countries, including **Bangladesh**, **Indonesia**, the **Philippines**, and **Vietnam**, household survey data suggests most people still believe, "men make better leaders" than women, and in some cases (e.g. **Bangladesh**) these attitudes have worsened over the years (Harper et al., 2020). These biases of course have negative effects on women's ability to participate in leadership positions in general, and in politics or governance in particular. In Asia and the Pacific, women on average make up only 20 per cent of seats in national parliaments, only 20 per cent of managerial positions in the private sector, and only 17 per cent of senior and middle management jobs in the region (UN Women, n.d.).

GENDER EQUALITY IN EDUCATION POST-COVID-19

4

4.1 HOW HAS THE PANDEMIC EXACERBATED EXISTING BARRIERS?

Drawing on available sex-disaggregated data, this section describes how the COVID-19 pandemic has exacerbated existing educational barriers for girls and boys, namely: poverty, paid and unpaid labour, violence, low learning outcomes, and labour market participation.

Though it is not exhaustive of all the pandemic's impacts (see our rapid evidence reviews on SSEA and PICs for a more comprehensive synthesis), it seeks to depict how the pandemic has particularly affected the most marginalised learners.

4.1.1 POVERTY AND ASSOCIATED CHALLENGES

Evidence from SSEA and PICs (as well as globally) consistently demonstrates that children and adolescents from poorer households are most at risk of learning loss, and increased dropout rates caused by COVID-19 (ADB, 2022; Moscoviz & Evans, 2022). The economic shocks of the pandemic have pushed up to an estimated 80 million people in Asia and the Pacific into poverty, increasing food insecurity and other associated challenges (ADB, 2021). In addition, during the onset of the pandemic, school closures resulted in students from the region missing out on important meals that they may otherwise not be able to afford at home (World Food Programme, 2021), ultimately increasing risks of malnutrition and stunting (UN-ESCAP, 2021). Students from poorer households – especially in rural areas – have also been less likely to receive support from parents for home learning, due to low levels of education or their need to work outside of the household (UNICEF & UNESCO, 2021). Income loss will likely "severely restrict the ability of the poor households to invest in the education of their children" (Rasul et al., 2021: p.10), leading to increased risks of children dropping out of school to engage in paid or unpaid labour.

4.1.2 INCREASES IN PAID OR UNPAID LABOUR

The economic shocks of the pandemic led to sharp increases in rates of paid and unpaid labour for girls and boys; girls tend to be more involved in unpaid labour and boys in paid labour. Gender norms shape expectations around girls' participation in household chores and boys' role as household breadwinners. A socio-economic impact assessment of the pandemic in **Timor Leste** (n=1,724) shows that girls (ages six to 14) were significantly more likely than boys to have spent time on household chores during school closures (25 per cent of girls compared to 20 per cent of boys) (UN Timor Leste, 2020). Similarly, a small-scale (n=122) quantitative study of primary school students experiences in **Indonesia** during the pandemic found that 39 per cent of girls (aged ten to 12 years) reported spending time on domestic chores, such as cleaning the house, compared to just four per cent of boys the same age. Various gender analyses – for example in **Fiji** (CARE, 2020) and **PNG** (CARE, et al., 2020) – have also illustrated how girls, especially eldest daughters, are unable to access

home learning opportunities because of their time spent on domestic work. On the other hand, boys may be more likely to engage in paid labour, though sex-disaggregated data on this topic is limited. In **Cambodia**, risk of engaging in child labour was the most frequently reported concern that educational stakeholders had for both boys and girls; yet there were minimal differences between boys' and girls' self-reported experiences (8 per cent compared to 6 per cent, respectively) (Ministry of Education, et al., 2020). A study in **PNG** found that boys were more likely to work to support families during school closures (55 per cent of boys and 16 per cent of girls worked) (Costa, 2022). However, key informant interviews pointed to another challenge specific to girls, who experienced increased risk of engaging in sex work.

4.1.3 INCREASES IN CHILD, EARLY AND FORCED MARRIAGE AND ADOLESCENT PREGNANCY

Economic shocks and increased levels of poverty have also resulted in increased risks of child marriage for both girls and boys, but potentially more so for girls, given gender norms that value boys as family breadwinners. While there is a need for more and better data on child marriage in the region, estimations suggest that in the first year following the pandemic, the effects of COVID-19 could lead to an estimated additional 61,000 girls being at risk of child marriage in East Asia and Pacific region (UNICEF, 2020) and an additional 200,000 girls forced into marriage in South Asia (Cousins, 2020). Our case study on the impact of COVID-19 on child marriage in **Indonesia** points to how the financial impacts of the pandemic – including job loss and inflation – have resulted in many families marrying their children, especially girls, to lessen the economic burden of having to feed another person and/or to gain money through dowry (Kore Global, 2022). Some research has also suggested that some young girls may choose to get married to escape dire household conditions, including domestic and gender-based violence, or lack of educational, economic, and social opportunities, felt especially during the early stages of the COVID-19 pandemic (Plan **Indonesia**, 2021; Rahiem, 2021).

As a public health crisis, the pandemic has also led to the curtailing of sexual and reproductive health and education, particularly affecting girls who need access to menstrual hygiene products and support. While even before the pandemic one in three female youth (ages 15-24) did not have access to family planning products (UNFPA, 2021b), the COVID-19 pandemic created new access barriers, including fear of catching the virus, travel restrictions, lack of information about service provision, and privacy issues (especially for women and girls); the closure of hospitals for non-essential services also led

to the curtailing of Sexual and Reproductive Health and Rights (SRHR) specific treatment and counselling (APA, 2021; Pacific Women, 2020; UNFPA, 2020).

Challenges with shifting to remote learning have also reduced or completely eliminated comprehensive sexuality education from some curricula (Plan International, 2021). The combination of these factors exacerbates risks of unintended adolescent pregnancy for girls. UNICEF and UNESCO (2021) used recent Demographic Health Survey data from 14 countries[8] in South Asia and estimated that adolescent pregnancy rates will increase by 28 per cent as a result of COVID-19 school closures, leading to nearly half a million more adolescent pregnancies. Girls are inevitably more affected by the lack of access to SRHR services. However, it is also vital that boys are also provided with SRHR education and sensitisation; yet there is a lack of data on boys and their access to SRHR education and sensitisation during the COVID-19 pandemic.

4.1.4 INCREASED VIOLENCE AT HOME AND IN THE WIDER COMMUNITY

Both boys and girls have been affected by increased risks of violence at home and in their wider communities since the start of the pandemic. A study in **Bangladesh**, for example, found that 424 children reported experiencing domestic violence for the first time during the lockdown, and that these new incidents were widely accredited to the stresses of COVID-19 (MJF, 2020), although sex-disaggregated data was not provided. In the **Solomon Islands**, a U-Report (2022) survey found that 53 per cent of female respondents and 55 per cent of male respondents felt less safe now than in the previous year. Data from a national counselling helpline in **PNG**, as reported in a newspaper article, also shows increases in calls, including from adolescents. Overall, there was a 75 per cent increase in calls from April 2020 to March 2021 compared with the year before. Among youth, there was a 128 per cent increase in calls received from 11- to 15-year-olds and 150 per cent increase in those aged 16 to 20 years. This data is not sex disaggregated but the report mentions that this pattern holds for both male and female adolescents (Loop **PNG**, 2021). A cross-sectional comparative study looking at psychosocial outcomes across six countries in SSEA found female adolescents aged 10-18 years in the **Philippines** and **Vietnam** were much more likely (2.22 times and 1.23 times, respectively) than males to report feeling unsafe during the pandemic, relating this gender disparity to girls' increased risks of domestic violence or sexual abuse (Wang et al., 2021). In contrast, in **Myanmar**, female adolescents were less than half (0.44 times) as likely as their male peers to report feeling unsafe, though the authors did not provide an explanation for why this may be.

8   Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, Sri Lanka, Indonesia, Laos, Vietnam, China, Japan, Korea.

4.1.5 IMPACTS ON LOW LEARNING OUTCOMES

There is limited sex-disaggregated evidence of the pandemic's impact on students' learning outcomes, and that which does exists points to cross-country variations, with pre-pandemic gender disparities being exacerbated in each respective country. In **Indonesia**, for example, where girls performed better than boys prior to the pandemic, we see that the same holds true with post-pandemic test results. A study in **Indonesia** analysed data across 612 schools and 18,370 Grade 1-3 students who were randomly selected to take an exam in foundational literacy and numeracy after one year of school closures (Spink, Cloney & Berry, 2022). Based on their test results, students were grouped into four levels based on their proficiency (Level 1 being the lowest, Level 4 being the highest). Maths results suggest that across all grades, there were higher proportions of girls scoring into Level 3 and Level 4 than there were boys. In reading, similar trends were apparent with gender disparities favouring girls. For example, there was a significantly higher proportion of girls in Level 3 reading than there were boys across all grades. In **Afghanistan**, on the other hand, where girls historically underperform compared to boys, gender disparities are likely to increase in favour of boys. A study of early grade literacy and numeracy tests for 684 students (85 per cent female) who participated in accelerated learning centres (ACLs) and associated "hub schools" (government primary schools) suggest that girls scored consistently lower than their male counterparts in both ALC and hub schools, in both reading and mathematics (Kan et al., 2022). Other studies have conducted simulations using pre-pandemic test scores to estimate learning loss; although they do not present sex-disaggregated data they point to significant increases in learning poverty for both girls and boys. For example, drawing on SEA-PLM data in **Myanmar**, Bhatta and Katwal (2022) found that learning poverty may increase to 100 per cent, meaning that no girls or boys will be able to reach minimum proficiency in literacy or numeracy by the end of primary school. With learning levels this low, gender disparities become inconsequential. Lastly, the preliminary results of the 2021 PILNA were just released, reinforcing that regionally, girls on average continue to outperform boys in all subjects (mathematics, reading, and writing), and that girls are thus more likely than boys to reach minimum proficiency levels in these subjects (SPC; 2022). However, the authors note that further statistical testing must be conducted to understand if these differences are significant. Further, the data points to a concerning fact: that students in the region generally performed poorer than the previous 2018 PILNA administered prior to the COVID-19 pandemic, especially in reading and mathematics, resulting in larger proportions of girls and boys not reaching minimum proficiency level in these subjects (ibid). This reiterates the potential impact of the pandemic on student learning loss in the region.

4.1.6 IMPACTS ON TRANSITION TO WORK AND PAID LABOUR

Limited evidence is available on the pandemic's impact on young people's school-to-work transition, but that which does exist points to significant barriers for all, especially young women. The pandemic's impact on women's participation in unpaid labour likely affects their long-term opportunities as well. An ADB (2020) study points to various negative effects of the pandemic on female and male youth, including not only disruption to education, training, and TVET, but also work-based learning opportunities such as apprenticeships and internships, and increased unemployment for young people who may have to now compete with older, more skilled workers. Further, a second more recent UN Women (2022b) survey across six SSEA countries and PICs (**Indonesia**, **Kiribati**, **PNG**, **Samoa**, **Solomon Islands** and **Tonga**) found that women were more likely than men to be pushed out of formal employment markets and into unpaid labour. The proportion of women whose main economic activity was unpaid care and/or domestic work increased in all countries, except for **Solomon Islands**. Indeed, this may be related to school closures, and the expectation and/or need for mothers to spend increased time supporting their children's education and other childrearing duties. Various studies have highlighted how mothers were initially more involved with their children's learning during school closures (e.g., in **Bangladesh**: Biswas et al. 2020; Islam, 2020; in **Cambodia**: Care & Plan International, 2020; and in **Vietnam**: Yang et al., 2020). A third ADB (2022a) study notes that, globally, forgone learning loss from the COVID-19 pandemic will translate into earning losses that are 28 per cent higher for girls than for boys because of the higher return on girls' education.[9] Further, the authors note that losses in expected earnings will be 47 per cent more for the poorest students, exacerbating income inequalities.

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[9] The authors explain, "the return on educating girls is about 2 percentage points higher than for boys, so that every year of schooling lost entails more foregone income for girls than for boys (Psacharopoulos & Patrinos, 2018). Thus, foregone learning translates to expected earning losses for girls that are, on average, 28 per cent higher than for boys in developing Asia" (ADB, 2022a: p.56).

4.2 HOW HAS THE PANDEMIC CREATED NEW BARRIERS?

4.2.1 GENDER DIGITAL DIVIDE

When the pandemic hit and schools shut down, teachers had to quickly shift to innovative forms of remote learning, including through digital technology; this has particular impacts on girls given the gender digital divide. The gender digital divide existed long before COVID-19, but it didn't become as much of a barrier to girls' education as it did when the pandemic's school closures created a need to move to online and innovative educational technology (EdTech) solutions. The gender digital divide is particularly a barrier to girls' education in South Asia, where there is a 23 per cent gender gap in mobile phone ownership (only 65 per cent of women). This compares to East Asia and the Pacific where regional ownership is 95 per cent, with only a one per cent gender gap (UNICEF & UNESCO, 2021). Various studies point to how both girls and boys had limited access to remote learning at the start of the pandemic; however, when looking specifically at digital or online learning during school closures, girls consistently seem to be more disadvantaged than their male peers. For example, a nationally representative survey (n=15,000) conducted by the **Cambodia** Ministry of Education, UNICEF, and Save the Children (2020) found that boys were more likely than girls to report having access to personal computers or laptops, smartphones, and the Internet. A qualitative study also found that a recurring theme in discussions with adolescent girls (ages 15- to 19-years) in **Kiribati**, **Indonesia** and **Vietnam** was unequal access to technology, with girls having limited access to devices, since they were sometimes only used by male family members (Plan International, 2021). Various studies describe how gender norms likely shape girls' limited access to digital technology, even for educational purposes. Parents and other 'gatekeepers' fear that girls who use the internet more may be tempted to participate in risky behaviour or have intimate relationships (e.g. in **Afghanistan**: Khlaif et al., 2021a/b; and in **Bangladesh**: Raha et al., 2021; Billah, 2021). Girls may also have lower digital literacy skills than boys, making it more difficult for them to benefit from digital home learning. A CARE and Plan International (2020) rapid gender analysis in **Cambodia** found that boys generally had higher self-reported ICT skills compared to girls. The COVID-19 pandemic has accelerated the shift towards digitalization in the delivery of education and training, including TVET programmes, ultimately impacting vulnerable students, such as girls and learners from poorer households, the most (ADB, 2020; Diop, 2022). Indeed, studies that have factored the gender digital divide into estimations of the pandemic's impact on learning loss often point to girls from Asia and the Pacific regions being more negatively affected for this reason (Wu et al., 2022).

4.2.2 NEW FORMS OF TECHNOLOGY-FACILITATED GENDER-BASED VIOLENCE

With increased exposure to the Internet for digital learning during the COVID-19 pandemic, girls and boys face new risks of technology-facilitated gender-based violence (TFGBV). TFGBV is "action by one or more people that harms others based on their sexual or gender identity or by enforcing harmful gender norms. This action is carried out using the internet and/or mobile technology and includes stalking, bullying, sexual harassment, defamation, hate speech and exploitation." (Hinson et al., 2018: p.1). Although many women and girls across SSEA and PICs experienced forms of online harassment or abuse before the COVID-19 pandemic (e.g. Sambasivan et al., 2019; USAID, 2021; UNFPA, 2021a), various studies emerging from the region have highlighted how risks of online abuse and violence have especially increased as a result of the pandemic and the move to online learning. A report by Plan International (2021) from South Asia and the Pacific regions reveals that adolescent girls aged 15 to 19 in **Kiribati**, **Indonesia** and **Vietnam** were concerned about an increased risk of both online violence when learning from home. Similarly, two reports by UN Women (2020) and UNFPA, UN Women and Quilt AI (2021) draw on metadata from Internet searches to explore trends of cyber-GBV in the region of SSEA, including in **Bangladesh**, **Indonesia**, and the **Philippines**, before and during the pandemic. The results indicated a rise in physical, sexual, and psychological violence against women and girls and increased online misogyny. Between March and May 2020, the **Philippines** government recorded nearly 280,000 cases of cybersex trafficking or the online streaming of sexual abuse of children in 2020, marking more than a threefold increase compared to the same time period in 2019 (Wongsamuth, 2020). Our thematic and country case study on child marriage in **Indonesia** also found that the pandemic increased the use of social media for recruiting child brides (Kore Global, 2022). Not only does exposure to cyber-violence impact the mental health and wellbeing of young people, but concerns over girls' exposure to online threats and misconduct have also caused family members to prohibit them from using the Internet for online learning, impacting their educational access during the COVID-19 pandemic (Plan International, 2021; Khlaif et al., 2021a/b). While girls and young women may be disproportionately affected by online violence, many of these studies only include women and girls in their sample, and therefore there is limited evidence on boys' and young men's exposure to online bullying and cyber-violence.

4.2.3 MENTAL HEALTH CHALLENGES

Isolation, anxiety, and stress caused by the COVID-19 pandemic and the resulting lockdown have appeared in the literature as a new barrier to girls' and boys' education. While mental health was surely a challenge that some learners confronted prior to the pandemic, more young people are now having to deal with negative emotions, as well as school-related stressors. For example, the Pacific Humanitarian Team's Humanitarian Response Plan draws on evidence from 12 countries in the Pacific, to indicate that because of the pandemic and ensuing lockdown, there have been increased rates of youth-reported stress, anxiety, and depression, leading to rises in youth suicide, and even substance abuse (Pacific Humanitarian Team, 2021). Various studies have explored the relationship between increased mental health challenges and young people's experiences with violence during the pandemic, including child abuse (ibid) and cyber-violence (Plan International, 2021). Wang et al.'s (2021) cross-sectional comparative study described in Section 4.1.4 showed that female adolescents were more likely than their male peers to report feeling unsafe in **Vietnam** and the **Philippines**, but less likely than males to report feeling this way in **Myanmar**. Thus, in some countries and contexts, girls may be more affected by mental health challenges; while in others, boys are. Indeed, Seck et al. (2021) found that increased mental health challenges during the pandemic was associated with loss of jobs, thus affecting women more in the **Philippines**, but men more in **Bangladesh**. Other factors that have shaped poor mental health outcomes for young people during the COVID-19 pandemic include access to information, and support from parents and peers, as found in a study in **Indonesia** (Wiguna et al., 2020). Further, a longitudinal by Population Council in **Bangladesh** found that the longer schools stay shut, the more likely girls were to report poor mental health: while 61 per cent of adolescent girls reported "sometimes" or "mostly" feeling depressed in April 2020, this figure increased to 79 per cent in September 2020 (Amin et al., 2020).

CONCLUSION AND RECOMMENDATIONS

5

To conclude, this section draws on the findings explored above to make a set of 8 recommendations to key stakeholders working in the field of education in SSEA and PICs.

The recommendations are based on literature from the region and the wider international evidence base to highlight promising practices or programmatic opportunities to support girls' and boys' access to education and quality learning opportunities (Baxter et al., 2022), especially when recovering from times of crisis (World Bank et al., 2022). Though aimed at diverse stakeholders, including donors, bilateral and multilateral organisations, policymakers, and international development practitioners, the recommendations require collaboration and coordination across multiple actors, and often a whole-of-government approach to optimize impact.

These recommendations include:

IMPROVE SCHOOL- AND COMMUNITY-LEVEL DATA COLLECTION AND MONITORING TO FOCUS ON STUDENT ACHIEVEMENT IN A RANGE OF SKILLS

This report has revealed various evidence gaps, especially for certain countries, and particularly in relation to the range of skills needed to reach SDG4.

It has also explored the myriad school – and community-level factors that shape teaching. Education data tools and systems must be strengthened to account for these factors and better monitor progress towards SDGs and other global commitments.

ADDRESS FINANCIAL BARRIERS FOR THE POOREST LEARNERS

This study has shown that economic barriers are one of the leading causes of school exclusion for girls and boys in SSEA and PICs.

To support poor students, work to remove these barriers, whether through scholarships, stipends covering education-related costs, food and nutrition supplements, or larger social protection or cash transfer schemes.

ADDRESS GENDER NORMS IN SCHOOLS AND COMMUNITIES

Including in textbooks and curricula, or through training of teachers, school leaders, parents, and/or private sector employers.

This is important to encourage girls' and boys' participation in education in general, and women and girls' participation in STEM, TVET and other male-dominated subjects in particular.

PROVIDE FLEXIBLE EDUCATION MODALITIES AND PATHWAYS

This includes opportunities for child labourers to participate in school and engage in work simultaneously, as well as re-entry pathways for students who have already dropped out or postponed schooling (e.g., girls who marry or become pregnant).

IDENTIFY AND ADDRESS GENDERED BARRIERS FOR STUDENTS WHO ARE OUT-OF-SCHOOL OR AT-RISK OF DROPPING OUT

The risks girls, boys, and especially overaged students, face – including child labour, early and forced child marriage, or violence – are shaped by their household and community contexts.

Use needs assessments or other diagnostic tools to create a contextualized understanding of educational equity, and design programmes or policies that support student retention.

USE A WHOLE-OF-GOVERNMENT AND MULTISECTORAL APPROACH TO EDUCATION POLICY DESIGN AND IMPLEMENTATION

This includes collaboration and coordination across ministries of education, finance, health and nutrition, and transport, among others.

It also requires engaging civil society and local communities. To truly provide holistic education and support the needs of learners in all their diversity, partnerships and an integrated approach across sectors is critical.

FOCUS ON IMPROVING TEACHING AND LEARNING
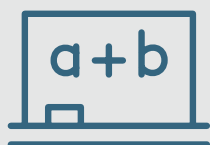
Especially foundational literacy, and numeracy, which are essential for long-term schooling success, but also STEM subjects and life skills such as digital technology.

Improve pre- and in-service teacher education and training and equip teachers with inclusive and gender-responsive pedagogies (e.g., teaching at the right level, Pratham, 2020); equip schools and classrooms with resources and technologies; and improve access to and participation in ECE, or remedial and catch-up classes for students who repeated grades or are not proficient.

CREATE SAFE, CHILD- AND YOUTH-FRIENDLY SCHOOL AND CLASSROOM ENVIRONMENTS

This includes safe transportation or routes to/ from school, and support for students' mental health and both physical and psychosocial wellbeing.

Work to remove corporal punishment from schools; create campaigns or awareness-raising initiatives, and/or curriculum to build social emotional skills, and provide school feeding programmes, sex-specific water, sanitation and hygiene facilities, SRHR resources and curricula, especially comprehensive sexuality education.

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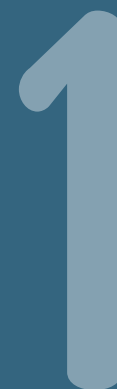
APPENDIX 1: INTERNATIONAL AND REGIONAL ASSESSMENTS

TABLE 8. INTERNATIONAL AND REGIONAL ASSESSMENT

NAME OF ASSESSMENT	COORDINATING ORGANISATION	SUBJECT (GRADE/AGE)	PARTICIPATING SSEA AND PICS
INTERNATIONAL ASSESSMENTS			
Programme for International Student Assessment (PISA)	OECD	Literacy, maths, science (15-year-olds)	Cambodia (2022 only), Indonesia (2018/2022), Philippines (since 2000)
Trends in International Mathematics and Science Study (TIMSS)	IEA	Maths, natural sciences (Grade 4/8)	Indonesia (1999-2015), Philippines (1999-2018)
Progress in International Reading Literacy Study (PIRLS)	IEA	Literacy (Grade 4)	Indonesia (2006, 2011)
International Civic and Citizenship Education Study (ICCS)	IEA	Civic literacy (Grade 8)	Indonesia (2009)
International Computer and Information Literacy Study (ICILS)	IEA	Digital literacy (Grade 8)	None
REGIONAL ASSESSMENTS			
South East Asian Primary Learning Metrics (SEA-PLM)	SEAMEO and UNICEF-EAPRO, technical support from Australian Council for Educational Research (ACER)	Literacy, numeracy, global citizenship (Grade 5)	Cambodia, Lao PDR, Myanmar, and the Philippines (2019)
Programme for the Analysis of Education Systems (PASEC)	CONFEMEN	Literacy, numeracy (Grades 2/6)	Cambodia, Laos and Vietnam (in 2011/2012 only)
Pacific Islands Literacy and Numeracy Assessment (PILNA)	Educational Quality and Assessment Program (EQAP) of Secretariat of the Pacific Community (SPC)	Literacy, numeracy (Grade 4/6)	Cook Islands, Fiji, FSM, Kiribati, Marshall Islands PNG, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu
South Pacific Form Seven Certificate (SPFSC)	Secretariat of the Pacific Board for Education Assessment (SPBEA)	Various subject tests; for certification at end of secondary, entry to higher education, or transition to work	Kiribati, Samoa, Solomon Islands, Tuvalu, and Vanuatu

APPENDIX 2: ADDITIONAL DATASETS

This appendix collates all UNESCO-UIS data drawn on in Section 2 on pre-pandemic gender and wealth inequalities in education. Each table includes a brief description of the dataset and the SDG target that it helps track, as well as a brief note on how to read the table.

TABLE 9. OUT-OF-SCHOOL RATES, BY EDUCATION LEVEL, SEX, AND HOUSEHOLD LOCATION

	COUNTRY	AFGH.	BANG.	CAMB.	INDON.	LAOS	MYAN.	PHILL.	TIM. LESTE	VIET.	KIRIBATI	PNG	SAMOA	TONGA	TUVALU
SCHOOL LEVEL	YEAR OF DATA	2015	2019	2020	2017	2017	2016	2018	2016	2021	2019	2018	2019	2019	2020
AVERAGE PRIMARY LEVEL	FEMALE	47.4	4.7	3.8	0.6	7.9	7.0	1.6	8.9	1.3	2.4	29.1	7.1	3.6	19.9
	MALE	28.0	8.3	4.0	0.7	7.3	5.5	2.6	10.0	1.1	3.9	29.5	7.6	3.7	20.3
Primary OOS rates by sex and household location	Urban female	23.2	4.6	7.1	0.4	2.4	3.9	1.7	4.1	1.3	3.0	16.6	4.2	2.9	14.1
	Urban male	15.7	7.7	8.1	0.3	3.0	2.0	2.7	4.6	1.1	4.9	18.3	7.0	2.3	17.3
	Rural female	55.3	4.7	2.9	0.8	9.7	7.9	1.6	10.3	1.3	1.8	30.5	7.6	3.8	28.2
	Rural male	31.4	8.5	2.7	1.0	8.7	6.5	2.5	11.7	1.1	2.9	30.7	7.7	4.1	24.8
Average lower secondary level	Female	55.2	8.2	11.8	1.0	21.5	17.4	3.6	8.6	5.2	5.3	22.8	4.9	8.0	22.0
	Male	24.7	18.0	19.1	0.8	18.2	15.9	5.8	11.0	5.6	14.8	21.6	7.8	9.8	30.5
Lower secondary OOS rates by sex and household location	Urban female	33.6	9.7	10.1	0.4	9.0	11.0	3.9	6.7	3.2	4.9	16.2	4.1	4.0	15.4
	Urban male	12.7	14.7	16.3	0.8	9.2	9.3	5.8	6.5	4.4	13.5	15.5	5.3	6.1	26.7
	Rural female	63.1	7.8	12.2	1.5	25.8	19.3	3.4	9.2	6.2	5.7	23.6	5.1	8.0	38.5
	Rural male	28.8	18.8	20.0	0.8	21.1	18.0	5.8	12.5	6.1	15.9	22.3	8.3	10.9	38.6
AVERAGE UPPER SECONDARY LEVEL	FEMALE	72.2	26.7	43.4	1.1	47.8	50.6	4.3	19.7	19.9	30.2	42.7	15.2	23.6	50.3
	MALE	41.3	36.5	54.2	1.4	38.8	55.0	12.8	22.9	23.1	45.8	34.1	27.3	41.1	73.8
Upper secondary OOS rates by sex and household location	Urban female	56.1	26.9	42.0	0.9	23.8	33.1	4.2	10.9	12.7	29.0	34.5	11.8	31.1	39.6
	Urban male	31.8	34.0	45.3	1.4	22.9	39.7	11.1	16.8	14.3	42.2	35.7	16.5	26.5	68.1
	Rural female	78.2	26.1	43.9	1.3	56.9	58.0	4.5	24.2	23.5	31.8	44.0	16.1	21.5	74.1
	Rural male	44.6	37.2	37.4	1.3	45.7	60.6	14.0	25.6	27.4	50.3	33.8	30.2	45.2	84.4

Source: UNESCO-UIS (2022) most recent data for SDG Indicator 4.1.4: out-of-school rate (drawing on household survey data).

TABLE 10. VOCATIONAL EDUCATION ENROLMENT RATES, BY SEX

COUNTRY/REGION	AVERAGE	FEMALE	MALE	DIFF
SSEA AVERAGE	**4.20**	**3.64**	**4.75**	**-1.11**
Afghanistan (2018)	0.93	0.34	1.48	-1.14
Bangladesh (2020)	3.30	1.82	4.73	-2.91
Indonesia (2018)	12.80	11.89	13.67	-1.78
Laos (2020)	3.55	3.52	3.58	-0.06
Myanmar (2018)	0.32	0.26	0.39	-0.13
Philippines (2016)	3.08	2.86	3.30	-0.44
Timor-Leste (2019)	5.44	4.77	6.09	-1.32
PICS AVERAGE	**1.06**	**0.72**	**1.38**	**-0.66**
Cook Islands (2020)	0.00	0.00	0.00	0.00
Fiji (2020)	0.66	0.46	0.85	-0.39
Marshall Islands (2020)	0.50	0.31	0.68	-0.37
Nauru (2016)	0.00	0.00	0.00	0.00
Papua New Guinea (2018)	0.49	0.44	0.54	-0.10
Samoa (2016)	0.00	0.00	0.00	0.00
Solomon Islands (2012)	0.00	0.00	0.00	0.00
Tonga (2020)	7.40	5.12	9.51	-4.39
Tuvalu (2020)	0.87	0.19	1.54	-1.35
Vanuatu (2015)	0.68	0.67	0.69	-0.02

Source: UNESCO-UIS (2022) most recent data for SDG Indicator 4.3.3: Proportion of 15- to 24-year-olds enrolled in vocational education.
Note: Negative differences mean females are less likely than their male peers to be enrolled in vocational education.

TABLE 11. OVERAGE STUDENTS, BY GRADE LEVEL, SEX

EDUCATION LEVEL	PRIMARY LEVEL				LOWER SECONDARY LEVEL			
COUNTRY/REGION	AVERAGE	FEMALE	MALE	DIFF	AVERAGE	FEMALE	MALE	DIFF
SSEA AVERAGE	**11.19**	**9.73**	**12.05**	**-2.80**	**13.53**	**12.42**	**17.37**	**-4.95**
Afghanistan	23.74	22.72	24.39	-1.67	14.24	12.61	15.16	-2.55
Bangladesh	-	–	–	–	4.58	4.52	4.65	-0.13
Cambodia	16.83	14.38	19.09	-4.71	16.74	13.94	19.82	-5.88
Indonesia	0.3	0.21	0.38	-0.17	8.92	7.15	10.61	-3.46
Laos	7.34	6.35	8.27	-1.92	17.39	13.69	20.87	-7.18
Myanmar	–	–	8.72	-	9.35	8.62	10.12	-1.5
Philippines	7.47	5.5	9.3	-3.8	15.8	11.8	19.76	-7.96
Timor-Leste	21.7	18.18	25.03	-6.85	32.38	27.01	37.95	-10.94
Viet Nam	0.98	0.8	1.25	-0.45	2.41	–	–	–
PICS AVERAGE	**14.16**	**13.19**	**15.07**	**-1.88**	**17.89**	**16.64**	**19.03**	**-2.40**
Cook Islands	0.54	0.34	0.74	-0.4	0.16	0.17	0.15	0.02
Fiji	3.1	2.46	3.7	-1.24	4.76	3.91	5.59	-1.68
Kiribati	2.87	2.48	3.26	-0.78	8.26	6.65	9.94	-3.29
Marshall Islands	8.55	6.33	10.6	-4.27	16.35	13.91	18.9	-4.99
FSM	10.99	9.19	12.7	-3.51	13.91	12.76	15.12	-2.36
Nauru	1.56	1.42	1.7	-0.28	0.62	1.18	0	1.18
PNG	40.67	40.14	41.14	-1	52.95	51.14	53.34	-2.2
Samoa	9.8	8.84	10.67	-1.83	9.16	7.28	10.94	-3.66
Solomon Islands	75.41	72.55	78.07	-5.52	74.78	73.07	76.46	-3.39
Tonga	0.14	0.08	0.2	-0.12	1.45	1.73	1.16	0.57
Tuvalu	0.07	0.15	0	0.15	0.31	0.32	0.3	0.02
Vanuatu	16.22	14.26	18.01	-3.75	31.97	27.51	36.51	-9

Source: UNESCO-UIS (2022) most recent data for SDG Indicator 4.1.5: per centage of children over-age for grade (primary education, lower secondary education).
Note: Negative differences means that females are less likely than their male peers to be overaged.