# Adolescent Engagement and Skills Acquisition in Digital Spaces:

Understanding Opportunities, Empowerment, and Inclusion Online

unicef
for every child

# Acknowledgements

Citation: UNICEF (2021). Adolescent Engagement and Skills Acquisition in Digital Spaces: Understanding Opportunities, Empowerment, and Inclusion Online. Bangkok: UNICEF East Asia and Pacific Regional Office.

Design and layout: Quicksand Design Studio
Copyright © United Nations Children's Fund (UNICEF), November 2021

# Foreword

For the last two years, the COVID-19 pandemic globally and in East Asia and Pacific has massively disrupted the lives of children, adolescents, and young people.  It has deepened the learning crisis, with indefinite school closures impacting learning outcomes for generations of learners. Governments across the region were quick to adapt and respond with remote and online learning options being operationalised.

Aside from interacting with formal learning structures and platforms online, in the East Asia and Pacific region, young people, particularly through early-and-mid-adolescence, spend considerable time online, engaging with each other through social media platforms, computer games and e-commerce, acquiring digital skills and soft skills. In recent years, this region has seen massive investments in technology and digital infrastructure. In several countries, young people spend up to eight hours being online.

Access to digital spaces are significant to their knowledge acquisition, skills development, income generation and social networking. However, there is limited research that highlights the similarities, differences, and uniqueness of skills building and empowerment through digital engagement of adolescents and young people.

This research was commissioned by UNICEF East Asia and Pacific Regional Office to better understand how adolescents in  Indonesia, Malaysia, Philippines, Thailand, and Viet Nam –interact and engage with online content and platforms that are available to them and how such engagement contributes to their overall empowerment. It explores the barriers and enablers that constrain or allow adolescents from these countries to learn, be connected, and engaged in their communities and society.

The research finds that in the five countries, adolescents, while being digitally savvy, largely use online platforms for entertainment and leisure, rather than to acquire knowledge or develop skills. Given their heavy presence on social media, adolescents have been exposed to skills including communication, team building, cross-cultural learning, and entrepreneurial acumen, but these are not necessarily resulting in improved digital literacy or critical thinking. The research draws attention to widespread digital inequality that limit access and opportunities for adolescents and young people, depending on whether they are from urban or rural communities. It also highlights the gender divide in digital spaces that constrain young girls from accessing and engaging effectively online. Additionally, the anonymity provided by the internet offered some adolescents the confidence to openly express themselves online, but most lacked adequate knowledge and skills to protect themselves from widespread risks and harms.

UNICEF is committed to working with young people and partners to expand the scope of online skills acquisition for adolescents and young people. We hope this research will serve to galvanize investments and solutions to promote digital literacy; reduce the digital divide for vulnerable adolescents and digital risks; tap into the digital potential in the region; and expand the role of young people as creators, innovators, and leaders in the digital eco-system.

Myo-Zin Nyunt
Deputy Regional Director
UNICEF East Asia and Pacific Regional Office

# Abbreviations and Acronyms

**App** - Application

**ASEAN** - Association of Southeast Asian Nations

**Blog** - web log

**BuJo** - Bullet journalling

**COSI** - Child Online Safety Index

**CSO** - Civil Society Organisation

**DELIMa** - Digital Education Learning Initiative Malaysia

**EAPRO** - East Asia and Pacific Regional Office

**E-commerce** - Electronic commerce

**EdTech** - Educational Technology

**Edu-tainment** - Educational entertainment

**Gen Y** - Generation Y (those born between early 1980s and mid 1990s)

**Gen Z** - Generation Z (those born between mid 1990s and early 2010s)

**GSMA** - Global System for Mobile Communications

**HCD** - Human-Centred Design

**ICT** - Information and Communications Technology

**ID** - Identity Document

**IELTS** - International English Language Testing System

**IMD** - Institute for Management Development

**iSEE** - Institute for Studies of Society, Economy and Environment

**IT** - Information technology

**K-pop** - Korean popular music

**LGBTQIA+** - Lesbian, Gay, Bisexual, Transgender, Queer or Questioning, Intersex, Asexual or Ally and other gender and sexual identities

**LMS** - Learning Management System

**MDEC** - Malaysia Digital Economy Corporation

**MDPI** - Multidisciplinary Digital Publishing Institute

**Medtech** - Medical technology

**MMA** - Mobile Marketing Association

**MS** - Microsoft

**NGO** - Non-governmental Organisation

**OECD** - Organisation for Economic Co-operation and Development

**OTT** - Over-The-Top media platforms (any streaming service that delivers content over the internet)

**PDF** - Portable Document Format

**PISA** - Programme for International Student Assessment

**Pop-culture** - Popular culture

**PUBG** - PlayerUnknown's BattleGrounds

**SMS** - Short Message Service

**SOGIE** - Sexual Orientation, Gender Identity, and Expression

**SOS** - Save Our Souls (indicating state of emergency)

**STEM** - Science, Technology, Engineering, and Mathematics

**Teen** - Teenager

**T-Rex** - Tyrannosaurus rex

**TV** - Television

**UNESCO** - United Nations Educational, Scientific and Cultural Organisation

**UNICEF** - United Nations Children's Fund

**VSCO** - Visual Supply Company

**Vlog** - Video blog

**WiFi** - Wireless Fidelity (Wireless Local Area Network)

**WOW** - World of Warcraft

**3T areas** - outermost and disadvantaged areas in Indonesia

**In this research,**

**'Adolescents'** refers to people between the ages 10 to 19.

**'Formal learning'** online refers to formal engagement online with schools and academic institutions. It may also refer to online tutoring courses to support academic learning.

**'Informal learning'** encompasses all other access like social media, Over-The-Top (OTT) media platforms, hobby clubs, podcasts or music streaming platforms and blogs.

**'EdTech'** is understood as public or privately run technology or software platforms that are solely purposed to provide educational content to students and teachers.

**'Co-design'** is a collaborative design process where the key users and other relevant stakeholders are integral to the process of developing solutions. In our research, co-design took place through activities such as allowing adolescents to design their own digital platforms, learning, and sharing what they were already creating online and how they wanted to do this better.

A '**hashtag'** is a label to aid searching on online platforms like Twitter, Facebook and Instagram. They are a combination of letters, numbers, and/or emoji preceded by the # symbol (e.g., #NoFilter). They are used to categorize content and make it more discoverable. Hashtags are clickable.

# Table of Contents

# Executive Summary

In the 21st century, adolescents are learning and growing in a globalised world. It is vital that they have access to digital spaces, which hold immense potential for them by creating opportunities for employment, income generation and access to services, encouraging civic participation, and fostering cross-cultural learning - all ultimately leading to empowerment. This is increasingly important for the Southeast Asian region, which is home to almost 30 percent of the total number of adolescents in the world.[1] However, across the region, unstable and intermittent internet access, unequal access to devices, the lack of adequate basic literacy and digital literacy skills, and widespread dangers of online risks have held adolescents back from maximising their digital potential.

Given this context, this research takes a mixed methods and design-led approach to understand how adolescents across countries, ages, genders, and socio-economic and cultural contexts, interact and engage with the variety of content and platforms available online. **The research focuses on Southeast Asia, with in-depth primary research conducted in four countries — Indonesia, Malaysia, the Philippines, and Thailand, and secondary research in Viet Nam.** It applies ethnographic, qualitative, quantitative, and digital methods of research to investigate the barriers and enablers that impact young people's online experiences, and identify future pathways that could help adolescents become active and contributing participants in the digital world.

The research found that adolescents are using digital spaces primarily for entertainment and leisure, rather than for exploring opportunities for skill development and active engagement. Through their engagement on social media, they are picking up skills such as communication, team building, cross-cultural learning, and entrepreneurial acumen, but these spaces are not fostering essential technical and analytical skills such as critical thinking and advanced digital literacy, thereby limiting adolescents' digital potential. The research also found that Southeast Asia suffers from significant digital inequality between urban and rural communities and entrenched gender inequalities that persist in the online world. Though the anonymity provided by the internet offers some adolescents the confidence to openly express themselves online, others face excessive harassment from unknown people online. To compound these risks, most adolescents do not have adequate skills to protect themselves from such online risks.

## Key insights into the digital potential of adolescents in Southeast Asia include:

Though digital spaces have opened avenues for adolescents in low-resource areas to connect and share beyond their immediate communities, poor internet connectivity, financial constraints, and gender barriers limit their access to and engagement with online spaces.

Distracting home environments, ineffective teaching styles, and limited social interaction with peers and teachers make distance education ineffective - resulting in adolescents preferring in-person engagement for formal education. They are particularly struggling with grasping concepts of math and science, and learning new languages.

When online, adolescents are pursuing their hobbies, interests, and exploring new cultures - which aids their transition to adulthood. However, only some adolescents are creating and sharing their own content online, and this is more likely for those with adequate resources and advanced digital skills.

Across the region, ages and genders, entertainment and leisure are the dominant motivators to spend time online. However, a significant number mention that they lack the appropriate guidance to develop knowledge and skills required to navigate the online world safely and effectively.

Participating in digital spaces, often anonymously, has given many adolescents the confidence to express themselves freely on civic and social issues as well as find solace and support in their personal struggles. This has been especially valuable for LGBTQIA+ adolescents, who often do not have access to such spaces in their offline worlds.

Pre-existing gender norms and stereotypes influence what content girls seek out when online and what content they are offered. Furthermore, girls and those from LGBTQIA+ communities also face increased online risks pertaining to their gender identity as compared to cisgender males.

Adolescents are not adequately protected — or capacitated to protect themselves — from the frequent risks and harm they face online. They also find it difficult to tell the difference between real and fake news. Girls, adolescents from younger age groups, and those from rural areas are less likely to effectively protect themselves, due to limited knowledge and stigma associated with bullying.

The research presents actionable recommendations to address the barriers and strengthen enablers so that all adolescents, in particular the most vulnerable, can maximise their digital potential. These are summarised on the following page.

## Enable inclusive access to online spaces for all adolescents

Make digital infrastructure affordable, with private sector participation like co-funding network deployment, creating common access points, and encouraging tech-innovation to improve access in areas with low income and poor connectivity.

Overcome gender barriers by creating programmes that enable girls and LGBTQIA+ adolescents to access online spaces safely and develop digital skills, while encouraging community dialogue that champions the cause of girls-in-tech.

Ensure platform designs are inclusive, to serve the diverse needs of marginalised and vulnerable adolescents by co-creating guidelines and content that are sensitive to various user needs, with a special focus on those with disabilities.

## Re-engineer formal learning systems to be more fun and effective

Invest in education systems that use blended learning to maximise learning outcomes including creating a standardised online learning system, equipping teachers to blend classroom learning with digital spaces and encouraging collaboration between schools and EdTech platforms.

Empower young people to be co-creators of their own learning experiences by encouraging them to develop contextual educational content and leveraging the potential of peer-to-peer learning on online platforms.

Engage diverse stakeholders in the creation and amplification of edu-tainment and learning content by encouraging EdTech interventions to cater for digital livelihoods, leveraging social media influencers to amplify educational resources, and working with gaming and entertainment providers to invest in content for the overall well-being of children.

## Equip adolescents with digital and employability skills

Teach digital literacy, skills, and safety by integrating digital skill development across schools and community centres. Along with providing on-going and age-appropriate information on the basics of the internet and being safe online.

Establish online and offline learning platforms for digital skills development outside of formal education and collaborate with private sector companies for regular and relevant upskilling and on-the-job training for adolescents.

## Create enabling environments for young people to realise their online potential

Guide access to safe and reliable platforms for information, self-help and self-expression by creating and amplifying verified public and private online resources, mandating collaboration of online support groups with government and/or civil society organisations, and leveraging the power of technology to prevent platforms from disseminating child-abuse material.

Provide teachers and parents with skills and knowledge to work with adolescents to ensure they are safe, supported and empowered when online and create mechanisms to ensure that messaging around online safety and age-appropriate engagement is consistent at home and in school.

## Mitigate online risk exposure and address gender-based discrimination and harm

Raise awareness of online risks, rights, and mitigation techniques, especially for girls and LGBTQIA+ youth by supporting interventions that accelerate support to vulnerable youth, tapping into media and micro-influencer networks to raise awareness, along with supporting interventions that promote gender equality.

Create safeguarding mechanisms for the online safety of children by developing ethical standards for platform providers, building institutional capacity to investigate and prosecute online abuse, and periodically reviewing legal policies to ensure that they are sensitive to digital harassment faced by young people.

# Introduction

The current Fourth Industrial Revolution,[2] driven by digital innovation in the use of data, information, and technology, has impacted almost every aspect of communication in our lives. It has the transformative potential to create opportunities for employment and income generation, provide access to services, encourage civic participation and engagement, all ultimately leading to empowerment, especially for adolescents.

The COVID-19 pandemic has accelerated this transformation. 40 million people in six countries across the South-East Asian region — Singapore, Malaysia, Indonesia, the Philippines, Viet Nam, and Thailand — came online for the first time in 2020.[3] This surge pushed the total number of internet users in those countries to 400 million — or nearly 70 percent of the region's total population.[4]

With restrictions on movement and the shift to online education, the Southeast Asian region which is home to almost 30 percent[5] of the world's adolescent population,[6] is witnessing the rise of a digital generation. According to a study conducted by the World Economic Forum and Sea with more than 68,000 people aged between 16 and 35 in the ASEAN region, adolescents from ASEAN countries spend, on average, over 6 hours online per day.[7] Their engagement with social media, gaming and music, online courses, chat rooms, interest and hobby based online groups has provided them with opportunities to develop skills beneficial to their growth and development - enhancing their creativity, confidence, social engagement, and motivation.[8]

The OECD Programme for International Student Assessment (PISA) scores of 2018, revealed gaps in formal education in the region, making the benefits of non-formal digital learning particularly important. However, large disparities in digital literacy exist between adolescents of different demographic backgrounds and benefits of online spaces are not reaching the poor and the most vulnerable – who are often most in need of education and skill building.[9] However, being online also exposes adolescents to several risks such as mental health problems, exposure to inappropriate content, and becoming victims of cyberbullying, hacking, and other scams.

This multi-country regional research study issued by the UNICEF East Asia and Pacific Regional Office (EAPRO) explores adolescents' access to online spaces, their behaviours in these spaces, as well as avenues, opportunities, and approaches for learning and empowerment when online - with a special focus on vulnerable groups.

2 Ingram, George., 'Bridging the Urban-rural Digital Divide and Mobilizing Technology for Poverty Eradication: Challenges and Gaps', Brookings Global Working Paper # 157, Brookings Institution, June 2021, pp. 1-22, <https://www.brookings.edu/wp-content/uploads/2021/05/Bridging-the-Digital-Divide_final.pdf>

3 Choudhury, Saheli R, 'Southeast Asia's digital services surge as coronavirus pandemic kept people at home', CNBC, 9 November 2021, <https://www.cnbc.com/2020/11/10/southeast-asia-40-million-new-internet-users-in-2020-report-finds.html >

4 'e-Conomy SEA 2020', Google, Temasek and Bain and Co., 10 November 2020, <https://www.bain.com/insights/e-conomy-sea-2020/# >

5 'Adolescent health, Overview', WHO South-East Asia, < https://www.who.int/southeastasia/activities/adolescent-health >

6 'Adolescent health, Impact', WHO, < https://www.who.int/health-topics/adolescent-health#tab=tab_2 >

7 COVID-19- The True Test of ASEAN Youth's Resilience and Adaptability Impact of Social Distancing on ASEAN Youth, ASEAN YOUTH SURVEY 2020, World Economic Forum and Sea, July 2020, <http://www3.weforum.org/docs/WEF_ASEAN_Youth_Survey_2020_Report.pdf >

8 Ansari, Jamal A. N. and Nawab A. Khan, 'Exploring the role of social media in collaborative learning the new domain of learning', Smart Learning Environments, vol. 7, no. 9, 16 March 2020.

9 'COVID-19: At Least a Third of the World's Schoolchildren Unable to Access Remote Learning during School Closures, New Report Says', UNICEF, 5 Mar. 2021, <www.unicef.org/press-releases/covid-19-least-third-worlds-schoolchildren-unable-access-remote-learning-during >

# About the Research

## Research Objectives

The aim of this research was to explore various avenues, approaches, and opportunities for learning and skill development that can be accessed and used online by adolescents. Content focused on adolescent skill development generally reflects the views of practitioners and professionals, not adolescents. This research also aimed to understand the digital journeys of adolescents from their perspective, exploring their needs, barriers, and ideas to co-create digital solutions with them.

Specifically, this study had the following objectives:

Analysing whether and how adolescents' interaction with formal and non-formal online platforms (including school-based digital learning and recreational platforms) contribute to increased knowledge, skills acquisition and empowerment

Exploring how adolescents are engaged in the co-design of digital learning and skills building content.

# Research Framework

The ability to access digital spaces without interruption, understand various opportunities online, use platforms, and navigate these safely determines the digital potential of an adolescent. Based on this understanding, the research framework and questions were formed on five pillars:

**Platforms and Content:** The digital platforms accessed by adolescents for learning and recreation and the content they consume and create on these platforms

**Equitable access:** The digital divide and barriers to access for vulnerable adolescents, including drop-outs, those with disabilities, girls, and ethnic minorities

**Digital Literacy:** The extent to which adolescents can use digital platforms and the limitations in their digital skills

**Digital Risks:** The risks to adolescents' mental and physical health through online engagement

**Digital Potential:** The extent to which digital platforms are empowering adolescents and providing them opportunities for growth and development

*Enablers:*
*Intrinsic Motivation; Supportive learning at home/school; Enabling policy environment*

**Access**

Low internet access → High internet access

**Literacy**

Basic Literacy → Advanced Literacy

**Content and Platforms**

Passive → Active

**Online Safety**

Risk exposure → Risk mitigation

Young people realise their digital potential

*Barriers:*
*Demographic Barriers like gender and disabilities*

An overview of the lines of enquiry are listed here. *(See Annex 1 for all the research questions).*

What content are adolescents consuming online? What are the differences between age groups, genders, and regions?

What are some of the platforms with which adolescents are engaging to acquire information and knowledge online?

What are the key barriers to access, including internet connectivity and device ownership?

How can we understand the difference in levels of digital literacy across income groups and genders? What are the digital literacy skills that young people currently lack, and wish to build further?

What are the increased vulnerabilities, mental health challenges, and other risks that come with spending time online?

What are the coping mechanisms and support services that exist currently to protect adolescents from online risks?

How are young people engaging with each other and acquiring various skills - including digital and soft skills - through online recreation and networking?

*Co-design workshop held with girls in Indonesia*

## Research Locations

The five countries in the study were - Indonesia, Malaysia, the Philippines, Viet Nam, and Thailand. They encompass the diversity of digital infrastructure and educational contexts across the Southeast Asian region.

Primary research was conducted in four countries. In Viet Nam, only secondary research and expert consultations were conducted. To ensure diversity among the respondents, rural and urban locations were selected for the primary research in each country while ensuring representation from vulnerable communities. The survey was conducted across various locations. The areas where the qualitative research was conducted were:

**Indonesia:** Bandung (urban) of West Java province and Makassar (rural) in the South Sulawesi province

**Malaysia:** The capital city of Kuala Lumpur (urban) and Petaling Jaya (urban) in the state of Selangor, and Sandakan (rural) in the state of Sabah.

**Philippines:** Valenzuela city, Pasig city, Taguig city and other parts of Metro Manila (urban); Davao city (urban) located in the province of Davao del Sur; San Isidro (rural) in Nueva Ecija province; Rizal province (rural) and La Trinidad (rural) in Benguet province

**Thailand:** The provinces of Chiang Mai (urban and rural), Chiang Rai (rural), Mae Hong Son (urban) Nakhon Chai Si district (urban) of Nakhon Pathom province and the urban metropolis of Bangkok

## Research Methodology

The research followed a mixed-methods approach with a combination of Human-Centred Design workshops and in-depth interviews with adolescents (male, female, marginalised groups, LGBTQIA+ identifying adolescents, and people with disabilities), surveys, digital landscape analysis, literature review, and expert interviews. A brief overview of the methods is presented in this section:

*Note: Field research was conducted in four of the five countries - Indonesia, Malaysia, the Philippines and Thailand. Viet Nam data were gathered through expert consultations and literature review.*

**1. Literature Review:** A desk review of academic publications, institutional reports, grey literature, and news articles dated from 2015-2021 to gain insights into digital learning in adolescents.

**2. Expert Interviews:** Interviews with 15 sector experts who are leading new and diverse initiatives on adolescent engagement and skill acquisition in digital spaces, along with EdTech representatives, social media experts, representatives from government departments, and development sector practitioners.



*Co-design workshop held with girls in Indonesia*

**3. Primary Research:**

Human-Centred Design (HCD) methods to capture the experiences, journeys, and voices of adolescents. The three components of the primary research were as follows.

*Details of the sampling are included in Annex 2.*

**Co-design workshops with 162 girls and boys:**

Five co-design workshops each were conducted in four countries of primary research. They were organised in age cohorts of 10-14 and 15-19, as well as gender-disaggregated, where appropriate. Workshops were conducted virtually in Malaysia, Philippines and Thailand due to Covid-19 related movement restrictions. Workshops were conducted in-person in Indonesia, Participatory research and co-design tools such as card sorts, scenarios, and stakeholder maps were used. The objectives of these workshops were to:

- Identify 'what' factors, barriers, and platforms affect engagement with the digital world

- Record formats of learning — online or offline, formal or informal, structured, or unstructured

- Understand how barriers can be addressed and opportunities capitalised to enhance the use of digital spaces.

**Ethnographic-style interviews with 32 adolescents:**

Ethnographic-style interviews with adolescents from diverse demographic groups, engaging in a variety of digital activities to understand access to resources and opportunities. The objectives were to:

- Look at barriers, behaviours, choices, patterns, and engagement strategies which could affect opportunities for learning in the future

- Record factors that determine access, levels of digital literacy, digital potential, and understand digital risks.

**Surveys with 1000+ adolescents across four countries :**

- A research partner, Brandscapes Worldwide, conducted a survey of 200-300 adolescents in each of the four countries of primary research - in person in Indonesia, Philippines, and Thailand, and virtually in Malaysia. Survey results are provided throughout the report.

**4. Digital Landscape Analysis:**

An external research partner, Quilt.Ai, used digital ethnography tools to understand the digital footprint of adolescents across the countries of primary research. Data were extracted on their stated behaviours (i.e., what they post online) and unstated behaviours (i.e., the real information they are searching for on platforms like Google). A qualitative analysis included exploring the nature of accounts, hashtags followed, and content posted. All data were sourced through publicly available accounts of adolescents aged 18-19 and the parents of those below the age of 18, on platforms such as Google, YouTube, Facebook, Instagram, TikTok, and Twitter with whom Quilt.Ai has third-party agreements. The analysis aimed to reveal:

Patterns of engagement with social media platforms and content being consumed and created

Formal learning behaviours and how online spaces are being used to explore personal interests

Adolescents' interaction with each other and online expression.

## Ethical Considerations

The research team followed the standards and guidelines laid down by the Belmont Report on Ethical Principles and Guidelines for the Protection of Human Subjects of Research, which stipulates the 3 principles of Respect, Beneficence, and Justice. The team followed strict guidelines and adhered to best practices in all its research processes to ensure an equity-based framework that recognises the needs and rights of marginalised and vulnerable population groups, and to ensure that participants are respected and protected. *(See Annex 3).* Ethical clearance for the study was taken at an international level by UNICEF's independent ethics reviewer. National level clearances were taken in Indonesia and the Philippines.

## Research Limitations

There were some limitations to the findings of this research:

The study does not present a macro-landscape analysis of Southeast Asia. It only aims to generate insights into online experiences of adolescents.

A relatively small number of respondents drove key findings which were then triangulated with insights from the literature review, expert interviews, and the surveys, which relate to larger populations.

The co-design workshops and ethnographic-style interviews represent the views of only selected locations within the four countries.

The quantitative data were gathered from a self-reported survey, so the understanding of some questions may vary for different respondents.

The primary research, conducted from April to September 2021, coincided with phase two of the COVID-19 pandemic and nationwide lockdowns. This forced the team to take a digital-first approach. The team worked with a network of partners with qualitative research experience, leading to variable research facilitation across the countries. The ethnographic-style interviews focused on reaching marginalised and vulnerable populations, for which the research team provided them with internet quota charges.
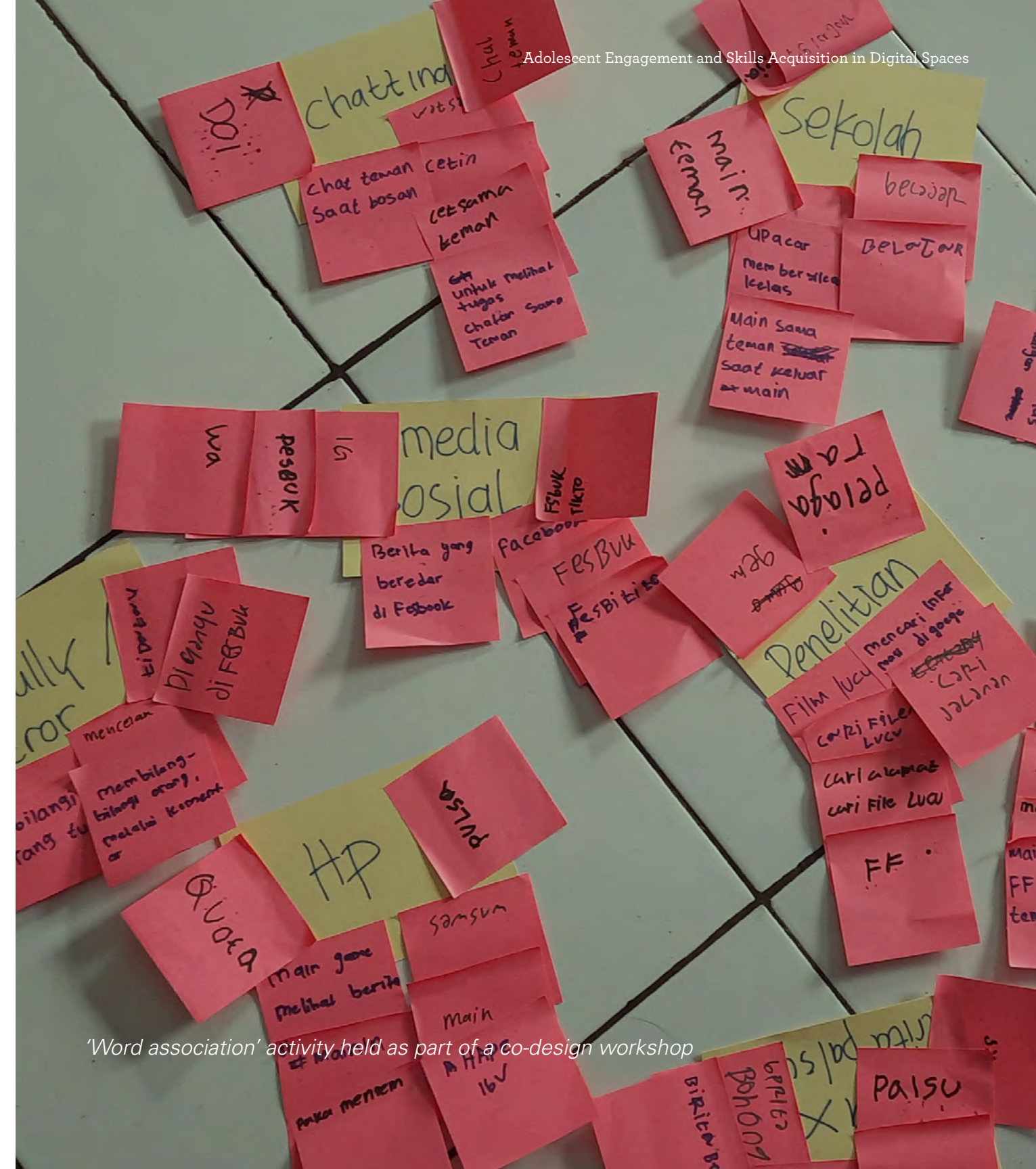
*'Word association' activity held as part of a co-design workshop*

# Learnings from the research

This section presents the key learnings of the research in the form of three subsections. First, Stories from the Field, which include a selection of personas — inspired by stories from the field research — that highlight how adolescents are interacting and engaging with digital spaces across the four research countries. Second, a Journey Map is used to represent the stories of adolescents from the field along the spectrum of digital potential in the Southeast Asian region. Third, Key Findings, which showcase the learnings from the mixed methods research conducted across the five countries.

*Ethnographic interview held in Indonesia*

# Stories from the field

This section includes a selection of personas — inspired by stories from the field research — that highlight how adolescents are interacting and engaging with digital spaces. The characters are fictional, but their stories are based on the interviews and key findings from the research and represent their diversity and differences across age, gender, life stages, geographies, socio-economic status, cultural context, and personal experiences. The research team created a set of indicative scales — platforms and content, digital literacy, digital access, and digital risks — based on the research framework to present each persona and their personal stories in the context of the larger research findings. The stories from the field hope to better situate the target audience, their context as well as help create a story-based narrative before the presentation of key research findings.

**Platforms & Content**

This scale ranges from passive to active content creation.
'Passive' refers to the uncritical consumption of content. On the other extreme is self motivated engagement with and creation of content to achieve one's goals.

Passive                          Active

**Digital literacy**

This scale of digital literacy ranges from basic to advanced.
Basic includes the ability to do basic online searches and use social media, while advanced digital literacy refers to being able to find, access, use and create information effectively, engage with other users and with content in an active, critical, sensitive and ethical manner and navigate the online and ICT environment safely and responsibly while being aware of one's own rights (as described by UNESCO[10]).

Basic            Advanced
Literacy         Literacy

**Digital access**

This scale ranges from sharing devices, to having one's own device that is adequate for the desired amount of digital access.

Shared                          Owned
devices                         devices

This scale ranges from low, unreliable internet access to efficient, high-speed and reliable internet access.

Low                             High
internet                        internet
access                          access
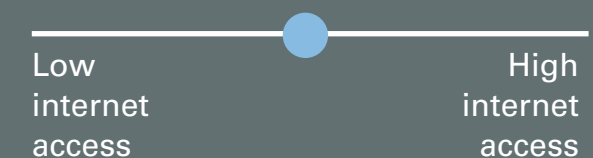
**Digital risks**

This scale goes from being exposed to a high amount of risk to being equipped and literate enough to deal with online risks to an adequate degree.

Risk                            Risk
exposure                        mitigation
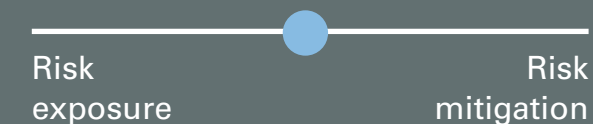
10   Digital Kids Asia-Pacific: Insights into Children's Digital Citizenship, UNESCO, Bangkok, 2019.

# Lim's Story

**Lim is seventeen years old, the only child of working parents. He lives in an affluent part of the city and attended a private school.**

He is politically aware and uses digital spaces to learn about current affairs in his country and to spread awareness about political and civic issues among his peer group. He uses the internet as a platform to openly express his opinions on current affairs, though he often chooses to do so anonymously. His online presence also gives him opportunities to engage in cross-cultural learning with followers from other communities and countries.

Lim usually has a stable and high-speed internet, which he uses to research current affairs. He is proficient in English and can access various sources of information including news articles, blog posts, and research papers. He is able to manage and operate digital devices and has his own smartphone and unrestricted access to a laptop.

He has been creating and sharing his own content online for the last three years. He accesses and uses a wide number of applications - social networking applications like Facebook and Twitter to share home-made videos and quick updates with others, Medium to publish writing and Canva to create visuals. He wants to learn how to use Mailchimp to send newsletters to his followers. When the COVID-19 pandemic struck he was able to seamlessly transition to online classes over Zoom, despite not having much experience with online learning. He also uses Zoom to attend virtual events.

Lim has faced negative comments and trolling, especially when he posted about sensitive topics like LGBTQIA+ rights or political issues. These comments can sometimes be detrimental to his confidence. He also struggles with time-management and sometimes complains of backaches and sore eyes that arise from his excessive use of digital devices.

Passive — Active

Basic Literacy — Advanced Literacy

Shared devices — Owned devices

Low internet access — High internet access

Risk exposure — Risk mitigation
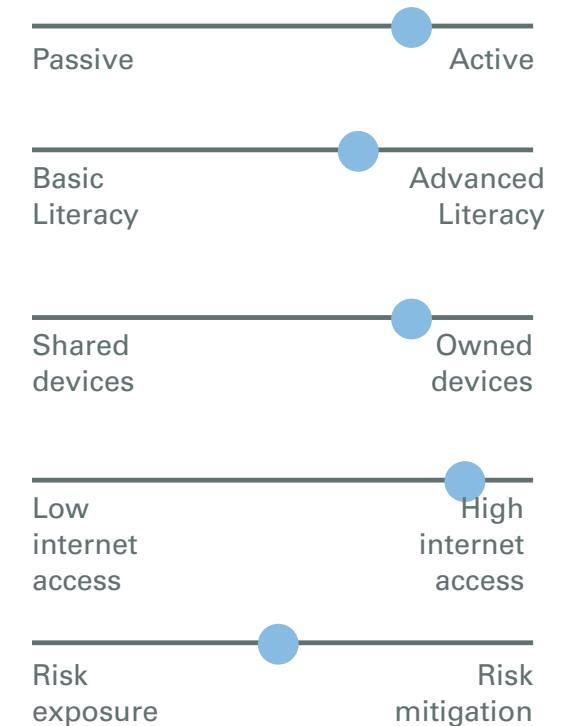
Lim has a supportive family and wants to continue to leverage his digital skills to create content and explore topics of interest, primarily the civic and social movements in his country. He hopes to get into politics, or be a journalist.

# Carmelita's story

**Carmelita is eighteen and has a two-and-a-half-year-old baby. She lives in a city with her husband, his younger brother, mother and grandmother.**

Her mother-in-law works as a cleaner in the bigger houses, while Carmelita and her grandmother-in-law manage the house. Her brother-in-law is enrolled in school, but finds online learning boring.

Carmelita dropped out of high school three years ago when she became pregnant. Her husband recently lost his job due to shutdowns in the COVID-19 pandemic. With a young child, she could not go out to work either, but she discovered the internet as a way to earn some money, while staying close to her baby. She started experimenting with selling homemade snacks in her community - mostly through Facebook or WhatsApp – in order to earn more money. She also earns a little money on the side by watching TikTok videos, for which she earns points. These points can be converted into cash using apps, which she spends or saves for her baby. She also uses this money to buy internet data as it is an added burden on household expenses.

Carmelita has good internet connectivity but has to share a PC and smartphone with her husband, who spends most of his time watching videos on the phone. Her husband has ruled that she must prioritise caring for the baby and he decides when she may use the computer. She is also expected to handle other household chores like cooking for the family.

But she spends most of her free time online, engaging with cooking videos, playing games, or on social media. She often turns to Facebook groups of young moms for socialising and finding advice about child care.

She is worried about her gaming accounts getting hacked so she tries to create a strong password, but there are times when she has clicked on a suspicious link because she thought it was a good opportunity. She is wary, and if someone says something scary to her or seems distrustful, she blocks that person.

Passive ——●——————— Active

Basic Literacy ————●————— Advanced Literacy

Shared devices ———●—————— Owned devices

Low internet access ——————●—— High internet access

Risk exposure ———●—————— Risk mitigation
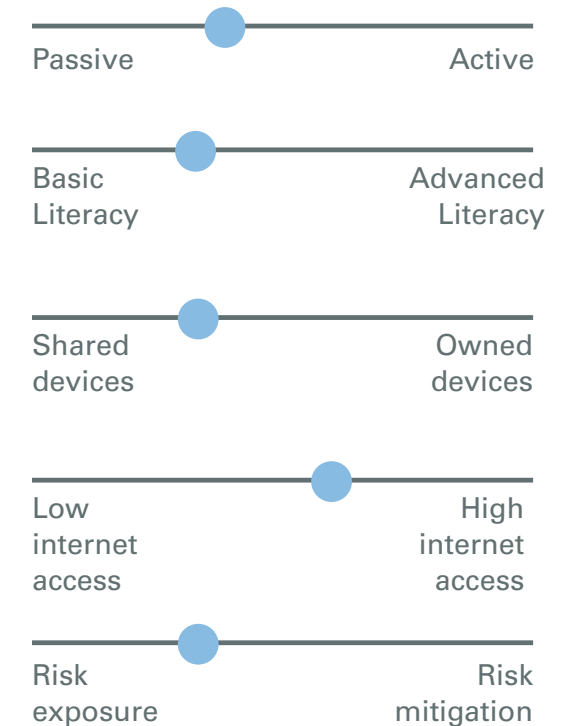
Carmelita recently faced some bad experiences with her online shopping stint - with people not paying the right amount or cancelling orders at the last minute. However, she still hopes to set up a successful online store with varied food products to sell things online which will help support her family.

# Riza's story
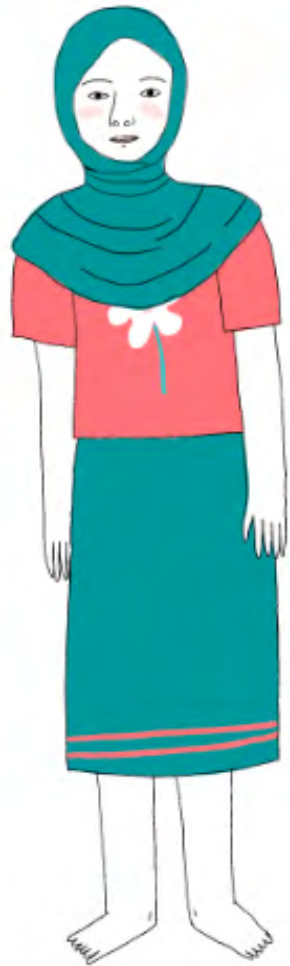
Riza enjoys learning and was a good student in school. The COVID-19 pandemic, however, pushed her into online learning. Though the government provided her with a free internet quota, her teacher was not equipped to deliver online learning effectively due to the intermittent internet connectivity. Additionally, the internet connectivity in her village is erratic and unreliable, especially during stormy weather.

Her family felt that online learning was ineffective and would only increase her time spent online, thus threatening her safety. As a result they pulled her out of school. They also want her to prioritise learning household duties in preparation for getting married. Riza wants to continue studying, so she asks her friends to send the class work to her older brother's phone, which she is allowed to use for just a few hours a day. She spends the rest of her time helping her mother around the house.

As a result of this, Riza has limited time to spend on digital spaces. When she accesses her brother's phone, she watches YouTube for topics

of school material she hears about from her friends, in the hope to go back to school post the pandemic. She sometimes tries to use Google for this information, but she is often confused with the amount of information online and does not know which link or video will provide her the most relevant content.

Riza's older brother is very protective of her and keeps a close check on her online behaviour to make sure she is not on social media talking to strangers. She uses TikTok to explore her hobby of dancing. Sometimes, she secretly posts dancing videos under a different name as her family discourages her from uploading such content online. She once received negative comments on her videos, which she deleted as she did not know how to deal with them. She does not tell anyone in her family of such instances as she fears she will be scolded or punished.

Riza craves companionship and sees digital spaces as a way for her to connect with her friends. Riza knows that using digital technology
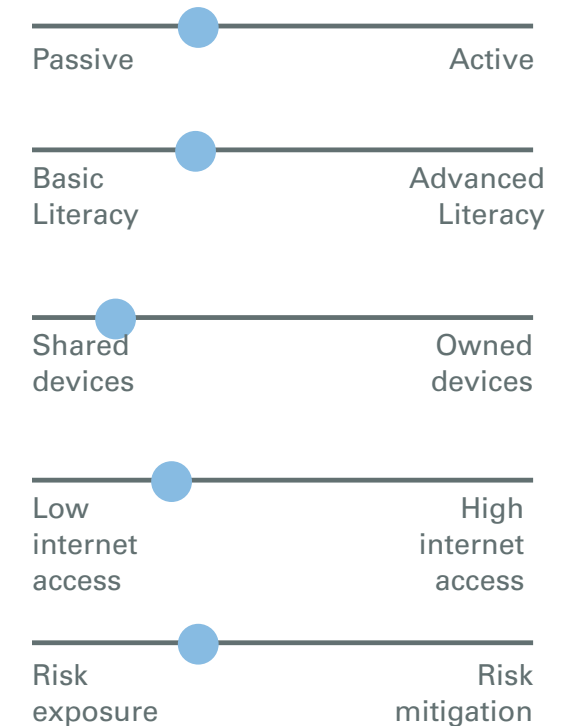
well could help her get a good job, but she is not sure how and where to begin. Her cousin works at a supermarket in a nearby town and uses a computer. She would like to learn how to use the computer and work at the same store, but is too scared to ask her family. Riza dreams that one day she is able to travel the world like the influencers she follows online.

**Riza lives in a village. She is thirteen years old, the youngest of a family of seven. She is a school dropout.**

Passive — Active

Basic Literacy — Advanced Literacy

Shared devices — Owned devices

Low internet access — High internet access

Risk exposure — Risk mitigation

# Joyo's story
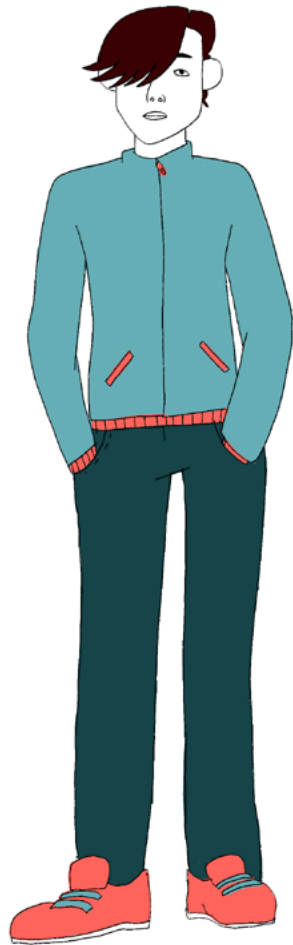
**Joyo is fourteen years old. He is the oldest of four siblings, and lives with his family. He belongs to an ethnic minority. His parents sell vegetables at the local market.**

When the COVID-19 pandemic shut down his school, Joyo had to switch to online learning. The remote teaching offered by his school consisted mostly of his teacher sending him photos of worksheets on WhatsApp. He found online learning difficult because he could not ask his teachers any questions. He started to do badly in his online classes and was worried that he would never catch up. His family cannot afford to buy him his own phone, so he had to share one with his father, and could use it only for studying, which he did not like. He especially misses school because he misses playing football with his friends during school hours.

Joyo feels that digital spaces are for fun and keeping up with his friends, especially during times of social distancing and limited offline activities. The internet also allows him to follow his passion for football. Joyo enjoys watching his football idol Lionel Messi's videos, or keeping up with the latest football tricks.

Prior to the pandemic, he would spend most of his time playing online games with his friends at a local internet café. He likes the fact that online games allow him to play in a team with others, make new friends, and develop survival strategies. He uses Google to find cheat codes and gaming hacks so he can win in his online games and share that with his friends. He is sometimes a victim of cyberbullying in gaming chat rooms and on social media but his friends tell him it's harmless.

Joyo dreams of being a professional football player. However, he realises that this is difficult and also wants to train as a police officer when he is older. He also hopes to live in a house of his own one day, as that is a metric of success.

| | |
|---|---|
| Passive | Active |
| Basic Literacy | Advanced Literacy |
| Shared devices | Owned devices |
| Low internet access | High internet access |
| Risk exposure | Risk mitigation |

# Dao's story

Dao attended a school for the blind where she received assistance from teachers and trained volunteers. She is going to start college this year to study Political Science.

In school, she used computers which were specifically designed to help those with visual impairments. Now she interacts with the digital world through her own personal Android phone and a netbook, using several assistive technologies and touch typing.

The varying formats of digital spaces allow her to share her opinions and thoughts and participate in conversations that she may have missed out on offline platforms. She reads articles to satisfy her curiosities using the screen reader software of her phone, uses the local platform Dek D to read fiction, and also learns foreign languages. For entertainment, she enjoys movies on Netflix and YouTube; she prefers Netflix as it is better than YouTube when it comes to audio description subtitles. She uses Facebook to socialise with friends and often shares articles and posts about the blind community. She values the independence and self-sufficiency that digital spaces allow her.

Dao can read Braille and knows her local language. She can access a wide range of content online and connect with others, but finds some platforms inaccessible to her because of her blindness. She hopes to buy a personal computer to be able to effectively use assistive technology like audio commands.

Dao wants to work in an organisation for people with disabilities, like an association for the blind, or get into politics to empower people with disabilities.

**Dao, who is eighteen years old, was born blind. Her mother sells flowers and her father works as an accountant.**

Passive ———●——————— Active

Basic Literacy ——●————— Advanced Literacy

Shared devices ———————●—— Owned devices

Low internet access ————————●— High internet access

Risk exposure ————————●— Risk mitigation
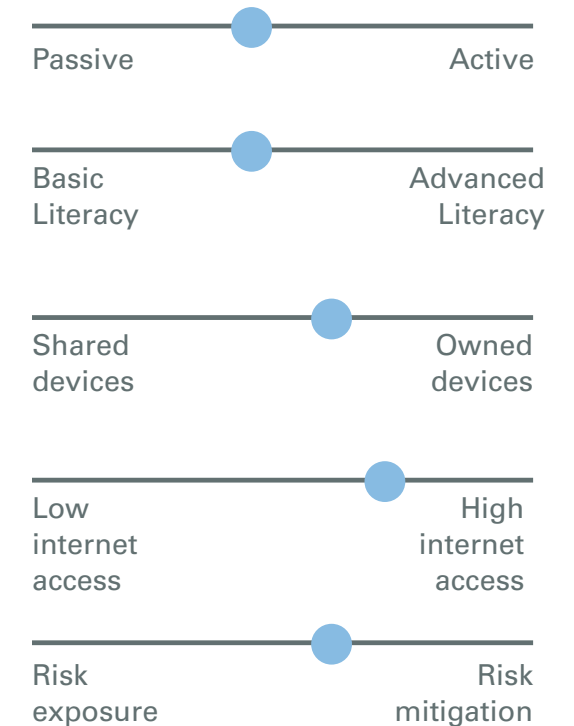
# Arthit's story

**Arthit is 16 years old, belonging to the LGBTQIA+ community. Arthit is non-binary and prefers 'They/them' pronouns. They live in a city and belong to a mid-income household.**

Arthit finds it hard to be open about their LGBTQIA+ identity in public for fear of discrimination. They live with their parents and older brother. Arthit's parents are embarrassed and hope their gender identity is 'just a phase' - sometimes even threatening to disown them.

Arthit has been perceived as 'different' by peers and faces bullying both online and in person for their identity. They find refuge in online spaces where they can hide behind the safety of anonymity, connect with others from the LGBTQIA+ community, follow LGBTQIA+ idols and role models, and express themselves without fear of judgement. Online is where Arthit feels they can truly be 'Out and Proud'.

Arthit owns a smartphone but shares a laptop with their brother and mother. They are proficient in the English language and this gives them wide access to online content

and platforms. With a stable and high-speed internet, they primarily use Twitter, Facebook, Instagram and TikTok to express themselves and connect with others of their community. They use Google search and Youtube videos to learn how to navigate the internet better. While exploring interests online comes naturally to Arthit, they face difficulties during online school especially with chemistry formulas and calculus, which are hard to learn online. They use YouTube for advanced formal online education and look for study notes on Facebook groups and Twitter.

On some days they spend hours on their smartphone, often losing track of time. However, they are easily distracted online and worry about being harassed or bullied. They often share their worries with their online friends who help and support them through these tough times.

Arthit wants to become a YouTube vlogger
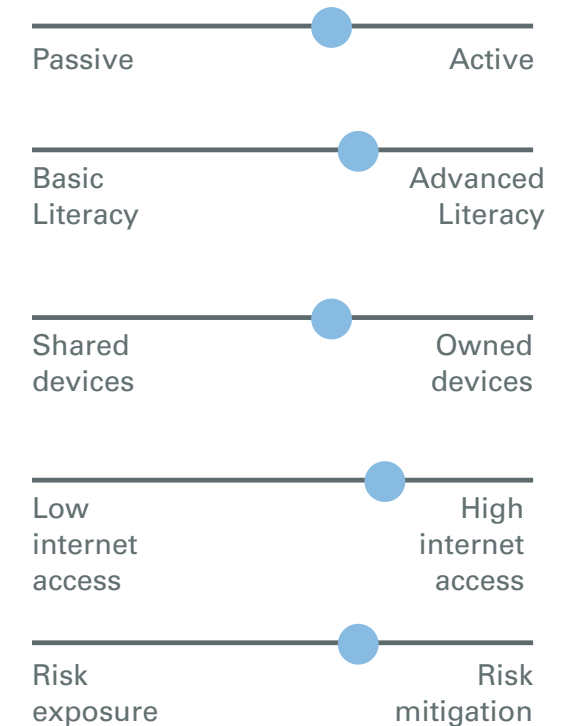
and learn skills like editing videos and how to establish their content online like other influencers. Their goal is to ensure that no other child who identifies as a part of the LGBTQIA+ community is othered. They want to become the role model that they wish they had growing up.

| | |
|---|---|
| Passive | Active |
| Basic Literacy | Advanced Literacy |
| Shared devices | Owned devices |
| Low internet access | High internet access |
| Risk exposure | Risk mitigation |

# Journey Map

**All adolescents lie on a spectrum of low to high digital potential - based on their levels of access and sophistication of digital skills. This is depicted through the stories from the field.**

**Digitally Disconnected**

*Mostly offline with limited knowledge about online spaces.*

**Low Access**

*Families are not able to afford internet data plans and devices. Online activities limited to social media applications for online schooling.*

"I only have very little time online which I use mostly for school - but it's confusing and hard to manage. I also have to share my device with my brother and sister."

**Intermittent Access**

*Internet connectivity is intermittent and broadband data is expensive. The internet is a gateway to learn and access information, develop skills often in an unguided manner.*

"I use Facebook to look for jobs in my area. I am part of specific groups and follow pages that post updates about job requests."

**Connected**

*Have reliable broadband connection at home. Actively use the internet to express themselves online through writings, videos, photos. Use internet to support academic learning.*

"I use Instagram as a way to post content that might not be accepted by family and other friends. I feel I can truly express myself online."

**Well Connected**

*Sufficient access to high speed broadband data and multiple devices. Use diverse platforms to gain and share information, learn and contribute to conversations.*

"I am aware of the internet's immense potential. I use it to learn and educate not only myself, but even those who follow my content. It is a great place to access information. "

Digital potential

# Key Findings



*Co-design workshop held with girls in Indonesia*

# Insight 1:

Digital spaces have opened avenues for adolescents in low-resource areas to connect and share beyond their immediate communities. However, poor internet connectivity, financial constraints, and gender barriers limit their access to and engagement with online spaces.

## 1.1 For adolescents, poor internet connectivity is the biggest impediment to being online.

Asia has the highest rates of child internet use globally.[11] Yet, the region demonstrates stark inequalities in digital access: middle to upper class users in large cities successfully use online spaces while children in low-resource or rural areas are slower to gain access due to poor connectivity and affordability.

In the quantitative survey, 50 percent of respondents said that bad internet was a key limitation to online schooling. In the Philippines, this figure was as high as 68 percent (See Table 1). The co-design workshops indicated that slow and intermittent connections were the key issues affecting connectivity in the Philippines and Indonesia. In Malaysia and Thailand, reliable and quality internet was expensive, especially in rural or remote areas. Further, those in low-resource areas were more likely to access mobile data over broadband connections, which have limited data and are characterised by weak signals in remote areas. Across all the countries, broadband services were rarely accessed in rural locations. Geographical factors - remoteness and weather conditions - also played a role. Adolescents in Thailand and Indonesia said that storms and rain often caused disrupted connections.

The Speed Test Global Index (August 2021)[12] reports that all countries in the study have mobile internet speeds lower than the global average. Thailand's internet speed is closest to the global average of 56.74 Mbps. Indonesia is the worst at 23.13 Mbps. The Philippines falls behind other ASEAN countries in affordability of internet services, internet penetration, and speed of services.[13] Viet Nam has one of the highest internet penetration rates in the region[14] but the stability and average speed remains poor due to frequent undersea cable ruptures.

11 Our Lives Online: Use of social media by children and adolescents in East Asia- opportunities, risks and harms,  UNICEF East Asia and Pacific and Center for Justice and Crime Prevention, Thailand, 2020,  <https://www.unicef.org/eap/reports/our-lives-online>
12 Speedtest Global Index, August 2021, < https://www.speedtest.net/global-index>
13  Arinto, Patricia B., Dunuan, Liezl F. and Sasing, Monalisa T.,  EdTech Ecosystem Report: Philippines, USAID, 2020, < https://ierc-publicfiles.s3.amazonaws.com/public/resources/EdTech%20Ecosystem%20Full%20Report%20FINAL_1.pdf >
14 Nguyen, Thu, 'Exploring Asia's youngest consumer market: Why Viet Nam, now?', We Create Content, 1 February 2021,
   <https://wecreatecontent.asia/content-marketing-blog-asia/2020/3/2/exploring-asias-youngest-consumer-market-why-vietnam-now>

**Insight 1:**

> "If it rains a lot, then no electricity - no internet or phone communication."

*Adolescent mother, 15-19, co-design workshop, Mae Hong Son, Thailand*

"Lagging and slow connectivity is a big barrier preventing tasks from being done online."
*"Male, low income, 14, Ethnographic-style interview, Bandung, Indonesia*

"I usually use [my] mobile phone to access the internet. Internet speed and slow internet in the mobile phone make it difficult for me to do things online."
*Male, low-income, 13, Ethnographic-style interview, Nakhon Pathom province, Thailand*

"Even with wifi connection the internet remains to be intermittent which may not be conducive for learning. During online schooling, the calls often drop, or we have to ask questions to be repeated given the lagging connection. "
*Male, 10-14, co-design workshop, Metro Manilla, Philippines*

| Country | Total Respondents (%) | Urban (%) | Rural (%) |
|---|---|---|---|
| Indonesia | 47 | 48 | 46 |
| Malaysia | 45 | 41 | 62 |
| Philippines | 68 | 65 | 72 |
| Thailand | 33 | 27 | 43 |

**Table 1:** Percentage of respondents stating that poor connectivity was a barrier to studying online [15]

15 Within the quantitative survey, participants had other choices apart from 'poor connectivity

**Insight 1:**

## Spotlight on the The Economist's 'Inclusive Internet Index 2021' [16]

The index, commissioned by Facebook, surveyed 120 countries and ranked them across four indices — availability, affordability, relevance, and readiness.

**Indonesia** fares poorly on the index, especially on affordability and readiness, due to the weaknesses in its competitive environment and lower digital literacy rates.

**Malaysia** is the most internet-ready nation in the Southeast Asian region, with high levels of digital literacy and a robust internet policy environment, but postpaid mobile data and smartphones are expensive.

The **Philippines** fares worst among the five countries across all four indices with expensive and slow-speed internet.

**Thailand** fares relatively well. However, its readiness rank is 102/120, indicating poor digital literacy, but supportive policy and digital trust and safety.

**Viet Nam** ranks average across all indices but unstable connectivity due to frequent under-sea cable ruptures, reduces inclusive access and affordability.

16 The Inclusive Internet Index, The Economist, 2020, < https://theinclusiveinternet.eiu.com/explore/countries/performance >

**1.2 Adolescents from low-income households are less likely to spend time online due to high costs of data and shared (or limited) access to devices.**

While infrastructure barriers remain paramount, the research showed that the majority of adolescents, especially those from low-income houses, do not have adequate access to appropriate learning devices and sufficient data - limiting the quality and time spent online.

90 percent of adolescents surveyed had access to smartphones at home for classes and recreation. However, online learning generally requires access to a computer and reliable internet availability. The data reveal that average household access to laptops and desktop computers across the four countries was at only 36 and 20 percent respectively *(See Figure 1)*. In the survey data, ownership of laptops and computers was directly correlated to higher household income, with significantly more devices in urban than rural areas. Gender had only a marginal impact.

The low level of ownership of laptops and desktops is corroborated by the larger evidence base. In Indonesia less than 15 percent of adolescents in rural areas, and 25 percent of urban children have computers for home-based learning.[17] In Malaysia, 37 percent of adolescents lack appropriate devices at home to participate in online lessons and only 6 to 9 percent own a personal computer and/or a tablet.[18] In the Philippines, only one in ten children have a desktop computer for their own use; even fewer have a laptop, tablet or a games console.[19] 25.7 percent of households in Thailand have a computer,[20] and most students lack appropriate digital learning equipment on account of poverty.[21]

17 Situational Analysis On Digital Learning Landscape In Indonesia, UNICEF Indonesia, February 2021. <https://www.unicef.org/indonesia/media/9956/file/Situation%20Analysis%20on%20Digital%20Learning%20in%20Indonesia.pdf>
18 ICT Use and Access by Individuals and Household Survey Report 2019, Department of Statistics Malaysia, Putrajaya, Malaysia, 2019.
"Asia–Pacific Employment and Social Outlook 2018", ILO, Bangkok, 2018, <https://www.dosm.gov.my/v1/index.php?r=column/pdfPrev&id=SFRacTRUMEVRUFo1Ulc4Y1JlLzBqUT09>
19 Philippines Kids Online Report: The Online Experiences of Children in the Philippines: Opportunities, Risks and Barriers, UNICEF, IACACP, Australian Government, De LaSalle University Manila, Philippines, 2020, <https://www.unicef.org/philippines/media/2706/file/UNIPH-2021-PhilippinesKidsOnline-FullReport.pdf >
20 Multiple Indicator Cluster Survey (MICS) 2019 Report of 17 Selected Provinces in Thailand, National Statistical Office Thailand and UNICEF, Thailand, March 2021, <https://www.unicef.org/thailand/media/5871/file/MICS6%2017%20Provinces%20EN.pdf>
21 'Distance Learning Technology Rapid Assessment', UNICEF and Thailand Cyber University, 2021.

**Insight 1:**

"We listened to our parents and family who said we should not continue school during the pandemic, even though we wanted to."

*Female, 15-19, co-design workshop, Rizal Province, Philippines*

In a rapid assessment conducted by UNICEF in Viet Nam, lower educated and poor families were less likely to access the internet, digital devices, and learning materials at home. 37 percent reported encountering technical problems during online classes and 9 percent of 148 respondents reported not having access to any IT devices or WiFi infrastructure to study at home.[22]

Many of the poorer students, especially in rural areas of Malaysia and Philippines, reported during the co-design workshops that they lacked access to digital devices for adequate lengths of time, since they shared devices with older siblings or parents - which often meant missing lessons and assignment submissions.

Adolescents in remote and low-income areas said they had to pay a premium for reliable broadband and mobile data services, which along with the cost of school fees, made education more expensive and therefore a low priority for their families during the pandemic. Some adolescents in Indonesia had to choose whether to use costly data plans for online learning or entertainment. They chose the latter as social media was less data-intensive than online teaching platforms (like Zoom, Microsoft Teams, Google Meet).

Studies have shown that adolescents with limited access to the internet tend to have weaker digital skills, leaving them behind not only in learning but also in realising their digital potential.[23]

22 Rapid Assessment On The Social And Economic Impacts Of Covid-19 On The Children And Families In Viet Nam, UNICEF Viet Nam, August 2020, <https://www.unicef.org/vietnam/reports/rapid-assessment-social-and-economic-impacts-covid-19-children-and-families-viet-nam >

23  Stalker, Peter, Sonia Livingstone, Daniel Kardefelt- Winther and Marium Saeed, Growing up in a connected world, Innocenti Research Report, UNICEF Office of Research - Innocenti, Florence,Italy, 2019.

**Figure 1:** Do you have access to the following devices at home?



|  | Total | Urban | Rural | Male | Female |
|---|---|---|---|---|---|
| **Smartphone** | | | | | |
| Indonesia | 96% | 97% | 94% | 97% | 93% |
| Malaysia | 82% | 87% | 70% | 77% | 87% |
| Philippines | 90% | 93% | 84% | 85% | 94% |
| Thailand | 97% | 96% | 100% | 99% | 96% |
| **Laptop** | | | | | |
| Indonesia | 38% | 45% | 29% | 4% | 41% |
| Malaysia | 52% | 58% | 38% | 52% | 52% |
| Philippines | 26% | 23% | 17% | 20% | 21% |
| Thailand | 34% | 38% | 25% | 32% | 35% |
| **Desktop** | | | | | |
| Indonesia | 3% | 3% | 2% | 2% | 4% |
| Malaysia | 24% | 24% | 25% | 25% | 24% |
| Philippines | 14% | 15% | 10% | 13% | 16% |
| Thailand | 40% | 41% | 38% | 43% | 37% |

● **INDONESIA**
● **MALAYSIA**
● **PHILIPPINES**
○ **THAILAND**

*Note on Indonesia: The gender discrepancy in Indonesia may be explained by the findings from the co-design workshops. During the pandemic, young adolescent boys had to take on more financial responsibilities for their families. With full-time jobs, they did not have access to their digital devices. Girls, however, remained at home and perhaps had more access to devices.*

**Insight 1:**

"There are times when my brother's classes are prioritised over mine. Whenever that happens, I just try to do everything I can with their smartphone and just accept a lower score. But I feel it is not fair."

*LGBTQIA+ identifying adolescent, 18, ethnographic-style interview, rural-San Mateo, Philippines*

**1.3 The barriers to access digital spaces are compounded for vulnerable and marginalised adolescents, including girls, people with disabilities, ethnic minorities, and those with limited literacy.**

The primary research found that adolescents from vulnerable and marginalised communities had more barriers to accessing digital spaces. During the co-design workshops, most adolescent girls in the four countries, especially in the low-income areas of Thailand and Indonesia, said they had comparable access to both data and devices. But they were more likely than boys to bear the burden of household chores, which cut into their time online.

The gender divide in education has also worsened in the East Asia and Pacific region after the COVID-19 pandemic. Research conducted by UNESCO in 2020 estimated that more than 1.2 million girls (from pre-primary to upper secondary) in the region could drop out or not have access to school in the next year due to the pandemic's socio-economic impact, including the need to generate income, increased household and child-caring responsibilities, early and forced marriage and/or unintended pregnancy.[24]

Adolescents with disabilities are more likely to experience adverse socio-economic outcomes such as less education, poorer health, and lower levels of employment.[25] UNICEF's East Asia Pacific data estimate there are 190 million children with disabilities in the region.[26] During the ethnographic-style interviews, adolescents with disabilities said that the audio and visual options of various platforms enabled them to access information and communicate with others effectively. They used the voice notes feature on WhatsApp, visual-heavy content on YouTube, TikTok and Instagram, audio description applications, and screen reader features to type on Google. However, this was observed mostly for adolescents from higher-income households who could afford and had more knowledge about inclusive technologies. Lack of regular access to essential services and assistive technologies during the COVID-19 pandemic has increased the hurdles for adolescents with disabilities. Those out of education, or those who are most likely to drop out, are adolescents from rural and poor households.

24  Babb, Jenelle and Paisic, Maida, ' 'Building back equal' for girls' education', UNICEF East Asia and Pacific, 14 October 2020, <https://www.unicef.org/eap/stories/building-back-equal-girls-education >

25 'Disability Inclusion ', The World Bank, 19 March 2021, <https://www.worldbank.org/en/topic/disability#1>

"Being a mother sometimes limits my access to digital devices and the internet. When my baby is being fussy, I am expected to handle it, and my husband will continue playing games online. My husband said that I need to play with my baby more."

*Adolescent mother, out of school, 19, ethnographic-style interview, Bandung, Indonesia*

"It's not easy to live with others but it's necessary. I need to practice it. I'm not sure if I can communicate clearly to get others to understand me. Aspergers has caused me to be frank to people and the way I speak many people cannot tolerate that. I find it normal but my frankness can irritate people and they think I'm not sincere. So, I prefer to communicate online because people only see what I write, not how I speak."
*Female with Asperger's syndrome, out of school, 16, ethnographic-style interview, Chiang Mai, Thailand*

"For students with disabilities there are not many schools for them to learn. My sister is a teacher in a Centre for Persons with Disabilities and digital devices are a dream for them. In Ho Chi Minh city, there are some schools and teachers that support those who are visually impaired. They use applications and voice-functions for them. But in rural areas, where I am from, there are few schools and opportunities like this for people with disabilities, or they do not know of any such opportunities."
*Teacher, Dao Thi Hong Quyen, Viet Nam*

Adolescents with limited literacy skills, like those out of school or from ethnic minority communities, also face barriers to digital inclusion. For adolescents in low-income settings in Thailand and Indonesia, a limited understanding of the English language is a significant barrier to their digital engagement. They feel that there is 'more useful' information available in English which they cannot access. For ethnic minorities in Viet Nam, language limitations are a barrier.

"More can be done for persons with disabilities. The Digital Entrepreneurship Economy Corporation tries to make programmes as accessible as possible. They have even produced modules in Braille. But there are certainly not enough initiatives for those with disabilities."
*Expert, Representative, Talent Development and Digital Entrepreneurship at Malaysia Digital Economy Corporation (MDEC), Malaysia*

26 'Children with Disabilities', UNICEF East Asia and the Pacific, <https://www.unicef.org/eap/what-we-do/children-with-disabilities >

**Insight 1:**



"Word documents are better to read than PDFs, which sometimes cannot be read comprehensively by the voice-over functions of mobile phones. For computer internet usage, I have to go to a blind school."

*Visually impaired female, 19, ethnographic-style interview, Bangkok, Thailand*

The Digital Landscape Analysis across the four countries showed that during 2020-2021 searches with keywords to learn English grew exponentially.[27] This could be attributed to various factors, including not being able to learn languages through distance learning in school, or needing English skills for networking, and gaming online. In **Indonesia** there was a 260 percent rise in searches for "virtual writing tutor IELTS"; in **Thailand** "YouTube channels to learn English" saw a 500 percent increase.

Adolescents who are out of school or have limited literacy skills use audio-visual formats to learn and engage with content online more than ever before, but the research showed that there was no formal information or guidance available to them. Through the co-design workshops, adolescents mentioned that there is limited awareness of learning platforms or external software offering supportive features and functions.

27 Search data was collected from June 2020- May 2021. Growth in interest compares the first 6 months of the time period (June 2020 - November 2020) to the last 6 months (December 2020- May 2021)

# Insight 2:

Adolescents prefer in-person engagement for formal education. Digital spaces are not as effective in fostering conducive learning environments and experiences.

**2.1 Some adolescents appreciate the flexibility and access to unlimited information that comes with online learning. However, distractions at home and unguided teaching lead to a lack of interest in learning.**

In the primary research, some adolescents across the four countries said they enjoyed being able to work in their own time and at their own pace with online learning. This new way of learning was seen as especially convenient for adolescent mothers and adolescents with diverse interests and hobbies, who were able to successfully handle their home responsibilities and education simultaneously.

"Joining the WhatsApp group really helped me during pandemic to still continue my learnings about Islam."
*LGBTQIA+ identifying adolescent, out of school, 19, ethnographic-style interview, Bandung, Indonesia*

However, in the quantitative survey, those who were dissatisfied with the overall transition to online schooling far outnumbered those who felt engaged, especially in low-resource areas. Adolescents missed a conducive learning environment at home. About 44 percent of all survey respondents across all countries indicated that they were not able to pay attention and were often bored with the digital learning environment. This figure was as high as 57 percent for Malaysia. 43 percent of respondents in Thailand and 52 percent of respondents in the Philippines reported not having a silent space to study at home. 39 percent of respondents in the Philippines said being asked to help out at home interfered with learning. This figure was between 10-15 percent in Thailand, Malaysia, and Indonesia. (see Figure 2)

"It's more fun watching TikTok rather than listening to the teacher during online school."
*Male, 10-14, co-design workshop, Makassar, Indonesia*

The quality of learning was also affected, as students were not fully immersed in the new format of online schooling, and often completed modules just for compliance. There were frequent instances of 'copying off the internet' for assignments. While searching for answers on Google, adolescents, especially the younger cohort, were often distracted by other entertainment apps or games online.

**Insight 2:**

## "I find online learning difficult and not fun"

INDONESIA
70%

MALAYSIA
57%

PHILIPPINES
77%

THAILAND
50%
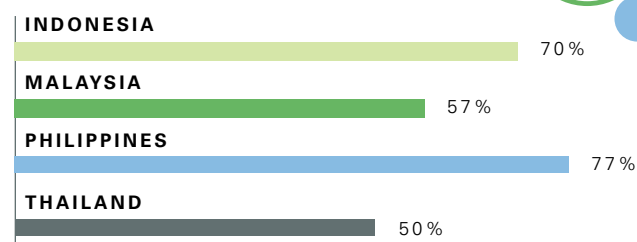
## "I feel happy and interested during online learning"

INDONESIA
21%

MALAYSIA
18%

PHILIPPINES
14%

THAILAND
15%
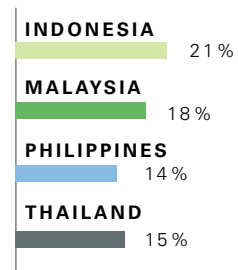
Figure 2: Quantitative data showing adolescents' reactions to online learning. The graphs above show that in all the research countries, most respondents viewed online learning as difficult or uninteresting.

A survey conducted by the World Economic Forum (2020) with over 68,000 people in ASEAN countries between the ages of 16-35 found that 7 out of 10 young people had a problem working or studying remotely. This was due to poor internet connections, high cost of learning, and household distractions. Two-fifths of the respondents in the survey said poor internet quality kept them from doing more, and over one-fourth said their internet was too expensive.[28]

The shift to online learning has been difficult because the education systems were not prepared and roles and responsibilities of various stakeholders - ministries and administrators on infrastructure provision, schools and EdTech on providing online solutions, and even parents and teachers on shouldering the burden of learning at the onset of the pandemic – were unclear.

The ethnographic-style interviews revealed that teachers often do not possess the skills to take virtual classes and sometimes have to visit the homes of their students. Parents have to balance home chores and their own livelihoods while creating a guided and supportive learning environment at home. In some remote areas of Indonesia parents have to pick up and drop assignments from school, communicate with teachers over SMS or phone calls, organise sessions when teachers visit their homes, assist their children with technology devices and support them with their assignments.

"Need to have better communication between teachers and parents because they are shifting, where usually the teachers can physically be present to teach and monitor the students whilst now parents need to participate in that role at home."
*Expert, Ministry of Education and Culture, Indonesia*

*The most preferred platforms for online learning were: Whatsapp and Zoom in **Indonesia**, Zoom and Google meet in **Malaysia**, Facebook messenger in the **Philippines**, and Google Meet and Line in **Thailand***

28 Broom, Douglas 'Young people in ASEAN have emerged from lockdowns more resilient and digitally switched on. Here's how', World Economic Forum, 8 October 2020, <https://www.weforum.org/agenda/2020/10/young-people-asean-digital-adoption-covid-19/>

**Insight 2:**

## Spotlight on adolescent mothers learning from home

The qualitative primary research revealed that adolescent mothers, across countries, unanimously preferred the online set-up due to their dual responsibilities. Online schooling gave them the opportunity, not only to continue their education and upskill, but also to be around for their children and find supportive communities online.

"I much prefer online learning. I can attend my classes on Zoom while staying close to my baby. I can even feed my child while taking classes with the camera turned off."

*Co-design workshop with adolescent mothers, 15-19, Manila, Philippines*

**Insight 2:**

## "I miss my friends. [I miss] studying at school with friends."

*Co-design workshop, 10-14, Rizal province Philippines*

**2.2 Despite the year-long adjustment, adolescents miss social interaction with their peers. Older adolescents pointed out that online learning minimises teacher-student interaction. This may result in increased instances of poor mental health.**

Across all countries and ages, adolescents preferred classroom settings for formal learning. Digital learning has not effectively recreated the classroom environment which adolescents perceive as key to their learning experiences. Nearly 40 percent of all surveyed respondents (50 percent in Indonesia and Malaysia), missed communication between teachers and students (See Figure 3). Younger adolescents missed 'human interaction' and older adolescents felt that reduced interaction with teachers makes it difficult to learn new concepts and ask questions. Poor connectivity and a different pace of learning prevents interaction, further limiting their learning and performance. Older adolescents also missed sports, music, and practical subjects that supplement formal learning.

This limited engagement with friends and peers leads to feelings of isolation, lack of motivation, stress and boredom.[29] Limited interaction with teachers and ineffective learning could also cause anxiety about academic performance. This could negatively impact their mental health and reduce their capacity to be active learners.[30] Being out of school settings, adolescents are also missing out on building important cognitive, social, physical and emotional skills, which will be harder to acquire as they get older and more removed from the collaborative and face-to-face school environments.[31]

"It is difficult to ask and clarify questions and understand the content. We also miss interacting with our friends."
*Female, 10-14, co-design workshop, Petaling Jaya, Malaysia*

"The pandemic has reinforced that learning is a social process and not just an accumulation of knowledge. Face-to-face learning can't be replaced. Young people need to laugh, smile and observe body language while learning, which is not always possible in an online classroom. However, pandemic helped us learn about some great ways in which online platforms can complement face-to-face learning. Blended learning may be a good takeaway from this pandemic."
*Expert, Educational Research and Innovation Officer, Philippines*

29 'UNICEF'S Approach to Mental Health During Covid-19 In East Asia And The Pacific', UNICEF East Asia and Pacific Regional Office, October 2020, <https://www.unicef.org/eap/media/6786/file/Mental%20health%20advocacy%20brief.pdf>

30 Situational Analysis On Digital Learning Landscape In Indonesia, UNICEF Indonesia, February 2021., <https://www.unicef.org/indonesia/media/9956/file/Situation%20Analysis%20on%20Digital%20Learning%20in%20Indonesia.pdf>

31 Learning and earning losses from COVID-19 school closures in developing Asia: Special Topic of the Asian Development Outlook 2021, Asian Development Bank, April 2021, <https://www.adb.org/sites/default/files/publication/692111/ado2021-special-topic.pdf >

## Spotlight on the barriers to online learning

It was apparent from the data that insufficient interaction with their teachers and peers were stated as a common cause of struggles with online learning amongst adolescents. In Indonesia, the lack of communication between students and teachers, poor internet coverage, and inability to pay attention were the primary challenges. In the Philippines and Thailand, lack of a conducive work or study environment preceded a lack of interaction. In Malaysia a lack of communication stood in second place, while the inability to concentrate was cited as the biggest barrier.

**Figure 3:** Do you face any of the following difficulties in online schooling?



No rooms or silent space to study
- 24%
- 37%
- 52%
- 43%

Internet coverage in my area is bad/net is slow
- 47%
- 35%
- 68%
- 33%

I have to help out at home/ no time
- 11%
- 23%
- 39%
- 15%

I can't pay attention/ concentrate
- 45%
- 63%
- 39%
- 36%

Teacher's lack of competence for online teaching
- 33%
- 12%
- 21%
- 19%

Difficulties taking online exams
- 25%
- 30%
- 18%
- 14%

Lack of communication between teachers and students
- 49%
- 53%
- 31%
- 36%

Insufficient interaction between students
- 36%
- 40%
- 42%
- 39%

Others
- 2%
- 3%
- 8%

Don't face any difficulties
- 10%
- 7%
- 1%
- 7%

- INDONESIA (303)
- MALAYSIA (248)
- PHILIPPINES (152)
- THAILAND (191)

**Insight 2:**

"YouTube is an important source of learning, like a second teacher".

*Male, Refugee, 15-19, co-design workshop, Kuala Lumpur, Malaysia*

**2.3 Adolescents are primarily using YouTube for non-academic and academic learning, particularly for math, science, and languages. The uptake of EdTech remains restricted due to low awareness and high costs.**

In the survey, about one-third of all respondents self-reported the informal use of online means to aid school learning. Adolescents across the board relied on YouTube for academic and non-academic learning, particularly for math, science, and languages. YouTube, with its visual appeal, free accessibility, abundance of options, and mobile-friendly interface was preferred. In urban areas of Philippines and Indonesia, other platforms like Brainly and PhotoMath were used to supplement homework, but were only accessed by a few. Most respondents engaged in supplementary learning at least once a week. While the Google search engine was the most popular platform for help with completing homework and school projects, not all respondents felt confident about navigating through the information. It is worth highlighting that conducting a search for the "right answer" may actually limit young people's ability to focus on the method of arriving at the answer, especially for math, science and other subjects, where the comprehension process is as important as the final answer.

"Everyone is attracted to the idea of 21st century skills. This is needed to be able to succeed in STEM careers. The problem is not with reading texts, but also understanding what the text means, and being critical about that - that is where the difficulty lies."
*Education Consultant, Indonesia*

Only 10 percent of respondents in the survey had signed up for an EdTech[32] platform (see Figure 4). This minimal uptake was noticed largely among urban and older adolescents, and could be attributed to the high cost, the low awareness about which platforms to access, and the lack of clarity on how they supplement formal education. EdTech did not feature much in both the co-design workshops and the digital analysis of adolescent behaviour online. During the qualitative research, adolescents across the four countries, especially from rural areas, said that EdTech solutions (mostly understood as private solutions) were often unaffordable. The Digital Landscape Analysis revealed that Indonesian

32  In this report, EdTech is understood as public or privately run technology or software platforms that are solely purposed to provide educational content to students and teachers

**Insight 2:**

"Pahamify is the most reliable platform but it only allows you to search 3 solutions and after that you need to pay, so cannot use it all the time. First I ask my peers and if they do not know I go to Pahamify."

*LGBTQIA+ identifying adolescent, 19, ethnographic-style interview, Bandung, Indonesia*

adolescents were the only ones discussing EdTech online, because through the public-private model of working, the government has provided an internet quota for learning which enables access to private EdTech platforms. Local EdTech platforms, like Ruanguru and Zenius were cited as modes of supplemental learning. In Malaysia, despite the government impetus on the rollout of DELIMa - a free EdTech platform - most of the younger and minority-group respondents were not aware of the platform or its use. Similar instances were found in the other countries as well, where the existence of government EdTech solutions was met with limited awareness. In Thailand and Malaysia, owing to the unaffordability of private EdTech, educational notes were sourced on Twitter and Instagram.

Social media platforms like Facebook, WhatsApp and LINE and conferencing applications like Google Meet and Zoom continue to be used by a majority of schools and are preferred over EdTech and school management software for synchronised learning. Education experts said that while EdTech presents a great opportunity to supplement gaps in the traditional learning system, they need to work synchronously with schools, and be made more accessible and affordable for all.

## Spotlight on the uptake of EdTech across the four countries

During the quantitative survey, when asked about their new formats of schooling, adolescents reported very low self-uptake of EdTech platforms for formal education. The Digital Landscape Analysis revealed that Indonesian adolescents were the only ones discussing EdTech online. This was negligible across the other countries.

**Figure 4:** If your schooling has moved online, what is the new format?



**Online classes on video conferencing platforms**
- 82%
- 90%
- 73%
- 89%

**Self-learning via informal means**
- 29%
- 27%
- 29%
- 31%

**Self-learning via EdTech platform**
- 14%
- 5%
- 5%
- 12%

**Teacher sends instructions through WhatsApp or social media**
- 82%
- 71%
- 38%
- 30%

**Teacher physically visits my school or community**
- 5%
- 0.4%
- 8%

**My schooling is a mix of many of the above**
- 9%
- 8%
- 13%
- 8%

**Others**
- 1%
- 2%
- 24%
- 2%

**I'm not sure**
- 1%

● INDONESIA (303)
● MALAYSIA (248)
● PHILIPPINES (152)
○ THAILAND (191)

# Insight 3:

The internet allows many young people to explore their curiosities, develop skills, and pursue interests which may be pivotal in their transition towards adulthood. However, this is more likely among those with adequate resources and digital skills.

**3.1 Adolescents are using online spaces to explore their hobbies. They share content online for self-expression, validation, and to inspire others.**

Online spaces have enabled adolescents to express themselves more than they ever could before. Online learning of creative pursuits like dance, music, culinary arts, arts and crafts are popular among them. In order to share their work, adolescents want to acquire and hone digital skills like video and photo editing, collaging, vlogging, and creative writing. According to the Digital Kids Asia-Pacific study, Viet Nam displays the highest scores in expression, related to their ability to use technology to creatively represent their identities.[33]

A majority of adolescents were primarily consumers of online content and only some (about 20-30 percent of survey respondents) felt comfortable creating and sharing their own content; these adolescents were likely to be from the older cohort. More males took part in content creation activities than females, across all surveyed countries *(see Table 2)*. These adolescents engaged in creative online activities on a weekly basis.

Adolescents share their work online in order to get validation in the form of likes, motivation, and positive reinforcement or comments from their peers. They are comfortable sharing 'light' content that is fun and entertaining but are nervous about expressing personal opinions online, especially socio-political opinions. Adolescents worry about being judged for being wrong, or talking about a controversial topic. They also try to avoid negative comments. This could be because the culture of Asian communities does not always encourage adolescents to have their own opinions or to disagree with figures of authority, often described as an aversion to the spotlight and "cultural shyness" in order to avoid conflict in society.[34] In the ethnographic-style interviews conducted with adolescent content creators, however, it emerged that national, social and political issues were central to the content they created. They were also aware of 'cancel culture' [35] and acknowledged that addressing sensitive issues might result in heated debates among their followers, often dividing their audience, which would be detrimental to their brand. Some revealed that often they chose to share content that might be controversial anonymously. They were motivated by creating awareness around social issues, not by financial rewards. They were choosing to send their messages in fun and creative ways like dance routines, comedy sketches, stories, make-up tutorials, or vlogs. Many mentioned they need to acquire advanced digital skills to be successful.

**Insight 3:**

## Spotlight on online learning and expression of adolescents*

In **Indonesia**, learning how to cook, playing new instruments, and makeup artistry and learning about religion via social media were popular. Creating fiction stories on Wattpad, crafts videos, and dance routines on TikTok and travel blogs were of interest.

In **Malaysia**, engaging in activities like creating and editing videos online for cooking and dancing were favoured.

In the **Philippines**, sharing singing and dancing videos, surfing for life hacks, and learning about conspiracy theories were popular. They are more interested in current affairs and news-related content than their neighbours.

In **Thailand**, a desire to learn new languages, seek motivational quotes, gardening, and engaging with news was well liked. Creating contemporary media like memes and humour remixing pop-culture and infographics for civic engagement was noticed.

*Data collated from co-design workshops and Digital Landscape Analysis

33 Digital Kids Asia-Pacific: Insights into Children's Digital Citizenship, UNESCO, Bangkok, 2019.

34 Wang, Rui, Brian Hempton, John P Dugan, and Susan R Komives, 'Cultural Differences: Why Do Asians Avoid Extreme Responses?' Survey Practice, vol. 1, no. 3, 2008, <https://www.surveypractice.org/article/2913-cultural-differences-why-do-asians-avoid-extreme-responses >

35 Cancel culture is the idea that a person can be "canceled" — or culturally blocked from having a prominent public platform or career. It takes the form of public backlash, often fueled by politically progressive social media.

**Insight 3:**

"I use Microsoft Office, VSCO, Adobe Lightroom, and Picsart to create my online content. I also use Google to do research about topics I want to write about. I share these on my social media channels and get good feedback from others."

*LGBTQIA+ identifying content creator, 19, ethnographic-style interview Bandung, Indonesia*

"I am happy to be part of the Facebook group on motorcycle parts and go to it because it gives me more details than I can get from asking around my physical social circles. It provides me with a place for finding community, reviews and trading motorcycle parts."
*Male, out of school, 16, ethnographic-style interview, Chiang Mai, Thailand*

"Digital spaces have allowed me to dream big. I discovered my life goal of becoming an animation artist in Ireland with a company called Carton Salon while watching a YouTube video."
*Female adolescent with spinal disability, 17, ethnographic-style interview, San Isidro, Philippines*

"A reason why I like playing Mobile Legends is because of OhMyV33nus, a professional Mobile legends player. He's one of my inspirations because despite of him being gay, it made me realise that someone like me or someone like us can be a pro player or can excel on various things that we want to do."
*LGBTQIA+ identifying adolescent,18, ethnographic-style interview, San Mateo, Philippines*

| Country | Total Respondents (%) | Male (%) | Female (%) |
|---|---|---|---|
| Indonesia | 12 | 17 | 11 |
| Malaysia | 20 | 24 | 16 |
| Philippines | 24 | 29 | 21 |
| Thailand | 33 | 39 | 27 |

**Table 2: Survey Question:** How frequently do you engage in this activity - 'Expressing yourself and sharing it with others (blogs, videos or posts). Data showing percentage of respondents who reported expressing themselves online on a regular basis - disaggregated by sex

"The internet is a great place to learn and explore my curiosity, ranging from bitcoin to preparing for college. I learned about bitcoin, the stock market, financial management, and languages on Dek-D. I can read about anything on Google."

*Visually impaired female, 19, ethnographic-style interview, Bangkok, Thailand*

**3.2 Online spaces are empowering adolescents to access information and acquire skills relevant for their careers and adulthood. The ability to access 'fun' content and determine their own path of learning in online spaces is particularly appealing to them.**

When online, adolescents are actively accessing knowledge on study and job opportunities that enhance employability.[36] The quantitative survey showed over 30 percent of all respondents were actively seeking information related to jobs and educational opportunities online. This figure, at 7 percent, was astonishingly low in Thailand. It is important to note that this behaviour was higher amongst rural dwellers than urban, and females than males. The survey data also indicate that across all countries, older adolescents and those in urban areas were more likely to access news, current affairs, and podcasts. Adolescents said they appreciated being able to choose from various fun formats and diverse information on topics that suited their interest. They enjoyed the experience of online learning as it was self-paced and not assessed.

In the co-design workshops, older adolescents said that this access to information has enabled them to explore their professional interests, ranging from becoming a bank official to an international football player. This allowed them to dream big and identify role models, not just within their communities but from all over the world. The online exposure also led them to articulate alternative 'digital' career aspirations like becoming 'influencers', 'YouTubers', 'travel bloggers' and 'professional gamers'. However, it is worth highlighting that many adolescents expressed the desire to to build productive and income generating skills, outside of the ad-hoc manner in which they were currently doing.

"Much easier to learn everything [online] ourselves because nobody will evaluate".
*Male, 15-19, co-design workshop, Makassar, Indonesia*

A few adolescents were already seeking monetisation opportunities like gaming, posting videos, or selling products online - building their entrepreneurial acumen. Older adolescents in rural areas, more than their urban counterparts, said that the internet helped them get information on setting up and operating businesses during the pandemic and in the future. Taking on adult activities like online shopping, and learning to cook online allowed them to feel independent, use resources wisely, and even exercise their agency in real-life situations from a young age.

**Insight 3:**

"I buy things online and get knowledge about the job I want. I use internet banking, an application on the phone, to transfer the money to pay for it. I use my phone for everything."

*Male, ethnic minority, 16, ethnographic-style interview, Chiang Mai, Thailand*

The quantitative survey also found that girls across the four countries spent more time shopping or browsing e-commerce websites (at 46 percent), as compared to boys (at 28 percent).

The research also revealed that playing online games was incredibly popular among adolescents across the Southeast Asia region, especially among boys. The Digital Landscape Analysis validated this as in Malaysia, Indonesia, Thailand, and the Philippines, the keywords that were rising in growth (more than 300 percent)[37] were related to gaming, such as "code monkey jr" in Thailand and Indonesia, and "hour of code minecraft" in the Philippines. In the co-design workshops, young gamers said they were able to socialise with those outside their communities and assimilate skills of strategy, teamwork and competitiveness. Previous studies also show that video games may enhance children's visual faculty and ability to learn skills.[38]

However, it is worth noting that there is a gender and location skew in online gaming frequency among adolescents. The quantitative survey found that girls were significantly less likely to engage in online gaming than boys. Even during the co-design workshops, only a handful of adolescent girls mentioned playing online games, with most saying they were "too violent" and often showed "over-sexualised" images of girls, making them too uncomfortable to participate. The Digital Landscape Analysis in Indonesia showed that while girls tend to enjoy simulator games like Sakura School, boys like high-energy games that feature adventure like PUBG, Minecraft, or Bangbang.

"I hate online games. I don't play them. You can't focus and you don't learn anything from playing it. My brother plays it and I know he's not learning from it. It's a waste of time."
*Female, 10-14, co-design workshop, Rizal province, Philippines*

"Free Fire creates a safe space for me to experiment new strategies with my friend to win against the opponent, which also teaches me coordination and decision-making skills for real life."
*Male, low income, 13, ethnographic-style interview, Nakhon Pathom province, Thailand*

36 'State of the World's Children 2017: Children in a Digital World', UNICEF, New York, 2017, <www.unicef.org/sowc2017/ >

37 Search data was collected from June 2020 - May 2021. Growth in interest compares the first 6 months of the time period (June 2020 - November 2020) to the last 6 months (December 2020 - May 2021)

38 'State of the World's Children 2017: Children in a Digital World', UNICEF, New York, 2017, <www.unicef.org/sowc2017/ >

Insight 3:

# Spotlight on engagement with online gaming

The quantitative data also illustrated that the frequency of playing games was much higher for boys than their female peers. The same was true for urban versus rural adolescents.

"There is immense potential for gamified learning. Creating friendly competitive environments by creating challenges work well and keep young people motivated and engaged."
*Expert, Director of a non-profit organisation working on education, Indonesia*

Figure 5:  Would you please tell us whether it is something you do online - 'playing games'



Boys

Girls

Urban

Rural

INDONESIA (303)
MALAYSIA (248)
PHILIPPINES (152)
THAILAND (191)
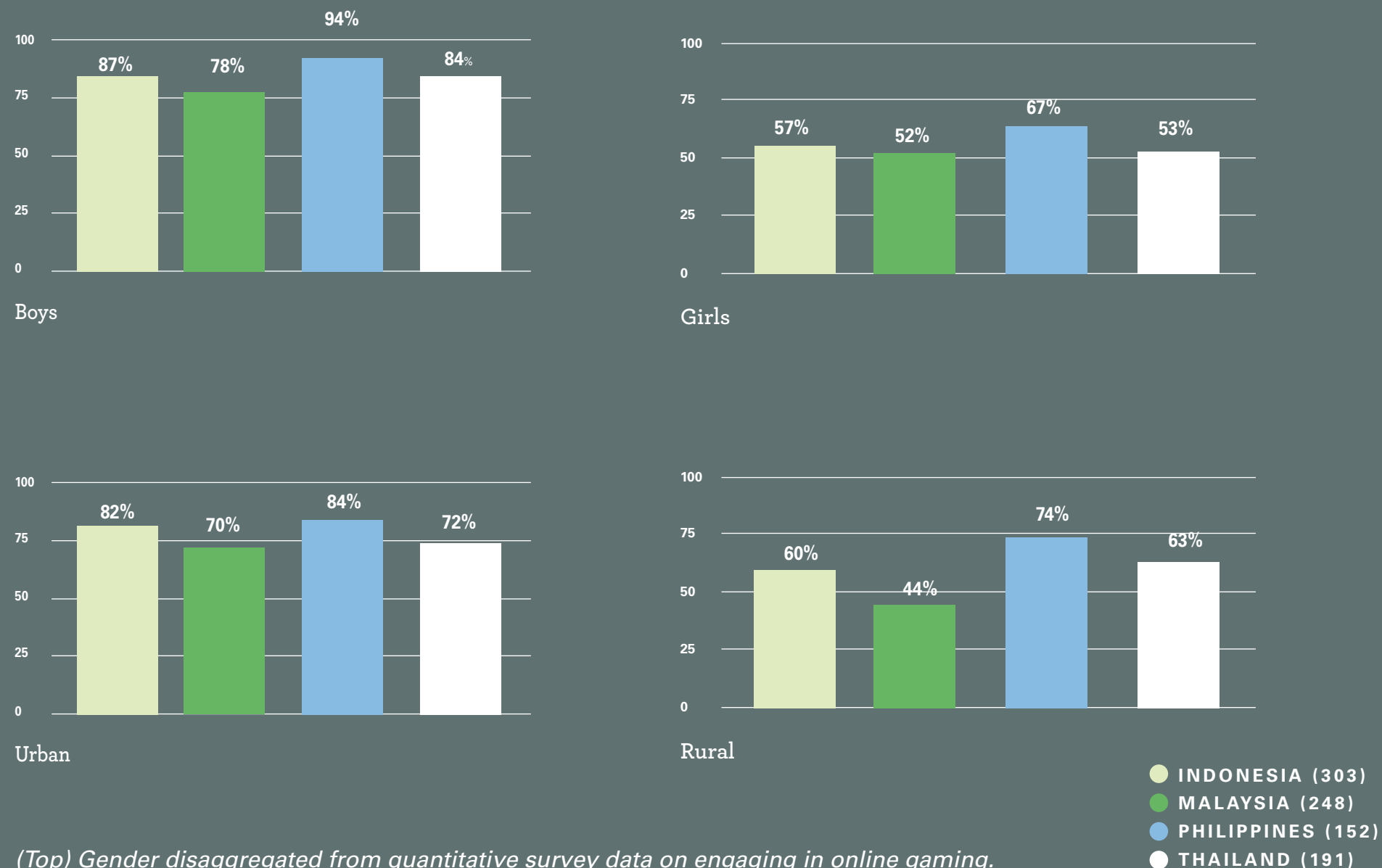
*(Top) Gender disaggregated from quantitative survey data on engaging in online gaming. (Bottom) Quantitative data representing the frequency and popularity of online gaming with a rural-urban slice.*

Insight 3:

## Spotlight on what adolescents prefer to learn offline

Respondents across all countries and ages unanimously felt there was a gap between learning theory online, and practical activities like playing sports and driving, which were 'missing online'. They also felt that 'interpersonal skills' and 'life values' like empathy and respect were only possible offline, aided by friends and family. Young people also believed that important domestic skills could not be learnt online as they required experiential learning.

Editorial credit: CHAINFOTO24 / Shutterstock.com

"By reading Mangas, we learn new vocabulary and grammar in Japanese."

*Female, 15-19, co-design workshop, Sabah, Malaysia*

**3.3 Online spaces are a gateway for adolescents to explore new cultures, communities, languages, and issues around the world, creating the potential for them to be global citizens in the future.**

Across the countries, it was found that Asian pop-culture was one of the biggest influencing factors on the content that adolescents were consuming and creating online. The popularity of Korean, Japanese and Chinese movies, TV shows, games, music, and books, act as an impetus for adolescents to explore these cultures, often by learning the language, cooking their food, or connecting with other fans across the world. Adolescents in Thailand and the Philippines also frequently engaged with English content while Malaysians mentioned English, Korean, and Japanese content. Across the region, adolescents found value in learning English and Mandarin through the opportunities offered by digital spaces.

Adolescents feel part of a global community across cultures and geographies and frequently share articles, images, videos, resources, and information about their interests with one another. They form friendships and often band together over shared interests. As part of their fandom, they often collectively organise with other fans to make music videos, help artists reach a certain number of views, make certain hashtags or topics trend, and fundraise on Twitter, Discord, YouTube, or TikTok. Some adolescents, especially among the older age group in Malaysia and Thailand, consume, learn, and share information online about global issues like the problems in Palestine, Black Lives Matter, international conflicts and natural disasters.

"Anime and Manga are a source of life lessons for young people."
*Female, indigenous population, 10, ethnographic-style interview, La Trinidan, Bicol, Philippines*

"Online platforms are limitless. I can connect with anyone, anywhere from local to abroad with those who share similar interests. I have used online platforms to find information, do campaigns online, and donate money to a cause I support. I even engaged in a physical protest in Chiang Mai through online information."
*Female, Content creator, 17, Chiang Mai, Thailand*

**Insight 3:**

## Spotlight on the growth of pop-culture

The K-pop craze is seen extending even into study materials in Malaysia. Students are using K-pop photocards, stickers, illustrations, print outs and other memorabilia to further personalise their notes and infuse positive associations into a task that can otherwise feel monotonous or daunting. For some, they even act as motivational reminders.

Typically, K-pop idols are expected to uphold high standards of perfection: not only do they have to be able to dance and sing flawlessly, they must also have the external appearance to match. As a result, they are viewed as 'perfect' figures and role models by their fans. Many teens look to these idols for motivation to achieve similar standards of excellence and this applies to academic excellence as well.



Editorial credit: thi / Shutterstock.com

Insight 3:

# Spotlight on the most popular platforms

Similar to children in the United States and Europe, children in Cambodia, Indonesia, Malaysia and Thailand primarily use Instagram, WhatsApp, YouTube, Facebook and Facebook Messenger, as well as gaming apps PUBG and Mobile Legends.[39]

Family and friends form the core circle of influence on applications and platforms that are used. In Malaysia and the Philippines, family played a major role, while peer pressure in the use of applications and online behaviours in digital spaces was most in Indonesia and Thailand.

**YouTube is the most popular platform for entertainment and learning** - watching funny videos, acquiring new skills, watching pop culture content from across the world, learning English, STEM subjects and advancing digital skills.

**Instagram is used to follow celebrities, stay up-to-date with current trends** on lifestyle and to share memes with friends and sometimes share socio-political information.

**Google is a quick-fix for finding answers to homework and assignments,** but is sometimes confusing due to excess information.

**Most popular games:** PUBG, Mobile Legends, Freefire, World of Warcraft, and Call of Duty.

**Most popular messenger:** WhatsApp is the main communication platform to chat with friends in Indonesia and Malaysia. Line was most popular for classroom messaging in Thailand. Facebook Messenger was popular in the Philippines and Thailand for connecting with friends and family.

39 'Our Lives Online', UNICEF East Asia and Pacific, Thailand, 2020, <https://www.unicef.org/eap/reports/our-lives-online>

## Insight 4:

Adolescents are most comfortable when navigating entertainment and social media platforms, but they are not adequately equipped with the digital and critical-thinking skills required for them to realise their full potential in online spaces.

**4.1 Almost all adolescents go online primarily for leisure and entertainment. A significant proportion say they do not have appropriate digital skills to effectively use tools and software that may be required for study or professional purposes.**

This research confirms existing evidence that adolescents feel digital spaces and the internet are for leisure and entertainment - primarily to watch videos, play games, and talk to friends on social media platforms. Using the internet for productive purposes is a lower priority *(see Figure 6).*

With extended periods of time spent on YouTube, Tiktok, Instagram, and Facebook, adolescents across all countries are seeking more bite-sized and visual content on user-friendly platforms even for learning or productive tasks. They like the automatic play feature on platforms like YouTube and TikTok, but struggle to use platforms like Microsoft Suite, Zoom, Google Meets, Google Drive, and Microsoft Office, which require additional skills which they lack.

From the research it is apparent that adolescents across the board felt confident to navigate social media platforms and basic search functions on Google. They also demonstrated high levels of awareness of various online tools and functions, but struggled in their effective and safe application when tasked with work or study-related activities. The survey data indicate that about 70 percent of adolescents across all countries are comfortable enough to search for information online, install apps, and use social media. However, only about 40-50 percent were well-versed with various software and tasks like attaching a file on email. Only about 20-30 percent of adolescents from the quantitative survey reported creating content or expressing themselves online.

In the co-design workshops in Indonesia, adolescents mentioned being confident about using applications to browse social media and gaming sites, but struggled to fill in Google forms or Excel sheets. In Malaysia, adolescents were able to submit their homework on WhatsApp but were unable to upload files to Google drive. While this may be because they were accessing the internet on their mobiles, they also said that they lacked formal guidance from teachers and their families. During the co-design workshops it was apparent that adolescents lacked

> "Playing games is easy, but I struggle to use Google Classroom. I don't know how to navigate or even who to ask."

*Male, Child labourer, 14, ethnographic-style interview, Makassar, Indonesia*

familiarity with tools to aid in digital skills development. To acquire these skills they relied on YouTube or Facebook videos, trial and error, and asking friends and people in their community. When probed they said digital skills were about having knowledge about various learning and social networking platforms and their safe and effective use online. Across all countries, adolescents unanimously sought to upskill themselves by being able to conduct advanced research and find information to complete their tasks.

This was similar to the findings of a survey conducted by UNICEF on Digital Literacy in ASEAN countries (2021)[40] where 61 percent of respondents from ages 10-24 felt that they were not learning digital skills at school. They perceived "inadequate access to digital devices, lack of internet access, and insufficient training at school" as key inhibitors to digital skill development. The survey also highlights that most boys and girls developed their digital literacy mainly by searching for information online.

"One of the key learning points from the (#LearnOnTiktok) campaign was the importance of delivering high-quality educational information in a creative, concise, fun and engaging way. Our attention spans on social media are very short in general, and especially so for younger audiences. This is why [where appropriate] educational activities are best kept short, which is where a short-form video platform like TikTok comes in as a great tool."
*Expert, Representative at Social Media Platform*

"I struggled to use Microsoft Excel and other online forms that require Google sheets. I needed this for a government ID, but I was unable to finish it because I did not know how to fill it in."
*LGBTQIA+ identifying adolescent, 19, ethnographic-style interview, Bandung*

"We are not aware how to even install applications on our phones, we ask the phone stores to pre-install what we need. It needs to be set up using emails for registration. The process is long and complicated for us, especially in choosing the password and username for the email."
*Female, 15-19, co-design workshop, Mae Hong Son, Thailand*

40  Voelker, Mark, 'Digital Literacy in Education Systems across ASEAN', UNICEF East Asia and Pacific Regional Office, February 2021, <https://www.unicef.org/eap/media/7766/file/Digital%20Literacy%20in%20Education%20Systems%20Across%20ASEAN%20Cover.pdf>

**Insight 4:**

## Spotlight on digital skills that adolescents seek

In the **Philippines** and **Indonesia**, adolescents were keen to learn skills that allowed them to edit media and utilise advanced apps and software that are 'used on the computer' for work, like PowerPoint, Zoom, Microsoft Suite, and Google Apps, as they did not have access to desktops. They were overwhelmed by a plethora of information and struggled to identify the right sources for content, often falling prey to 'fake news' scams.

In **Malaysia**, adolescents wanted to acquire enhanced skills for typing and using apps like PowerPoint and Word to do their homework. They also wanted skills that would help them operate and promote their businesses online and set up bank accounts.

In **Thailand**, older adolescents expressed the desire to learn how to search for work or opportunities, and how to sell things online, whereas the younger cohort wanted to learn how to chat and message their friends online as well as carry out tasks that they did not learn in school.

In **Viet Nam**, adolescents said that they wanted digital skills in order to learn, acquire transferable skills, and be active citizens.[41]

41 'Bringing the Voice of Youth to the ASEAN Ministers of Education!', SAP, #DigitalFutureForYou, 15 October 2020.

**Insight 4:**

## Spotlight on the online activities preferred by adolescents

In addition to entertainment, other popular activities were watching tutorials, taking online courses, listening to podcasts or music, and consuming news. The quantitative survey data reveal that adolescents in Thailand were less likely than those from other countries to look for information about work and educational opportunities.

**Figure 6:** Would you please tell us which of these you do online



**Watching videos or movies** — 68%, 82%, 86%, 96%

**Listening to podcasts or music** — 42%, 37%, 67%, 47%

**Expressing yourself and sharing it (blogs,videos, posts)** — 19%, 4%, 23%, 27%

**Playing games** — 72%, 65%, 8%, 69%

**Consuming news about your community and the world** — 18%, 41%, 49%, 29%

**Talking to friends/family** — 63%, 81%, 72%, 72%

**Talking to new people from a place or background different from yours** — 27%, 34%, 43%, 15%

**Shopping or browsing e-commerce websites** — 25%, 37%, 28%, 22%

**Watching tutorial videos/taking online courses** — 3%, 53%, 59%, 19%

**Looking for information about work or educational opportunities** — 32%, 0.4%, 72%, 7%

**Donated or fundraised towards a social cause** — 8%, 0.18%, 2%, 3%

● **INDONESIA (303)**
● **MALAYSIA (248)**
● **PHILIPPINES (152)**
● **THAILAND (191)**

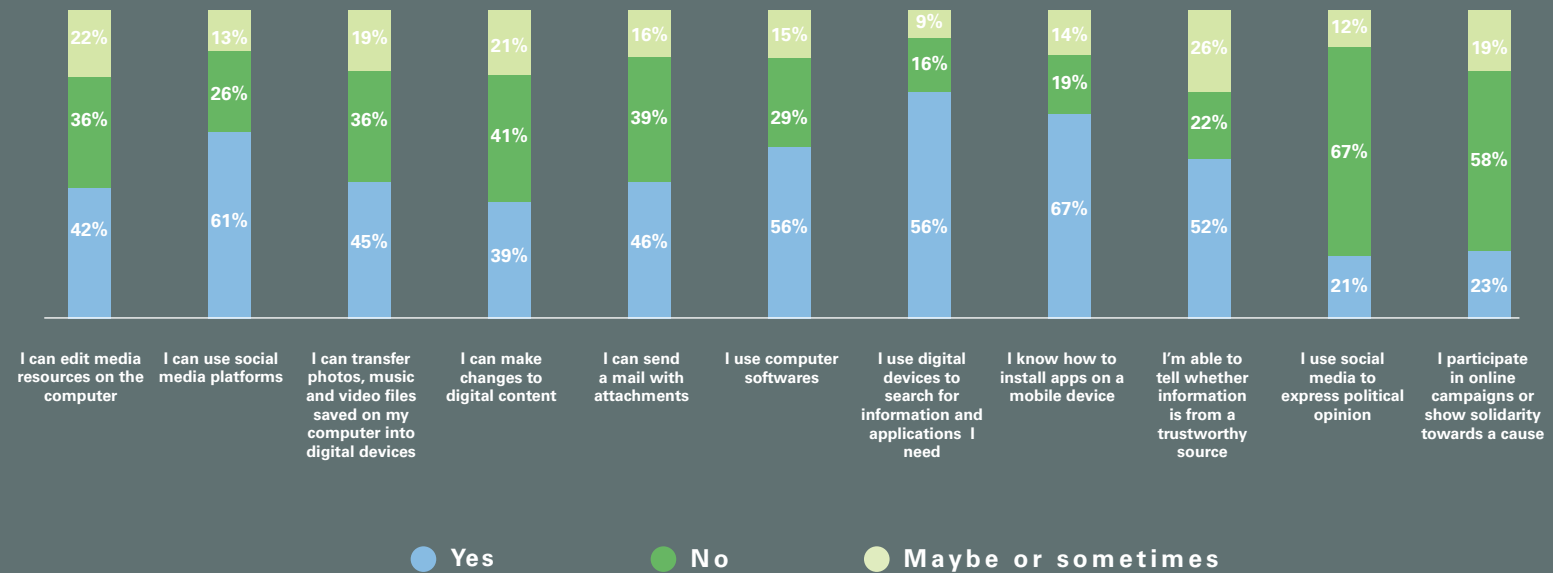## Insight 4:

### Spotlight on the digital proficiency of adolescents

The data shows that while adolescents are confident about performing basic tasks like searching for information or installing applications, they struggle with application-based tasks like sending emails with attachments and making edits online.
No significant gender differences on skills were noticed.

**Figure 7(i):** Do you agree with the following?



Indonesia

| | I can edit media resources on the computer | I can use social media platforms | I can transfer photos, music and video files saved on my computer into digital devices | I can make changes to digital content | I can send a mail with attachments | I use computer softwares | I use digital devices to search for information and applications I need | I know how to install apps on a mobile device | I'm able to tell whether information is from a trustworthy source | I use social media to express political opinion | I participate in online campaigns or show solidarity towards a cause |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Maybe or sometimes | 15% | 8% | 9% | 12% | 9% | 11% | 9% | 6% | 14% | 9% | 8% |
| No | 42% | 15% | 38% | 40% | 40% | 42% | 23% | 15% | 30% | 61% | 72% |
| Yes | 42% | 76% | 53% | 48% | 51% | 48% | 68% | 79% | 56% | 30% | 20% |

Malaysia

| | I can edit media resources on the computer | I can use social media platforms | I can transfer photos, music and video files saved on my computer into digital devices | I can make changes to digital content | I can send a mail with attachments | I use computer softwares | I use digital devices to search for information and applications I need | I know how to install apps on a mobile device | I'm able to tell whether information is from a trustworthy source | I use social media to express political opinion | I participate in online campaigns or show solidarity towards a cause |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Maybe or sometimes | 22% | 13% | 19% | 21% | 16% | 15% | 9% | 14% | 26% | 12% | 19% |
| No | 36% | 26% | 36% | 41% | 39% | 29% | 16% | 19% | 22% | 67% | 58% |
| Yes | 42% | 61% | 45% | 39% | 46% | 56% | 56% | 67% | 52% | 21% | 23% |

● Yes  ● No  ● Maybe or sometimes

*Disclaimer: The data were gathered from a self-reported survey, so the research team is unable to attest to the fact that the question was interpreted and answered as intended. The understanding of what counts as political may vary for different respondents.*
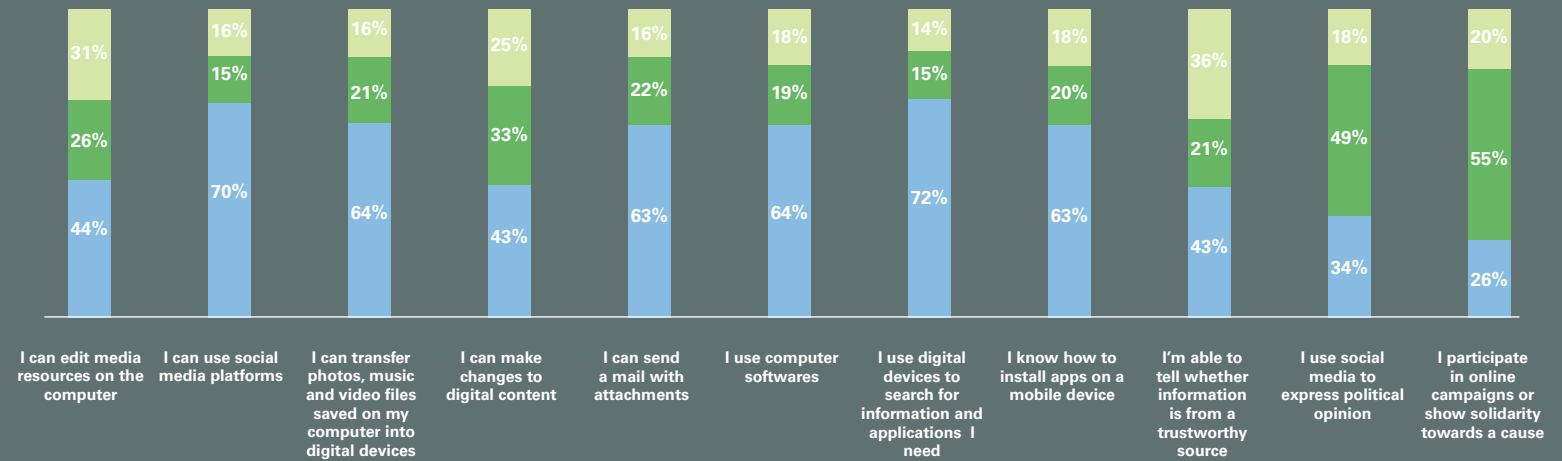
**Insight 4:**

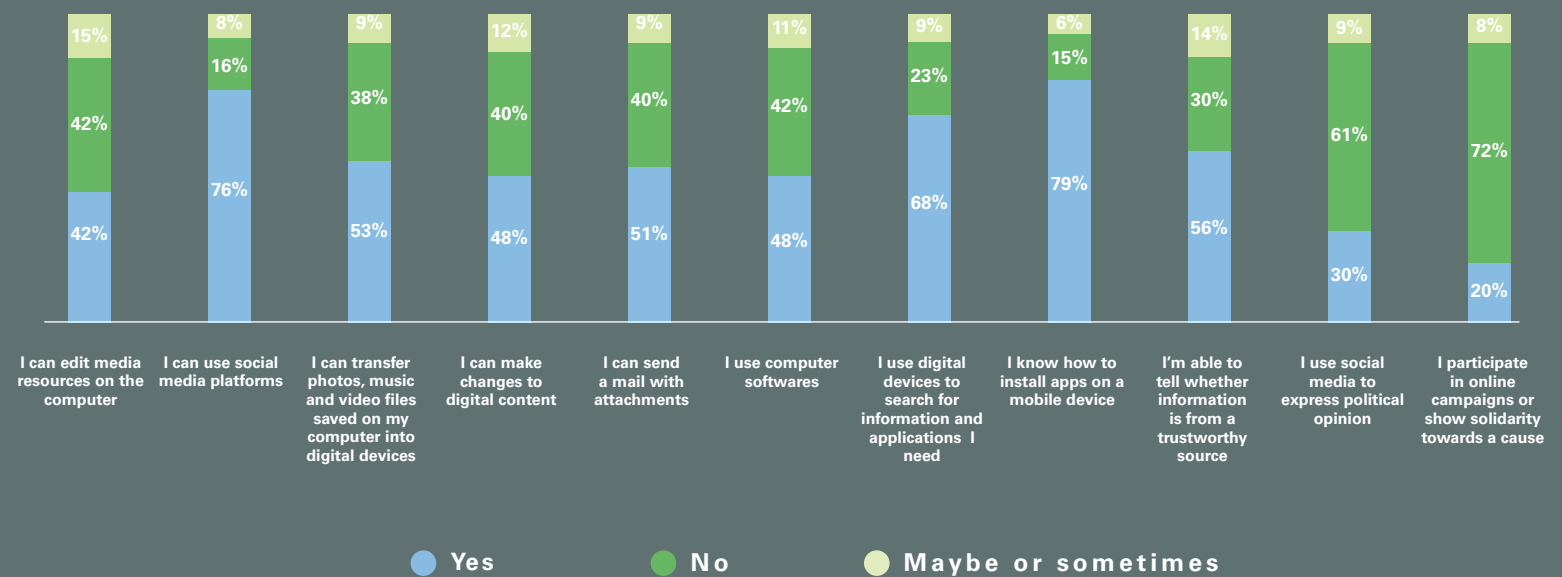## Spotlight on the digital proficiency of adolescents

In Thailand it was noted that the ability to download apps was much higher than in other countries.

**Figure 7(ii):** Do you agree with the following?

### Philippines



| | I can edit media resources on the computer | I can use social media platforms | I can transfer photos, music and video files saved on my computer into digital devices | I can make changes to digital content | I can send a mail with attachments | I use computer softwares | I use digital devices to search for information and applications I need | I know how to install apps on a mobile device | I'm able to tell whether information is from a trustworthy source | I use social media to express political opinion | I participate in online campaigns or show solidarity towards a cause |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Maybe or sometimes | 31% | 16% | 16% | 25% | 16% | 18% | 14% | 18% | 36% | 18% | 20% |
| No | 26% | 15% | 21% | 33% | 22% | 19% | 15% | 20% | 21% | 49% | 55% |
| Yes | 44% | 70% | 64% | 43% | 63% | 64% | 72% | 63% | 43% | 34% | 26% |

### Thailand



| | I can edit media resources on the computer | I can use social media platforms | I can transfer photos, music and video files saved on my computer into digital devices | I can make changes to digital content | I can send a mail with attachments | I use computer softwares | I use digital devices to search for information and applications I need | I know how to install apps on a mobile device | I'm able to tell whether information is from a trustworthy source | I use social media to express political opinion | I participate in online campaigns or show solidarity towards a cause |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Maybe or sometimes | 15% | 8% | 9% | 12% | 9% | 11% | 9% | 6% | 14% | 9% | 8% |
| No | 42% | 16% | 38% | 40% | 40% | 42% | 23% | 15% | 30% | 61% | 72% |
| Yes | 42% | 76% | 53% | 48% | 51% | 48% | 68% | 79% | 56% | 30% | 20% |

● Yes   ● No   ● Maybe or sometimes

*Disclaimer: The data were gathered from a self-reported survey, so the research team is unable to attest to the fact that the question was interpreted and answered as intended. The understanding of what counts as political may vary for different respondents.*

**Insight 4:**

> "We don't really think whether the information we see is true or not unless other people mention it was not true or fake."

*Male,15-19, co-design workshop, Makassar, Indonesia*

**4.2 Young people are consuming more information online than ever before, and yet they struggle with a lack of critical thinking and problem-solving skills that would enable them to navigate the online world more safely and effectively.**

In the co-design workshops, adolescents said that they were overwhelmed by the large amount of information online and did not know how to navigate through it. They also said that they struggled to detect fake news and identify credible sources of information online. In Indonesia and Malaysia, adolescents were largely unable to grasp the concept of fake news and therefore were not concerned about it — which in itself is a cause for concern. However, older adolescents in the Philippines were extremely concerned about the proliferation of fake news. It was also noticed that even though adolescents across ages, genders and locations were engaging with a wide variety of content online, younger children were unable to see online browsing as forms of learning. They did not understand the concept of learning beyond their school-based curriculum.

To realise their full potential, adolescents need problem-solving and decision-making skills and to possess and apply critical thinking in offline and online environments. Experts and some adolescents noted that such skills are tougher to build and have not been adequately nurtured in their current learning environments at home or in school. This aligns with the findings of PISA 2018, that the education systems in the four countries of this research were among the lowest performing and significantly below the global mean score for reading, which assesses the ability to construct knowledge, think critically and make well-founded judgments. The Philippines was the worst of the 99 countries.[42] Data were not available for Viet Nam.

There is growing evidence that adolescents most vulnerable to violence online are likely to be less resilient both online and offline.[43] Resilience to online violence requires developmental skills such as empathy, social skills, communication, conflict resolution, and coping. Adolescents equipped with these skills are more likely to make appropriate choices when using social media, and can better manage conflict they may encounter online.

42  Programme for International Student Assessment 2018, OECD, 2018, <https://www.oecd.org/pisa/PISA%202018%20Insights%20and%20Interpretations%20FINAL%20PDF.pdf >
43 Livingstone, Sonia,Julia Davidson and Joanne Bryce, Children's Online Activities, Risk and Safety: A Literature Review by the UKCCIS Evidence Group, UKCCIS Evidence Group, London, October 2017.

Insight 4:

## Spotlight on trouble with searching for information

In a co-design workshop with the younger cohort from Makassar, Indonesia, one of the workshop activities was to create an informative presentation on the people of Iceland. The adolescents were confident that Google would help them to find the correct information. When urged by the facilitator to go onto Google and add images, the adolescents inputted the text "Face of Iceland" on Google, thinking that this would lead them to how people look and behave. However, they were unable to find any relevant information and visual references. This left them confused and stumped. They said they felt "lost" and did not know how to proceed. The workshop was conducted in Bahasa, and they were typing on Google in English.

"Filipino kids fare poorly when it comes to growth mindset, as suggested by PISA 2019 where Philippines was ranked at the bottom of the countries list. This essentially points to a lack of critical thinking in the upcoming generation, a gap which the traditional school systems have failed to fulfill. It's difficult to measure 21st century skills by schools as the focus stays on more traditional skill sets."
*Expert, Director, Education Consultancy, Philippines*

"Reading the comments section is a common way to ascertain whether an information online is real or fake. If internet users agree to it, it is presumed to be correct. If they don't agree to it, it is presumed to be false."
*Female, 15-19, co-design workshop with Girls, Rizal province, Philippines*

"Messages that are too good to be true are usually fake. I learned this from my experience."
*Male, low income, 13, Nakhon Pathom province, Thailand*

Editorial credit: junpinzon / Shutterstock.com

## Insight 5:

Adolescents find solace and safe spaces online, whether it is to share and express themselves confidently, seek emotional support, or engage with civic issues.

**5.1 Fearing judgement and embarrassment, adolescents turn to the internet to find information about their identity and find comfort for their emotional struggles, often choosing to do so anonymously. This has been especially important for marginalised and vulnerable adolescents, who often do not have access to such spaces in their offline worlds.**

Many adolescents see online spaces as a safe avenue to share and express themselves. They can seek advice on interpersonal issues, ask questions about sexuality, gender identity, and mental health, which they are embarrassed to talk about offline. From the research it was evident that such safe spaces are particularly important for marginalised adolescents such as those belonging to the LGBTQIA+ community, adolescent mothers, and those with disabilities who are more likely to face stigma and discrimination offline. Online anonymity also gives adolescents the confidence to openly ask questions and share their personal experiences. However, since the curtain of anonymity extends both ways, adolescents sometimes face bullying from strangers online. As a result, they view such spaces with caution and prefer to turn to their trusted friends offline.

"While using both Twitter and Instagram, I am always conscious about the content that I publish, to minimise backlash. I feel my safe space is in the real world with my peers."
*LGBTQIA+ identifying adolescent, 19, ethnographic-style interview, Bandung, Indonesia*

Across the region individuals from the LGBTQIA+ community often face harassment, shaming, and cyberbullying for their gender identity. They do not have the same legal rights as their cis heterosexual counterparts. According to the Human Rights Watch 2020 report on Barriers to the Right to Education for LGBTQIA+ youth in Viet Nam,[44]  LGBTQIA+ adolescents are turning to online spaces for information on topics of health and sexuality which can empower them, break cultural barriers and enhance social cohesion.[45]

44 ' Out Online: The experiences of lesbian, gay, bisexual and transgender youth on the internet, The Gay, Lesbian & Straight Education Network, Center for Innovative Public Health Research and Crimes Against Children Research Center, New York, 2013, <https://www.hrw.org/report/2020/02/13/my-teacher-said-i-had-disease/barriers-right-education-lgbt-youth-vietnam>
45  Out Online: The experiences of lesbian, gay, bisexual and transgender youth on the internet, The Gay, Lesbian & Straight Education Network, Center for Innovative Public Health Research and Crimes Against Children Research Center, New York, 2013.

**Insight 5:**

"Bullies online can hide behind the screen and no one can hold them accountable for their actions."

*Female, 15-19, co-design workshop, Bangkok, Thailand*

Adolescent mothers also face shame and social stigma in the physical world. Safety concerns due to their gender and child-rearing responsibilities limit their freedom of movement and agency, preventing them from socialising with those beyond their immediate families. Individuals with physical and mental disabilities too face social stigma and exclusion.

Need-based online spaces such as community Facebook groups in the Philippines, Malaysia, and Thailand and Instagram pages and Discord gaming chats in Indonesia, are valuable resources for adolescents to seek information and connect with those with similar challenges and needs. Even when not anonymous, connecting with others over common interests like online games or political causes, allows the marginalised to find friendship and acceptance instead of being judged and consequently being discriminated against solely on the basis of one aspect of their identity (being LGBTQIA+ or an adolescent mother).

"I do not need to post any personal things. I explore and express myself through avatars and stories."
*Female content creator, 17, ethnographic-style interview, Bandung, Indonesia*

"I found my baby has some small red bumps all over her lower back so I got worried. I'm in a Facebook group for young mothers so I asked some questions there. I also posted a photo. Other young moms commented on my post, suggesting to see a doctor or use this lotion. I also follow other posts and questions to see what problems others are facing and what the advice is. I think this is better than asking my parents because they're older and their ideas are ancient. Talking to other teen moms is more relevant."
*Adolescent mother, 16, ethnographic-style interview, Chiang Mai, Thailand*

"When unsure about my gender identity and when I did not understand what was happening, I found information and knowledge on YouTube that taught me I could wear attire that made me feel comfortable and not specific to one gender."
*LGBTQIA+ identifying adolescent,19, ethnographic-style interview, Bandung, Indonesia*

**Insight 5:**

> "In addressing my fear of not being able to recover when I fail, I saw a lot of videos on the internet where people who failed and were able to recover were giving tips. There are vlogs you can see on YouTube that discuss that...many influencers do that."

*LGBTQIA+ identifying adolescent, 18, ethnographic-style interview, rural San Mateo, Philippines*

**5.2 With the proliferation of digital learning across the region, study groups, note-taking, and focus applications have burgeoned. These provide adolescents with motivation and comfort while navigating the challenges of the new learning environment.**

The Digital Landscape Analysis also found that with the COVID-led move to digital learning, adolescents were turning to online study groups and pages. These were mechanisms for them to be accountable to study and connect with their peers, as they missed being in schools. Some adolescents were part of online communities where they shared their daily routines and study tips and followed similar accounts. Students anonymously voice their worries, stresses, feelings of burnout, and demotivation on Twitter or Facebook, and find solace among strangers in these online communities.

In the Philippines, focus and note-taking apps were popular and widely discussed online. Searches for "apps to help you focus on studying" have seen more than 140 percent growth since the onset of the COVID-19 pandemic. In Thailand, adolescents were helped in their academic learning through digital note-taking and focus apps like GoodNote, Notability and Forest. In Indonesia, anonymous study accounts were very popular, especially on Twitter. In Malaysia, adolescents sought companionship through study-together videos during the long hours they were studying.

However, digital learning has had some negative consequences, like adolescents cheating from the internet. There is also the risk of adolescents not adequately understanding concepts, which adversely impacts learning outcomes.

"A digital content creator on Tiktok, @CarlyGatchh, helps me to survive the online classes and helps with my studies. She talks about medtech, study habits and motivates me."
*Female, 19, ethnographic-style interview, Davoa city, Philippines*

## Spotlight on the trend of educational note-sharing in Indonesia

The popularity of note-sharing on Twitter, particularly through anonymous accounts, led to the formation of Ambisnotes, a website and Google Play Store app that describes itself as a container that holds various school notes scattered across the Internet.

The website, which is entirely free, aims to provide help to students facing difficulties with their studies as well as those who are not able to attend school (for personal or financial reasons). They accept volunteers who source notes shared by others on the internet as well as verified authors who upload their own notes onto the website.

Editorial credit: Kristina Ismulyani / Shutterstock.com

**Insight 5:**

"A group known as 'Bad Student' are actively criticising the issues within the Thai Education System. Under the Bad Student Movement, almost each school had their own #hashtag on Twitter. When children see each other online, they each create a new/code name for the school, a few letters here and there. With access to the internet, younger people can be involved in causes that they believe in. Online spaces have scaled the capacity for being involved."

*Expert, Youth activist, Thailand*

**5.3 The ability to participate anonymously has allowed girls and marginalised groups to participate in civic, social, and political issues. However, across the region only a small proportion of adolescents create and engage with such content actively.**

The digital world allows adolescents to have more access to a broad range of civic topics by following political news and community and local updates on platforms like Twitter, Instagram, YouTube, or Facebook. Adolescents also use these platforms to engage in politically charged debates, protests, and peer-based movements, which provide them with a sense of agency and empowerment and contribute positively to their self-esteem and well-being.[46] Online spaces are particularly important realms of participation for Asian adolescents, as they provide a voice to adolescents whose opinions are often not acknowledged in the hierarchical structure of society.

All five countries in this study have offline and online censorship. Freedom House scores internet freedom of countries on a scale of 0 (least free) to 100 (most free). Three of the five research countries were "partly free", and the other two "not free" *(see Annex 4 for detailed country rankings).*[47] The strict censorship leads adolescents to engage in conversations around civic awareness, engagement, activism and advocacy anonymously. Platforms like Twitter, Discord, and Clubhouse, as well as Pantip in Thailand are valuable for anonymous political participation. Online spaces for political and civic engagement have been particularly important for girls in the region who are otherwise restricted from participating in these activities. In Indonesia, young Muslim women are not allowed to engage in the public "street politics" of young men and so are joining groups on social media, particularly Instagram, for community and expression as an alternative public sphere.[48] They engage in issues around gender, harassment, and domestic violence. In Malaysia adolescent girls have taken to online platforms to raise awareness on topics like misogyny and sexual harassment, with examples like the viral TikTok video of Ain Husniza, a 17-year-old girl calling out her male gym teacher for making an inappropriate comment about rape during a class discussion about sex education.

46 Christens BD, Peterson, 'The role of empowerment in youth development: a study of sociopolitical control as mediator of ecological systems' influence on developmental outcomes', J Youth Adolesc, vol. 41, no. 5, 2012; pp.623–635.
47 Internet Freedom Scores, Freedom House, 2021, <https://freedomhouse.org/countries/freedom-net/scores>
48 Middaugh, Ellen, Lynn Schofield Clark and Parissa J. Ballard, 'Digital Media, Participatory Politics, and Positive Youth Development', Pediatrics, vol. 140, no. 2. 2017, pp. 127–131, < https://doi.org/10.1542/peds.2016-1758Q >

Insight 5:



PLATFORMS AND CONTENT
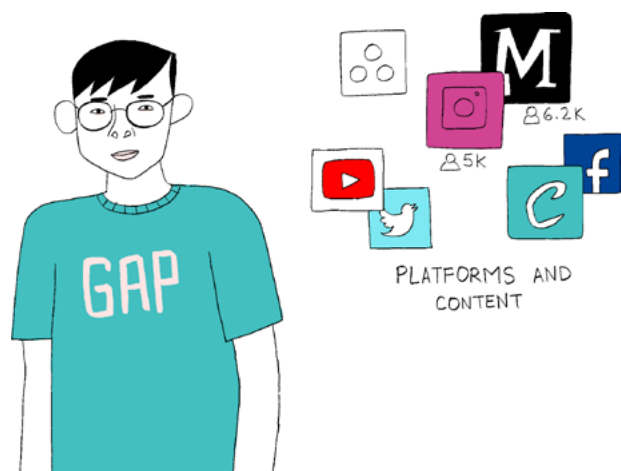
"I feel safe expressing myself online because I can remain anonymous."

*Female content creator, 17, ethnographic-style interview, Chiang Mai, Thailand*

However, all adolescents are not engaging in online activity related to civic engagement very frequently. As per the quantitative survey, sharing political opinions online and participating in online campaigns or showing solidarity towards a cause were not very prevalent *(see Table 3)*. UNICEF's 'Growing up in a connected world' reports that it is primarily adolescents with better access and learning environments, who exhibit higher critical thinking and interest in socio-civic engagement.[49]

| Country | Total Respondents | Used social media to express political opinion | Participated in a campaign or showed solidarity towards to a cause online |
|---------|-------------------|-----------------------------------------------|--------------------------------------------------------------------------|
| Indonesia | 306 | 30 | 20 |
| Malaysia | 249 | 21 | 23 |
| Philippines | 254 | 24 | 15 |
| Thailand | 200 | 34 | 26 |

**Table 3:** Quantitative survey data highlighting adolescents' online civic engagement frequency. **Survey question:** Do you agree with the following?

**Disclaimer:** *The data were gathered from a self-reported survey, so the research team is unable to attest to the fact that the question was interpreted and answered as intended. The understanding of what counts as political may vary for different respondents.*

49 Stalker, Peter, Sonia Livingstone, Daniel Kardefelt- Winther and Marium Saeed, Growing up in a connected world, Innocenti Research Report, UNICEF Office of Research - Innocenti, Florence,Italy, 2019.

Insight 5:

## Spotlight on need for more youth-sharing and altruistic platforms in Indonesia

In Indonesia, during the co-design workshops, older adolescents said that they sought spaces for altruism and community development online. Participants said that they had grown up with values of community-centric kindness. Due to their country's geographical location, Indonesia is prone to many natural disasters, and therefore community-centric kindness and helping others is a significant part of their culture.

They also expressed that they struggled to 'cope with their emotions', especially during COVID-19, and needed more platforms and applications that allowed adolescents to share their problems and emotional burdens with others. In their opinion, there were enough entertainment-based platforms and content sources available, but limited channels for community development and sharing.

Insight 5:

## Spotlight on growing popularity of civic engagement in Thailand

"People are shifting from just going to vote and writing letters to the government. Trust from the government and traditional modes of participation are declining. Since there's a low barrier to entry on digital platforms, there's more active participation. You see really creative and engaging content that kids are coming up with - they use memes or humour and remix pop-culture."

*Celebrity and Gender Activist, Thailand*

"#donttellmehowtodress started as a social media campaign, quite unplanned, with a post on instagram, as a reaction to something I read that angered me about the injustice of telling women to not dress sexy, to avoid government assault. A clip that went viral and got a lot of international media attention. The hashtag has acquired a life of its own and is still being used, especially by university students but by high school students too. Most of the comments are very positive, especially with posts on women empowerment and so on."

*Expert, celebrity and gender activist, Thailand*

## Insight 6:

Pre-existing gender stereotypes and threats from offline spaces are reinforced in digital spaces.

**6.1 The research confirms that content consumed online is influenced by gender stereotypes, which run the risk of being perpetuated. This could limit the confidence of girls, as well as opportunities they can access.**

Deeply entrenched cultural patriarchy dictates that technology is in the masculine domain. The stereotype that women have technophobia, low excitement and interest in, and are less capable of using technology,[50] has led to a gender imbalance in the workforce. The number of women enrolling in STEM disciplines across the region is much less than men; only one in six students majoring in STEM courses is female.[51] This adversely influences adolescent girls and limits their ambitions to aspire for success in STEM disciplines and industries. Experts say that most role models for young girls are connected to beauty, travel or lifestyle; female role models for young girls in the realm of technology, engineering, science, entrepreneurship and business are very few.

"I have never used a computer. I am afraid if I press the wrong button it will break. There is no one who can teach me, except my cousin, but I am scared to ask him."
Female, out of school, 17, ethnographic-style interview, Makassar, Indonesia

The primary research did not show a notable digital gender divide in access to devices and internet, but in the co-design workshops, especially in Indonesia and Malaysia, it was observed that the content consumed by adolescents was often influenced by their gender.

The quantitative data and Digital Landscape Analysis revealed that adolescent boys were more likely to be consuming news-related content more regularly than girls as they were more interested in political and social issues. Boys across all countries were also more engaged with online gaming than girls. The quantitative survey also found that adolescent girls across the four countries spent more time shopping or browsing e-commerce websites (at 46 percent), as compared to boys (at 28 percent). They were more interested in community events, happenings and social matters and were likely to be consuming content related to domestic duties like cooking, taking care of the family and respecting others, or their physical appearance like makeup, skincare, and beauty. Due to the way algorithms work, this type of content floods

50 Marini, Sylvi, Farida Hanum, and Alfian Sulistiyo, 'Digital Literacy: Empowering Indonesian Women in Overcoming Digital Divide', Advances in Social Science, Education and Humanities Research, 398, 2nd International Conference on Social Science and Character Educations (ICoSSCE 2019), 2019, pp. 137-41.

51 'Advancing women in STEM for the future of work', Investing in Women, Australian Aid, 6 February 2019, <https://investinginwomen.asia/posts/advancing-women-in-stem-for-the-future-of-work/>

Insight 6:



"Being a daughter I have to help my mother so time spent online is limited. Parents don't allow more than 10 minutes on social media, and no Anime."

*Female, 10, Low income, ethnographic style interview, Petaling Jaya Selangor*

the feeds of adolescent girls, often limiting their opportunities to move beyond such aspirations.

The Digital Landscape Analysis revealed that across all the countries, adolescent girls were more likely to be on lifestyle-oriented platforms like Instagram and TikTok, while boys were more likely to be on Facebook, Twitter, and YouTube.

Adolescent girls' online engagement was more closely monitored than boys' by family and relatives, especially in Indonesia. Girls were repeatedly reminded to limit the time they spend online, not upload "sexy videos" or images of themselves, and to be extra careful while communicating and chatting with people online. As a result, girls were a lot more conscious of their online presence, hinting at stricter beliefs and judgements when it came to their digital access. No boys across the countries mentioned any parental or family supervision for their online engagement outside of online learning support.

"Boys are more focused on gaming (eg., Roblox) but girls are more about social media. Social media and influencers in general involve more female participation because there is so much money for beauty, fashion, and more influencer products that are more targeted to women. Boys will be more about playing video games or on YouTube watching gaming videos etc."
*Expert, UN Women Goodwill Ambassador*

"Skills like cooking, cleaning, sewing, and how to be kind are important. It is the base knowledge for our future."
*Female, 15-19, co-design workshop, Makassar, Indonesia*

"Chatting online may lead to sexual harassment."
*Female, 10-14, co-design workshop, Chiang Rai, Thailand*

"My mother tells me not to talk to strangers online. I can get kidnapped."
*Female, out of school, 17, ethnographic-style interview Makassar, Indonesia*

**Insight 6:**

*"I used to be bullied for my gender expression on Facebook from friends at school."*

*LGBTQIA+ identifying adolescent, 15, ethnographic-style interview*
*Nakhon Prathom, Thailand*

**6.2 While cyberbullying was faced by all adolescents, the research observed a gender difference. Girls and those from LGBTQIA+ communities faced online risks pertaining to their gender identity, like body shaming and unwanted sexual advances. Boys were exposed to sexualised images of women, violence, and trash-talking in gaming environments.**

Data from the quantitative survey indicate that girls feel less safe on the internet than boys, at 32 percent and 26 percent respectively. Girls across age groups and all four countries in the co-design workshops, associated cyberbullying with "body shaming", and older adolescent girls in the Philippines went as far to say it was "widespread and has become a part of social media behaviour of Filipinos." During the COVID-19 pandemic, online misogyny, such as trolling, sexual harassment, and victim-blaming, rose in Thailand, Philippines, Indonesia and Malaysia.[52]

The findings from the co-design workshops indicate that girls and those belonging to the LGBTQIA+ community faced gender-based risks and threats when online. Girls often received comments about body and physical shaming and unwanted sexual advances and those from the LGBTQIA+ community often received negative comments about their gender identity on social media. Cisgender males, on the other hand, had mixed views - a few did not see online spaces as unsafe at all, while most others talked about trash-talking and cyberbullying in gaming environments or even falling prey to 'scams' and account hacking. In gaming environments, boys were also exposed to over-sexualised images of girls and violence, which was specifically mentioned by Muslim boys in Indonesia and Malaysia who categorised these as 'haram' and against their religious beliefs.

*"Body shaming and bullying is common for girls online."*
*female, 15-19, co-design workshop, Bangkok, Thailand*

*"I don't see any risk of using the internet, it is only for fun and entertainment."*
*Cisgender male, 10-14, co-design workshop, Bandung, Indonesia*

**Insight 6:**

> "I received harassment from my old boyfriend. When I told him I no longer wanted to be with him, he started defaming me online."

*Female, 15-19, co-design workshop, Rizal Province, Philippines*

In Malaysia, Muslim women's advocates have been harassed online for dressing and behaving "inappropriately" by those intent on moral policing of women's bodies and actions and, in the Philippines, LGBTQIA+ advocates of the Sexual Orientation and Gender Identity Expression Equality Bill were subjected to cyberattacks.[53] In Thailand a study, conducted in 2019 found that 40 percent of cyberbullying victims, who tend to be girls and LGBTQIA+ more than boys, remain silent.[54]

While adolescent boys seemed to be able to brush off negative experiences quite easily, girls were more likely to feel emotionally and mentally disturbed by them. Older adolescent boys were more likely to try and address issues of cyberbullying on their own, while girls often chose to confide in their parents, siblings, or sometimes their friends.

"Minors could be exposed to risk via several ways on the platform — when they create content (e.g., inappropriate body exposure, oversharing of personal information), consume content (exposure to developmentally inappropriate themes such as sexualised content, violent and graphic content, dangerous activities), or when they interact with others (e.g., harassment and bullying, attention from predators)."
*Expert, Representative from a Global Social Media Platform*

52  'COVID-19 and Violence against Women: The Evidence behind the Talk', UNFPA Asia Pacific, July 21, 2021, <https://asiapacific.unfpa.org/en/publications/covid-19-and-violence-against-women-evidence-behind-talk?_ga=2.177790757.1435733120.1632066305-1998180909.1632066305 >
53 'Online Violence Against Women in Asia: A Multi-Country Study', UN Women,  November 2020, <https://asiapacific.unwomen.org/-/media/field%20office%20eseasia/docs/publications/2020/12/ap-ict-vawg-report-7dec20.pdf?la=en&vs=4251 >
54 Chaiyong, Suwitcha, 'The sad world of online gaming', Bangkok Post, 15 January 2020, <https://www.bangkokpost.com/tech/1836154/the-sad-world-of-online-gaming>

## Insight 7:

Online risks across the region are frequent and ubiquitous. Adolescents want to build their capacity to deal with such instances.

**7.1 Adolescents mentioned struggling with mental health concerns, instances of cyberbullying, time management, and the physical side effects of too much screen time.**

Across the region, the high incidence of unsafe and risky online experiences can be attributed to widespread connectivity. Adolescents, even those in remote areas, with limited exposure and digital literacy, are online and may not necessarily know how to safely navigate the internet, often becoming victims of online risks.[55] This is also why perpetrators often target the Global South. Further, new technologies – like cryptocurrencies, the Dark web[56] and end-to-end encryption – are fuelling live streaming of child sexual abuse and other harmful content, challenging the ability of law enforcement to keep up. The COVID-19 lockdowns that restrict millions to their homes may be worsening the abuses.[57] According to 2021 UNICEF data, around 8 out of every 10 Filipino children are at risk of online sexual abuse or bullying.[58] In February 2021, Indonesia ranked 29th out of 32 geographies for the most reported negative online experiences.[59]

In the co-design workshops, adolescents across all countries and ages unanimously talked about exposure to distressing content and facing cyberbullying. There was a gender difference; girls were often contacted by strangers through sexually-charged messages. Younger adolescents and girls were more disturbed by exposure to distressing and violent content, whereas older male adolescents were more concerned about account hacking, especially in Malaysia where data leaks and privacy leaks were often mentioned. In the Philippines, adolescents were worried about the proliferation of fake news.

55 'State of the World's Children 2017: Children in a Digital World', UNICEF, New York, 2017, <www.unicef.org/sowc2017/>
56 ibid
57 'Online sexual abuse of children rising amid COVID-19 pandemic', Press Release, Save the Children: Philippines, 9 February 2021, <https://reliefweb.int/report/philippines/online-sexual-abuse-children-rising-amid-covid-19-pandemic-save-children>
58 'Make the digital world safer for children – while increasing online access to benefit the most disadvantaged', UNICEF, 8 February 202, <https://www.unicef.org/philippines/press-releases/unicef-make-digital-world-safer-children-while-increasing-online-access-benefit-most>
59 'Digital Civility Index', Microsoft, 2021, <https://www.microsoft.com/en-us/online-safety/digital-civility?activetab=dci_reports%3aprimaryr3 >

**Insight 7:**

"I've seen people who are addicted to games. They play games all the time without sleeping, eating or socialising."

*Male, low-income, 15, ethnographic-style interview, Chiang Rai, Thailand*

The prevalence of unsafe online practices was discussed in the co-design workshops and corroborated by the quantitative survey. 45 percent of total respondents in Indonesia, 55 percent in Thailand, 21 percent in the Philippines and 25 percent in Malaysia said that in the past year something happened online that bothered or upset them. Many of these respondents were from rural areas. According to a survey by UNICEF in 2019, 21 percent of young people in Viet Nam have been a victim of cyberbullying, most commonly on platforms like Facebook, Zalo, YouTube and Instagram.[60]

"The Global South lacks a robust support system, technology infrastructure and government investing sustainable solutions to prevent and address risky and unsafe online problems."
*Expert, Child Safety, Stairway Foundation*

"What happened before was a fake account on Facebook, with my name and photo on it, sent a message to my girlfriend.. asking her to send him a nude photo of her. That account even sent me a message 'bro, share with me your girlfriend.'"
*Male, 15-19, co-design workshop Rizal, Philippines*

Few older adolescents from the co-design workshops said that they were struggling with limited focus and concentration caused by excessive screen time. Some older adolescents even said that they were "addicted" to online platforms like games and social media and struggled to discipline themselves or manage their time when it came to online usage. The problem of "screen time addiction" was also found in UNICEF's 2020 Our Lives Online report,[62] with parents saying that their children were "glued" to their phones; teens found it impacted their sleep cycles as they stayed up all night playing video games.

The Digital Landscape Analysis revealed that adolescents across the four countries were actively searching for time management techniques and tips to increase their focus. Online searches among adolescents for "pomodoro technique" - a time management method that encourages

60 'Child Online Safety Index, 2020: Real-time Measurement for Child Online Safety and Digital Citizenship', DQ Institute, 2020, <https://www.dqinstitute.org/child-online-safety-index/ >
61 Quy, Nguyen,.' Viet Nam fares poorly in online child safety ranking', VnExpress International, 15 February 2020, <https://e.vnexpress.net/news/news/Viet Nam-fares-poorly-in-online-child-safety-ranking-4053720.html#:%7E:text=Viet Nam%20has%20performed%20badly%20in,the%20global%20average%20of%2042> 62Our Lives Online: Use of social media by children and adolescents in East Asia- opportunities, risks and harms, UNICEF East Asia and Pacific and Center for Justice and Crime Prevention, Thailand, 2020, <https://www.unicef.org/eap/reports/our-lives-online>

**Insight 7:**

"Sometimes I stay up all night with my friends to play online games. This will be a problem if I want to be a serious sports player because I will always be tired."

*Male, out of school, 14, ethnographic-style interview, Bandung, Indonesia*

shorter spurts of concentration and more frequent breaks – has seen an average growth of more than 200 percent in the recent past. This figure was as high as 556% in Malaysia.[63] A few adolescents in the co-design workshops, especially in Indonesia and Thailand, confessed that they spent more time on entertainment than on productive tasks like studying and struggled to reduce the time they spent on recreational activities.

The current shift to online spaces during the COVID-19 crisis has affected the mental health and well-being of adolescents in a number of ways, through physical isolation, rumours and misinformation, the closure of schools and activity spaces, and the trauma of losing loved ones.[64] In Thailand, Philippines, and Malaysia, some adolescents reported physical impacts of excessive online usage, like sore and watering eyes, backaches and headaches. Older Thai and Filipino adolescents shared concerns over 'cancel culture',[65] while girls in Indonesia and the Philippines struggled with the mental health challenges that came with excessive social media use - insecurity, low self-esteem, and comparing oneself with others on the internet.

"Social media can be very addictive. Once when I first got on Facebook I spent time all night without sleeping or eating for texting with friends and my crush. My mom took my phone away from me."
*Female, low-mid income, 16, ethnographic-style interview, HuayPa, Mae Hong Sorn, Thailand*

"When people post negative comments it really impacts your self-esteem. You also see other people upload their pictures and then you start to self-comparison about what you are posting and doing."
*Female, 15-19, co-design workshop, Metro Manilla, Philippines*

"Young people, especially during this time [of a global pandemic], lack spaces for moral and emotional support - they need guidance or to troubleshoot, but don't know who to go to - especially from rural parts where often no one in their immediate ecosystem can effectively support their needs."
*Expert, Director, Non profit Organisation working on Education, Indonesia*

63 Search data was collected from June 2020 - May 2021. Growth in interest compares the first 6 months of the time period (June 2020 - November 2020) to the last 6 months (December 2020 - May 2021).
64 'Because We Matter: Addressing COVID-19 and Violence Against Girls in Asia-Pacific', Save the Children and Plan International, 2020, <https://reliefweb.int/sites/reliefweb.int/files/resources/PI_STC_BecauseWeMatterPolicyBrief-FINAL.pdf>
65 Cancel culture is the idea that a person can be "canceled" — or culturally blocked from having a prominent public platform or career. It takes the form of public backlash, often fueled by politically progressive social media.

## Spotlight on Adolescents' Online Safety

According to the DQ Institute's Child Online Safety Index of 2020,[61] four of the five research countries, except Malaysia, fared below average. The Index measured 30 countries across six pillars: Cyber Risks, Disciplined Digital Use, Digital Competency, Guidance and Education, Social Infrastructure and Connectivity.

**Indonesia** ranked 26th, with particularly low scores for education and guidance when it comes to online risks, screen time management, and digital empathy.

**Malaysia** fared exceptionally well,at rank 3. However, there could be improvements across the parameters of screen time management and connectivity.

**Philippines** ranked 23rd, but scored low across cyber risks, especially cyberbullying, risky contacts and reputational risks.

**Thailand** came last of all 30 countries, with cyber risks including cyberbullying, risky content, risky contacts, cyber threats and reputational risks.

**Viet Nam** ranked 28th, slightly ahead of Thailand with low scores across risky contacts, cyber threats and reputational risks.

**Insight 7:**

"If you face cyberbullying, just let it go. It often happens."

*Cisgender male,15-19,*
*co-design workshop, Bangkok, Thailand*

**7.2 Adolescents, especially younger and those from rural areas, mentioned wanting better support systems to deal with the negative online experiences.**

Across the four countries, the quantitative survey revealed that when faced with an unpleasant online experience, adolescents would talk to parents, carers or teachers. While this may be the case, other studies on violence against children have shown alarmingly low rates of disclosure and help-seeking behaviour.[66] The most problems were faced by the younger age group, and girls marginally more than boys.

In the co-design workshops adolescents from rural areas said that they often had no adult supervision for their internet-based activities. Most of their parents were less skilled at using the internet, and would not be able to help in unsafe or risky online situations. The co-design workshops showed that most adolescent girls were more likely to share negative online experiences with elders, while boys would probably try to deal with such instances on their own.

"Parents — especially from low income and rural settings, who have limited digital literacy themselves — do not possess the adequate skills to build protective behaviours for their children. They struggle to move beyond the basic facebook features."
*Expert, Child Safety, Stairway Foundation, Philippines*

However, during the co-design workshops especially in Indonesia, adolescents said that they deliberately chose not to share such instances with their parents and family members, out of shame, embarrassment and the fear of being scolded, and would turn to their friends for help. This was also validated through the quantitative survey, where about one-third of all respondents said that they tended to ignore or close the page when exposed to distressing content. This may be attributed to the stigma that is associated with talking about 'being a victim' or facing negative experiences in Southeast Asian cultures.

66 National Baseline Study on Violence Against Children: Philippines, Council for the Welfare of Children and UNICEF, Philippines, October 2016.<https://www.unicef.org/philippines/reports/national-baseline-study-violence-against-children-philippines >

**Insight 7:**

"It's important to look at the level of parent's involvement in minimising vulnerability. Children protecting themselves is a stop-gap measure. By the end of the day, parents have to be capacitated to protect their children."

*Expert, Child Safety, Stairway Foundation, Philippines*

Cyberbullying could have two kinds of outcomes — first, adolescents internalise these experiences, which in some instances can be very traumatic and impact mental health; second, adolescents cannot effectively deal with them and begin to accept them as a common occurrence which one has to "ignore and move on", thus normalising such behaviour. A study conducted by The Internet Foundation for the Development of Thailand found that one-third of child gamers experienced some form of cyberbullying, while another third of the victims bullied others - indicating that even victims are often perpetrators because they think that's how the internet works.[67]

"Societal values and the 'Asian value system' categorise online risks/threats as a taboo - people do not talk about it. "
*Expert, Child Safety, Stairway Foundation, Philippines*

"There are instances of cyber-bullying, but teachers don't know about every case. Students do not always come to teachers to find help. It's not always easy for them to tell teachers. They don't tell teachers directly. Sometimes their classmates come and report."
*Teacher, Dao Thi Hong Quyen, Viet Nam*

"It's okay to bully the know-it-all people, because they are annoying."
Female, 15-19, co-design workshop, Bandung, Indonesia

"Although the Mobile Legend game allows you to mute or report someone who is offensive, participants sometimes choose to trash-talk them back instead of muting options."
LGBTQIA+ identifying adolescent, 18, ethnographic-style interview, rural-San Mateo, Philippines

67 Chaiyong, Suwitcha, 'The sad world of online gaming', Bangkok Post, 15 January 2020, <https://www.bangkokpost.com/tech/1836154/the-sad-world-of-online-gaming>

**Insight 7:**



"We want to know how to respond to unsafe online activities."

*Male,10-14, co-design workshop, Makassar, Indonesia*

The research also showed that adolescents occasionally consciously chose less safe online practices, like having public profiles on social media, responding to messages from strangers and sharing images and videos of their personal lives, in the hopes of going 'viral' and gathering many followers and likes. This was found particularly among adolescents in Indonesia and Malaysia. UNICEF's Our Lives Online Report of 2020, also found that children are aware of unsafe experiences and realise the risks attached, but this knowledge does not always stop them from chatting to strangers online.

In the quantitative survey, about 50 percent of respondents said that they were able to report, block, or call a helpline if they were exposed to harmful or distressing content online (see Figure 8). This number was reported to be the lowest in Thailand at 25 percent. The incidence was significantly higher among older adolescents and marginally higher for male respondents than for female ones. Adolescents from urban areas were more likely to report, block or call a helpline when facing distressing content online, as opposed to those from rural areas. Adolescents in rural areas, those below the age of 15 and those from vulnerable communities were more likely to lack adequate information regarding safe online practices.

"Besides turning to parents, we do not know how to report people doing cyberbullying or seeing inappropriate content."
*Female, 10-14, co-design workshop, Rizal province, Philippines*

**Figure 8:** On using a report button or blocking a website
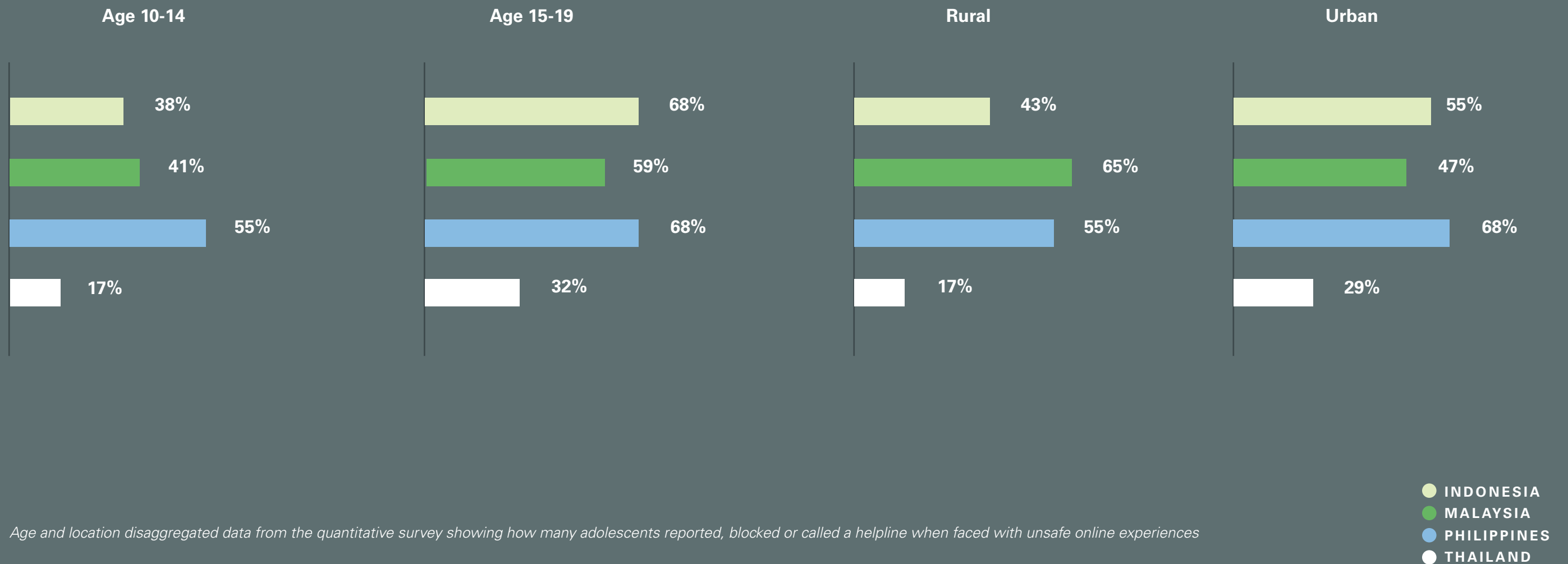


Age and location disaggregated data from the quantitative survey showing how many adolescents reported, blocked or called a helpline when faced with unsafe online experiences

# Summary of Country Findings

Viet Nam

Thailand

Philippines

Malaysia

Indonesia

# Indonesia

Indonesia is the world's fourth most populous country and the tenth largest economy.[68] However, it has the second highest adolescent unemployment rate in the Asia–Pacific region.[69]

The country currently has one of the largest youth populations in the world, with 45.8 million adolescents aged 10-19 (or 13.3 percent of the national population).[70]

In 2021, 62 percent of the total population are active social media users.[71] 9 in 10 young people between the ages of 11 and 18 in Indonesia use social media.[72] Research in 2016 found that 80.9 percent of Indonesians aged 16 to 19 actively use Facebook, while 73 percent of Indonesians aged 16 to 25 use Instagram.[73]

In 2012 Indonesia's capital Jakarta was called the "world's most active Twitter city", and in 2021, it recorded 15.1 million active Twitter users - the sixth largest number of users in a country.[74] Most Twitter users have been reported to fall within a relatively younger demographic of 15-39 years old.[75]

According to the 2020 Global System for Mobile Communications (GSMA) Report, Indonesia is currently the third-largest mobile market in the Asia-Pacific region and it is predicted that by 2025 the mobile subscribers will increase to 199 million of the 280 million total population.[76]

Internet users seem to be concentrated among the young demographic. Of internet users in 2019, 70 percent of them were found to be between 13 and 34 years old.[77] Moreover, about half (30 million) of 65 million children and adolescents are estimated to be internet users in Indonesia.[78]

Geographical disparity in Indonesia has resulted in unequal internet coverage, with only 30 percent in Papua with internet access, as opposed to 89 percent in the capital, Jakarta.[79]

The World Wide Web Foundation's 'Women's Rights Online' report of 2016, said 20 percent of women from the total population had access to the internet, of which only 5 percent used it to express their views and 26 percent to find information about their rights.[80]

In Feb 2021, in Microsoft's annual Digital Civility Index, Indonesia ranked 29/32 geographies for the most reported negative online experiences.[81]

68 'Indonesia: Overview', The World Bank, April 6, 202, <https://www.worldbank.org/en/country/indonesia/overview>

69 'Asia–Pacific Employment and Social Outlook', ILO, Bangkok, 2018.

70 'Explore4Action to Discover What Youths Really Want', The Jakarta Post, 17 January 2019, <https://www.thejakartapost.com/youth/2019/01/17/explore4action-to-discover-what-youths-really-want.html>

71 Kemp, Simon, 'Digital 2020: Indonesia - DataReportal – Global Digital Insights', 18 February 2020.<https://datareportal.com/reports/digital-2020-indonesia?rq=indonesia>

72 'UNICEF report on online safety highlights risks and opportunities for children in East Asia', UNICEF Indonesia, 26 February 2020, <https://www.unicef.org/indonesia/press-releases/unicef-report-online-safety-highlights-risks-and-opportunities-children-east-asia >

73 'Indonesia's Social Media Landscape: An Overview', Greenhouse, 16 May 2019, <https://greenhouse.co/blog/indonesias-social-media-landscape-an-overview/>

74 'Twitter: Most Users by Country', Statista, 7 September 202, <https://www.statista.com/statistics/242606/number-of-active-twitter-users-in-selected-countries/>

75 Untari, Dhian, T., 'Technology, Social Media And Behaviour Of Young Generation In Indonesia; A Conseptual Paper', International Journal of Scientific & Technology Research, vol. 9. No. 4, April 2020.

## Key Insights

**Indonesia still struggles with poor internet coverage, speed and affordability which negatively affects the online experiences of adolescents.** This is especially a challenge for those in rural and 3T (outermost and disadvantaged) areas. According to the primary quantitative survey, 47 percent of adolescents felt poor internet coverage and speed were barriers to their online learning.

**Indonesian adolescents spend an excessive amount of time online for entertainment compared to their neighbours,** as revealed by the Digital Landscape Analysis conducted for this research. This was also validated by findings from the primary data. Adolescents in Indonesia struggled to make the connection between 'learning' and being 'online'. They mentioned that most of their time online was spent for entertainment and

leisure. During the co-design workshops, participants associated 'learning' with school and teachers, and 'being online' with entertainment and leisure activities. They said that online schooling was boring and teachers were ill-equipped for it.

"The main use of the internet is for entertainment, chatting with friends, playing games, and having fun. I did not learn anything new [online] lately."
10-14, Co-design workshop, Makassar

**The qualitative research indicated that girls from rural areas had limited access to computers, tablets and laptops as compared to boys,** who said they frequently interacted with such devices at the local cyber cafe, if access was limited at home. Girls mentioned that domestic duties often posed a barrier to accessing the internet.

"Being a mother sometimes limits my access to digital devices and the internet. When my baby is being fussy, I am expected to handle it, while my husband continues playing online."
Adolescent Mother, 19, ethnographic-style interview, Makassar

**Though Indonesia has seen a burgeoning of EdTech ventures, uptake among low and mid-level income adolescents is limited due to their inability to afford paid learning solutions.** None of the participants from the qualitative research mentioned using paid EdTech solutions, unless specifically probed. Data from the World Bank report "EdTech in Indonesia: ready for take-off?" found that less than 5 percent of EdTech platform users in Indonesia are willing to pay, once a platform's free trial period is

76 'Spotlight on Indonesia: Seizing the digital transition opportunity now', GSMA, February 2020, 2020.<https://www.gsma.com/spectrum/wp-content/uploads/2020/02/Indonesia-Digital-Dividend.pdf>

77 Scaling Access & Impact Realizing the Power of EdTech, Omidyar Network, Indonesia Country Report, 2019, <omidyar.com/wp-content/uploads/2020/09/Scaling-Accessand-Impact_Indonesia-Report_vFinal_r.pdf>.

78 'How to be safe on the internet', UNICEF, <https://www.unicef.org/indonesia/child-protection/how-to-be-safe-online>.

79 'Digital Landscape Analysis Brief: Indonesia', Quilt.AI, 2021, p. 10.

80 'Women's Rights Online Report Card Indonesia', World Wide Web Foundation, 2016. <http://webfoundation.org/docs/2016/09/WF_GR_Indonesia.pdf>

81 Digital Civility Index, Microsoft, 2021.

82 Digital Landscape Analysis Brief: Indonesia', Quilt.AI, 2021, p. 4.

over. Further, people with disabilities face limitations when using EdTech, as platforms are not adapted to their needs.[82]

"Pahamify is the most reliable platform but it only allows you to search 3 solutions. After that you need to pay, so I do not use it all the time. First I ask my peers. If they don't know, I go to Pahamify."
15-19, Co-design workshop, Bandung

**Adolescents are not equipped with the appropriate digital skills to effectively use tools and software for productive purposes.** Both the quantitative and qualitative data found that adolescents struggled to use software like Microsoft Suite, Zoom or even some EdTech platforms, but were comfortable navigating social media platforms like YouTube, Instagram,

TikTok and Facebook. The quantitative survey also found that adolescents struggled with tasks like sending attachments with emails, understanding all the functions on digital files and using advanced softwares.

"I struggled to use Microsoft Excel and other online forms that require Google sheets. I needed this for a government ID, but I was unable to finish it because I did not know how to fill it in."
LGBTQIA+ identifying adolescent, 19, ethnographic-style interview, Bandung

**There are clear gender stereotypes in the types of content adolescent girls and boys are consuming online.** Girls engage more with makeup, dancing or cooking-related content, while boys are interested in news, gaming and politics. The Digital Landscape study and the co-design workshops also found that boys were consuming more

career, civic engagement and news content as compared to girls. This runs the risk of limiting young girls' aspirations and opportunities they can access.

**Learning the English language is seen as the key to unlocking digital potential especially among adolescents in rural areas.** There is the perception in these areas that 'more useful' information is available in English. The Digital Landscape Analysis found that Indonesian adolescents and parents were searching the most for high school English content.

"There is no-one who shows us how to take advantage of digital resources or help us understand the language skills required."
10-14, Co-design workshop, Makassar

**TikTok is unanimously the most popular platform, due to the variety of available content, while Facebook seems to be losing popularity,** as it is associated with scams and cyberbullying. A few adolescents said that their family elders were also on Facebook, which made them feel that they could not openly express themselves on the platform. TikTok on the other hand, was a space to explore and find all kinds of 'random' and interesting content, dominated by young people.

**Facebook groups are used as a place to bond over common interests, address personal challenges or seek job opportunities, especially among older adolescents.** Both the Digital Landscape study and primary research found that adolescents were turning to Facebook groups for social-emotional support regarding

religious content, gaming, identity issues, love and relationships and mental health. They also relied on local Facebook groups to find jobs, or as a way to dabble with entrepreneurial activities, like selling things to supplement their income.

"Some of us sell jackets on Facebook. We buy second-hand and vintage jackets from the market and sell it again online."
15-19, Co-design workshop, Bandung

**Across the board, Indonesian adolescents prefer to learn 'practical skills and values' offline.** Skills like kindness, respect, leadership and empathy are the most important, and best learnt offline from trusted family and community members. Math and English content is better learnt online, especially through YouTube. Experts unanimously agreed that young Indonesians lack critical thinking, digital literacy and creative thinking skills.

**In the absence of adequate spaces in their offline world, adolescents go online to talk about mental health, struggling with studies related and identity issues.** This is especially true for adolescents from the LGBTQIA+ community, who, aware of the friction between their identity and religious beliefs, turn to online spaces and communities to better understand their experiences and seek support from others like them. Facebook groups and anonymous Twitter accounts are very popular, especially with older adolescents, who share their worries, concerns and stresses with others, and get advice and support.

"We [girls] have had bad experiences on Facebook, like receiving threats and bad messages, so we avoid using it."
*15-19, Co-design workshop, Bandung*

"I am part of 2 serious WhatsApp groups - one for Islam and one for lesbians. I like knowing and learning about Islam, but that group does not know about my sexual orientation. The other group knows about my sexual orientation, but I cannot talk about Islam there."
Non-binary adolescent, 19, ethnographic-style interview, Bandung

**In Indonesia, adolescents do not seem to think online safety is a priority,** and if they face a negative experience, they usually choose not to confide in their parents and family members out of fear of being judged or punished. Adolescents say that they are more interested in being "popular" and therefore often choose unsafe practices, like having public profiles and sharing many images and videos of their lives in the hopes of becoming "viral". They feel that negative experiences online are because of 'your own fault and mistakes', and therefore should not be shared with others.



"It's more fun watching TikTok rather than listening to the teacher during online school."
*10-14, Co-design workshop, Bandung*

## Key Opportunity Areas for Indonesia:

*How might we boost access to reliable and cost-effective internet, especially to communities in rural and low-resource settings?*

*How might we build skills like critical thinking, problem-solving and creativity through online spaces?*

*How might we provide online opportunities for adolescents to effectively learn practical skills like critical and creative thinking ?*

*How might we encourage the uptake of digital learning and Edtech platforms?*

*How might we bring adolescents and parents together to develop skills and systems to encourage safe online practices?*

**Example in practice:**

Indonesia's Ministry of Education, Culture, Research and Technology has a sponsored hashtag on TikTok called #samasamabelajar (#learntogether) which encourages the creation of informative TikTok content across a range of categories. This successful initiative has gathered around 64 billion views along with the creation of a vast amount of content like educational messages, DIY hacks, content on social issues and technical tutorials.

# Malaysia

Malaysia is on course to transform from a middle-income to a high-income country by 2024.[83]

Malaysia has 5.5 million adolescents and in 2018, they made up 17 percent of the population. However, with an increasingly ageing population, the proportion of adolescents to the overall population has steadily declined over the past 50 years.[84]

According to the Economist Inclusivity Index 2020, Malaysia ranks as the most internet-ready nation due to high levels of digital literacy, trust and safety of the internet with a robust internet policy environment.[85]

According to the IMD World Digital Competitiveness Ranking 2020, Malaysia

is one of the most digitally competitive countries.[86]

With nearly 90 percent of all households having the internet, 1 in 3 internet users is a child; 9 out of 10 children in the age group 5 to 17 are internet users. More than 175,000 children go online for the first time every day in Malaysia.[87]

Malaysian children primarily use Instagram, WhatsApp, Facebook Messenger and Google, especially to keep in touch with friends during the pandemic.[88]

Malaysia ranked among the top five countries with the best online safety for children, according to the Child Online Safety Index (COSI) by think tank DQ Institute.[89]

83 'Malaysia: Overview', The World Bank, April 2020, <https://www.worldbank.org/en/country/malaysia/overview>

84 'Malaysia Demographics', Worldometers, January 2020, <https://www.worldometers.info/demographics/malaysia-demographics/>

85 The Inclusive Internet Index, The Economist, 2020, <https://theinclusiveinternet.eiu.com/explore/countries/performance>

86 IMD World Digital Competitiveness Ranking 2020, IMD World Competitiveness Center, 2020, <https://www.imd.org/centers/world-competitiveness-center/rankings/>

87 'Our Lives Online', UNICEF East Asia and Pacific, Thailand, 2020, <https://www.unicef.org/eap/reports/our-lives-online>

88 Our Lives Online: Use of social media by children and adolescents in East Asia- opportunities, risks and harms, UNICEF East Asia and Pacific and Center for Justice and Crime Prevention, Thailand, 2020, <https://www.unicef.org/malaysia/media/1506/file/Accessible_version_-_Our_Lives_Online_Executive_Summary.pdf>

89 Child Online Safety Index, DQ Institute, 2020, <https://www.dqinstitute.org/child-online-safety-index/>

## Key Insights

**Malaysian adolescents struggle with the lack of a conducive learning environment and the inability to pay attention during online classes.** In Malaysia the issues with online learning are affordability and home environment. According to the primary quantitative survey, 57 percent of Malaysian respondents said that they were not able to pay attention and were often bored with digital learning.

**Malaysian adolescents seem to be struggling with some subjects, especially STEM and English when studying from home. Videos and tutorials on social media and YouTube are the preferred medium to supplement formal education.** The most popular platforms are Instagram, which has a lot of posts specifically providing STEM notes, and Facebook, which offers English tutoring pages. Students share STEM notes, mainly on Studygram accounts (these are communities wher students help eachother)on Instagram, knowing there is a demand for these notes in particular.

**Despite government efforts, the uptake and awareness of EdTech remains low, especially in low-resource areas.** Despite the government push and impetus on the rollout of DELIMa - a free EdTech platform, most adolescents and minority groups in the co-design workshops were not aware of the platform or its purpose. Only 5 percent reported use of EdTech apps, with the highest usage in the age group of 15-17 at 9 percent; for others it was around 5 percent.

"YouTube is an important source of learning, like a second teacher".

*15-19, Refugee group, co-design workshop, Kuala Lumpur, Malaysia*

**Learning languages and exposure to new cultures, communities and global issues is gaining momentum.** Young people are interested in learning new languages, finding motivational quotes, gardening and engaging with news and current affairs. Malaysia has a very high level of consumption of foreign entertainment, which includes dramas in foreign languages like Korean, Japanese, Chinese, Spanish and English, with subtitles. Malaysian teens acknowledge the important role of online spaces in their ability to learn new languages. Furthermore, being part of global online communities like K-pop and gaming, has resulted in global friendships, exposing them to new cultures and languages. Anime is also popular, and teaches Malaysian teens about Japanese culture.

"By reading Mangas, we learn new vocabulary and grammar in Japanese."
15-19, Low income, co-design workshop, Sabah, Malaysia

**Malaysian adolescents take to bullet journaling to keep track of work and video editing to hone creativity and be a part of online communities.** Malaysian students create elaborate bullet journaling (BuJo) spreads for each month- templates of which they share with one another online. Many – mostly girls - use it as a way to create a personalised planner, with their schedules and deadlines. Adolescents also frequently create and edit videos online about cooking and dancing to pursue their hobbies and hone their talents, guided by an online community of like-minded individuals.

"It is rather easy to "create" whatever you desire today with heaps of information readily available on the internet."
15-19, low income, co-design workshop, Ulu Langat, Malaysia

**With sophisticated digital infrastructure, there is greater diversity in the number and types of apps used by adolescents in Malaysia.** They appreciate the sense of self-reliance and enjoy the experience as they are not being assessed. However, the exposure to self-guided learning varies across socio-economic contexts and the inherent motivation of students. In the co-design workshops, adolescents in Malaysia were very proactive and intentional about self-directed learning. This is evident in their enthusiasm at being able to learn at their own pace and the wide variety of apps they download for creative pursuits such as Ibis paint, Capcut and Funimate.

"I can explore my own interest through an online platform."
Female, 17, middle income, ethnographic-style interview, Petaling Jaya Selangor, Malaysia

**In Malaysia, time spent online by girls is more closely monitored by parents and family members and the content consumed by them is gender-stereotyped.** Girls predominantly consume content related to domestic duties like cooking, taking care of the family and respecting others, or their physical appearance like makeup, skincare, and beauty. This trend was observed especially in the co-design workshops in Malaysia. However, the way algorithms work, this type of content floods the feeds of adolescent girls, often limiting their opportunities to move beyond such aspirations. Girls across age groups in the co-design workshops associated cyberbullying with "body shaming", highlighting how rampant this issue is.

"Being a daughter I have to help my mother so time spent online is limited. Parents don't allow more than 10 minutes on social media, and no Anime."
Female, 10, Low income, ethnographic style interview, Petaling Jaya Selangor, Malaysia

**Despite being ranked highly on online safety metrics, Malaysian adolescents highlight the negative physical and mental impacts of being online and the need for better support systems to deal with them.** A few also mentioned suffering from the physical impacts of excessive online usage, like sore and watering eyes, backaches and headaches.

**Malaysian adolescents, especially those in rural areas, see digital spaces as a democratic platform where the absence of social hierarchies allows them to be civically engaged.** The Digital Landscape Analysis shows that anonymity and the absence of social hierarchies online have made them inclusive and democratic spaces for adolescents, offering girls and marginalised groups the opportunity to participate in civic, social and political issues. From reading about political news to organising protests and campaigns online, internet spaces can be important channels for adolescents to be more informed about the world around them. The quantitative survey data has also found that adolescents in rural areas participate more in campaigns than urban teens. Serious social issues are important to teens in Malaysia, most recently, this included the 2021 conflict in Palestine.

**Malaysian adolescents are risk-aware and have high literacy on mitigation strategies.** According to the quantitative survey data, over 88 percent of young people attempt to protect their information online, more so in the older age band of 17-19. A majority know what they should or should not share and girls are more aware of this than boys. Half of the students said they would talk to parents or teachers and use a report button when faced with something negative on the internet.

"When something happens online I inform my mother and report it to the police."
Female,13, Low income, ethnographic style interview, Sabah, Malaysia

## Key Opportunity Areas:

*How might we improve affordability and stability of the internet, especially in low-resource areas?*

*How might we leverage the high penetration of the internet and use of online apps amongst Malaysian adolescents to enhance their digital literacy and skills?*

*How might we leverage the EdTech infrastructure within the country to provide equitable access to online learning and quality content?*

*How might we leverage digital spaces to cultivate the creativity and civic engagement of adolescents in Malaysia?*

*How might we create systems that prioritise safe online practices?*

**Example in practice:**

Malaysia Digital Economy Corporation has a "my digital maker" programme for school children. It includes computational thinking and coding in school curriculums and provides spaces such as "Digital Maker Hubs", "Future Innovators Schools" and "Future Skills for All" (a programme with UNICEF for GenU) for young people to develop digital skills. These involve collaboration with public sector departments including the Ministry of Education, Ministry of Science and Ministry of Youth, and UNICEF under the Generation Unlimited initiative.

# Philippines

In January 2021, internet penetration in the Philippines was 67.0 percent; social media was used by 80.7 percent of the total population.[90]

In 2020, the Filipinos had the longest average daily time of social media use, at 4 hours, with Facebook being the most used platform.[91]

The English language is used in a little over half of the Philippines' online conversations, followed by Tagalog.[92]

Internet performance is constrained by geographical factors and a weak wireless operators' market.[93]

There are over 45 million gamers online. The Philippines is the world's 25th-biggest market in game revenues, as well as a key driver of Southeast Asia's overall games market. There has been a significant expansion during the COVID-19 pandemic.[94]

The Philippines continues to be a global hotspot for online child sexual exploitation.[95]

90 Digital 2021 Philippines, Datareportal, we are social and Hootsuite, 11 February 2021, <https://datareportal.com/reports/digital-2021-philippines?rq=philippines%20>

91 Kemp, Simon, 'Digital 2019: Global internet use accelerates', We Are Social, New York, 2019, <https://wearesocial.com/blog/2019/01/digital-2019-global-internet-use-accelerates>

92 'Social Media Statistics in the Philippines', Talkwalker, August 2017, <https://www.talkwalker.com/blog/social-media-statistics-philippines>, Accessed June 17, 2021.

93 Pablo, Mari Chrys, ' Internet Inaccessibility Plagues "Social Media Capital of the World", The Asia Foundation, 24 October 2018, <https://asiafoundation.org/2018/10/24/internet-inaccessibility-plagues-social-media-capital-of-the-world/>

94 Elliott, Rhys, 'The Philippines' Games Market: Data and Insights', Newzoo, 4 May 2020, < https://newzoo.com/insights/articles/data-and-insights-on-the-philippines-games-market/>

95 'Online sexual abuse of children rising amid COVID-19 pandemic', Press Release, Save the Children: Philippines, 9 February 2021, <https://reliefweb.int/report/philippines/online-sexual-abuse-children-rising-amid-covid-19-pandemic-save-children>

## Key Insights

**All adolescents in rural and urban areas perceive intermittent and slow connectivity as the primary reason for ineffective online schooling.** Studying at home is also seen as distracting. This is compounded by issues of limited device ownership and the practice of shared devices for those in the lower-income strata. In the quantitative survey of 152 respondents, 68 percent perceived poor internet connectivity as their biggest hurdle with online schooling; 52 percent reported the lack of a silent place to study at home; and 39 percent mentioned that they are called away for household chores.

**Facebook and Messenger are the most commonly used platforms for online communication with friends, family, and teachers as they are free.** In the quantitative survey, those in urban areas were 20 percent more likely to use Google Meet and Zoom for synchronous learning in classroom settings than their rural counterparts, as these platforms were seen as data-intensive and not optimal for use with poor connectivity.

**Adolescents in the Philippines are more likely than their peers in other countries of the region, to reach out to their families for guidance for online learning since they miss the guidance they received in school.** This has been attributed to the close familial ties that Filipino culture encourages.

Editorial credit: kalilipatvideoart / Shutterstock.com

"When the lesson is difficult to learn and I cannot understand it, I go to my Auntie. Then I'll ask my brother's girlfriend and then my mom."
*10-14, co-design workshop, Davao city*

**YouTube is the go-to platform for supplementary learning for math and science and digital skills.** Google Search is used to help with assignments and search for quick answers.

"YouTube helps me because I get informed about conspiracy theories, history of mammoths, T-Rex, nuclear power plants, World War I and II, guns, math problems and scientific facts."
10-14, co-design workshop, Metro Manila

**The Digital Landscape Analysis shows that Filipino adolescents consume more news-related content (11 percent) than the regional average (6 percent).** The co-design workshops found that this was higher for females than males. Adolescents also enjoy watching K-Pop videos and Anime for entertainment.

**Facebook is the most commonly used platform amongst adolescents in the Philippines,** followed by YouTube, and Instagram. There are more girls than boys with Facebook and Instagram accounts, while more boys have YouTube accounts. TikTok is less popular than in other countries in the region. Facebook is the most used social media channel with over 70 million users.

**Girls generally look for resources or events in their local communities, and to discuss social problems when online. Boys are more likely to watch video clips or play online games**. Interviews conducted with those who were out of school, showed that girls were more interested than boys in formal learning and going back to school.
While no gender differences in digital access to digital spaces have been reported**,** girls are more supervised and restricted in their online

learning and engagement due to issues of online safety.

**Adolescents are learning gaming skills, photo and video editing, drawing, performing arts, life hacks and entrepreneurial skills online.** They said that life values like respect and empathy and life skills like domestic work cannot be learnt online and are best learnt from family. Conspiracy theories are also popular among some respondents. Older adolescents view the internet as a space to engage in income-generation activities and seek technical and business skills like makeup, vlogging, editing videos and understanding branding, to run businesses online.

"Information is always one click away; you can find almost anything on the internet."
10-14, co-design workshop, Rizal province

**Adolescents who are creating content online are more likely to be motivated by their interest in the subject matter and are not necessarily seeking monetary benefits.** Parental support is viewed as critical for them. There is a huge risk associated with content creation, particularly for females, due to the sexualisation of children online.

"The benefit of creating content is it gives me an avenue to do the things that I want to do, such as dancing, singing, and playing instruments."
Female,17, content creator, ethnographic-style interview, Metro Manila

**Adolescents are missing formal guidance and information on developing digital skills.** They want to learn how to use PowerPoint, shortcut keys, and research information effectively. They are currently using YouTube to build these skills and understand advanced software.

**This research has found that concerns around fake news and false information is much higher among Filipino adolescents than those of other countries, and especially higher for females.** Adolescents are beginning to devise methods like checking for verified accounts and the number of followers to assess the credibility of information.

**Around 8 out of every 10 Filipino children are at risk of online sexual abuse or bullying.** Across ages, adolescents talk about being exposed to 'violent' and inappropriate content. Experts say that this is because perpetrators are drawn to the English proficiency of adolescents, especially those living in poverty who may be more vulnerable to becoming victims of abuse. The level of awareness of online risks and unsafe practices is higher than in previous years, but adolescents want and need to build their capacity to better deal with such instances.

"There is some wrong information on the internet. Before I believe them, I check the comments first."
*15-19, co-design workshop, Rizal province*

# Key Opportunity Areas:

*How might we enable access to reliable, safe, and cost-effective digital engagement for those in low-resource areas?*

*How can we capitalise on family relationships in providing guidance to adolescents in their engagement with tech?*

*How might we encourage EdTech players to invest in cost-effective portals which provide guidance to learners in pursuing academic and other interests?*

*How might we capitalise on entrepreneurial energies of older adolescents in online spaces?*

*How might we enhance adolescents' skills for navigating online spaces safely and effectively and use platforms required for the purpose of work and study?*

**Example in practice:**

The Free Internet in Public Spaces Act in the Philippines aims to provide free WiFi in all public places such as schools, parks, transportation ports and health facilities. This is incredibly important for those living in poverty, as WiFi in the Philippines is among the most expensive in the world. By having free WiFi in easily-accessible locations, people in the Philippines have more chances to work, communicate and learn online.

# Thailand

Thailand is an upper-middle income country[96] with persisting income inequalities.[97]

The population of Thailand is ageing, with adolescents representing only 12 percent.[98]

The Thai education system has been ranked poorly in equipping adolescents with even basic skills in reading and mathematics,[99] much less the advanced digital skills required to thrive as adults.

69.5 percent of the Thai population has access to the internet,[100] with 97.7 percent of users accessing the Internet via mobile phones.[101]

78.7 percent of the population is active on social media.[102]

Thailand has relatively affordable and widely available internet broadband services,[103] but users are constrained by limited availability of content in the local language[104] and a low level of digital skills.[105]

Adolescents in Thailand spend a lot of time online, with research showing that Gen Y and Gen Z spend an average of 12 hours online per day.[106]

96 'Thailand: Overview', The World Bank ,'September 2020, <https://www.worldbank.org/en/country/thailand/overview>

97 Jitsuchon, Somchai, 'Thai inequality: What we should know', The Bangkok Post, 22 Jan 2020, <https://www.bangkokpost.com/opinion/opinion/1840739/thai-inequality-what-we-should-know>

98 'World Population Prospects' , United Nations Department of Economic and Social Affairs, Data Booklet, 2019, <https://population.un.org/wpp/Publications/Files/WPP2019_DataBooklet.pdf>

99 Programme for International Student Assessment 2018, OECD, 2018, <https://www.oecd.org/pisa/publications/pisa-2018-results.html>

100 Digital 2021 Thailand, Datareportal, we are social and Hootsuite, 11 February 2021, <https://datareportal.com/reports/digital-2021-thailand>

101 2020 Affordability Report, Alliance for Affordable Internet, 2020. < https://a4ai.org/affordability-report/report/2020/#welcome >

102 The Inclusive Internet Index, The Economist, 2020, < https://theinclusiveinternet.eiu.com/explore/countries/performance>

103 IMD World Digital Competitiveness Ranking 2020, IMD World Competitiveness Center, 2020, <https://www.imd.org/centers/world-competitiveness-center/rankings/world-digital-competitiveness/>

104 Digital 2021 Thailand , Datareportal, we are social and Hootsuite, 11 February 2021, <https://datareportal.com/reports/digital-2021-thailand>

105 ibid

106 'Thailand User Behaviour Profile 2020', p. 40, < https://www.etda.or.th/th/Useful-Resource/publications/Thailand-Internet-User-Behavior-2020.aspx >

## Key Insights

**Though the internet is affordable and widely available in Thailand, financial constraints for adolescents living in poverty is one of the biggest barriers to their digital access.** Adolescents from poor backgrounds are unable to afford digital devices beyond mobile phones. The research found that they also could only afford internet packages that allowed for social media usage and online gaming. They were unable to afford high-speed internet.

---

**Thailand rates very poorly on cyber security and governance, particularly child online safety. Young people lack the skills to deal with online threats effectively.** In the DQ Institute's Child Online Safety Index of 2020, which measured 30 countries, Thailand ranked last.[107] 25 percent of respondents in the quantitative survey said that they were able to report, block, or call a helpline in case they were exposed to harmful or distressing content online. This was the lowest across the four countries where the primary research was conducted.

"If you face cyberbullying, just let it go. It often happens."
Co-design workshop, mixed gender group, 15-19, Bangkok, Thailand

---

**Facebook and Twitter are popular information sources for news, while Instagram is particularly popular among girls for fashion, lifestyle tips and socialising with friends.** Facebook is one of the most popular social media platforms in Thailand. Apart from socialising and entertainment, adolescents also use it as a source of news. Twitter provides news and political updates under trending hashtags. Instagram is popular among girls, possibly because top Instagram influencers are females, posting about

Editorial credit: Albert Garrido / Shutterstock.com

"Even if I have a personal phone, access depends on monthly internet packs."
*15-19, co-design workshop, Mae Hong Son (urban), Thailand*

fashion and lifestyle. It is also the platform where they socialise with their friends the most.

"I use Instagram more regularly than other platforms as it is easy to look up in the "search" bar and stay connected with my friends."
Female, 12, ethnographic-style interview, Bangkok, Thailand

**The limited availability of Thai content online restricts youth, especially those with low literacy, from accessing information.** Social media platforms like YouTube, TikTok and Facebook are valuable learning resources for youth with low literacy. Marginalised youth, particularly those from rural areas and drop-outs, many of whom are migrants,[108] have limited English language proficiency and are thus unable to access much content online. From the ethnographic-

style interviews it emerged that individuals who were out of school, were primarily learning through videos on YouTube, TikTok and Facebook pages. Their learning was based on their personal interests, ranging from creating art to fixing motorbikes. Marginalised ethnic minority youth also used YouTube to learn about vegetables that could be grown in their rural environment.

"My mom first gave me her motorcycle. I like to know how to disassemble it and put it back or put other parts. If I cannot do it, I watch YouTube, Facebook, or TikTok. They give me good and detailed instructions."
School drop-out, male, 16, ethnographic-style interview, Chiang Mai, Thailand

**Due to the entrepreneurial culture of Thailand, many adolescents are engaged**

**in online shopping, but want to know more about how to sell things online.** Most Thai youth use e-commerce platforms like Lazada and Shoppee and social media platforms like Instagram and Facebook for online shopping. However, they want to learn more about how to sell online. They do not know how and where to acquire these skills, and rely heavily on Google search and YouTube videos.

"I am able to shop on Lazada by reading reviews and comparing products online."
Low income, male, 15, ethnographic-style interview, Nakorn Pathom, Thailand

**Online communities like Facebook groups are valuable learning resources and social groups for marginalised adolescents in Thailand.** Need-based online spaces, such as Facebook groups for adolescent mothers in Thailand, allow them to get information and to

connect with those facing similar challenges. Youth with disabilities find comfort in the anonymity of online spaces, and are able to socialise without fear of judgement. LGBTQIA+ adolescents in Thailand are less aware of online communities which could help them understand their identities. These communities were the most popular in Thailand as compared to other countries in this research.

"No one really teaches me how to raise a baby so I have to rely on online sources. I'm in a Facebook group for young mothers so I asked some questions there. I also follow other posts and questions to see what problems others are facing and what the advice is. I think this is better than asking my parents because they're older and their ideas are ancient. Talking to other teen moms is more relevant."
Adolescent Mother, 16, ethnographic-style interview, Chiang Mai, Thailand

**Online spaces are valuable avenues for Thai adolescents to cultivate their creativity and for their creative expression.** In Thailand, research participants said that they enjoyed creating their own games, social media posts and contemporary media like memes, humour remixing pop-culture and infographics with political content. Online spaces for creativity were particularly valuable as there were limited avenues for it in the formal education system in Thailand.

"Creativity is one of the most important skills for all Thai- even farmers. Traditional teaching sometimes hampers creativity."
Expert, Education policy and innovation, Thailand

**Girls have more parental restrictions, less money for internet usage and have to deal with gender-specific threats like body-shaming and sexual harassment.** Girls bear the burden of household work, especially in the rural, low-income settings of Thailand. Consequently, adolescent girls in rural areas are less likely to be able to work to earn pocket money to pay for internet packages. In urban areas there is more surveillance of female participants in digital spaces, by parents and male partners. Girls often receive comments about body and physical shaming and unwanted sexual advances online.

"Body shaming and bullying is common for girls online".
Co-design workshop with girls, 15-19, Bangkok, Thailand

**Online spaces are especially valued for anonymous political participation and for female participation** in a country where women have been historically marginalised in political spaces. Platforms like Twitter, Discord, and Clubhouse are particularly valuable for anonymous political participation. Anonymity online allows youth to feel safe about expressing their social and political opinions. Furthermore, in a country where women are largely excluded from political spaces, with only 16.2 percent membership in the Parliament and zero ministerial positions[109], online spaces are significant avenues to increase the engagement of young Thai women in politics.

"Twitter is safe to be socially engaged online because I can remain anonymous by using VPN and cloudshare. Every morning, I check the morning update like #WhatDidOurGovtDoNow."
 Female, 16, Chiang Mai, ethnographic-style interview, Thailand

## Key Opportunity Areas:

*How might we guide marginalised adolescents to online communities that address their needs?*

*How might we leverage social media platforms like YouTube and TikTok to provide build digital skills and 21st century skills for adolescents in Thailand?*

*How might we leverage need and interest-based Facebook groups to cater to the skills development and employment needs of drop-outs and marginalised groups like adolescent mothers in Thailand?*

*How might we explore the potential of digital spaces in enhancing the creativity and active civic participation of Thai adolescents ?*

*How might we create mechanisms to enable adolescents to deal effectively with online threats?*

**Example in practice:**
In Thailand, Eduzone is an online community that makes tools available for students to access admission to university, counsellors and information for future careers. It also directs students and teachers towards free online resources for learning.

107 Child Online Safety Index, DQ Institute, 2020. <https://www.dqinstitute.org/child-online-safety-index/>

108 'Education knows no border: A collection of good practices and lessons learned on migrant education in Thailand', UNICEF Thailand, December 2019, <https://www.unicef.org/thailand/reports/education-knows-no-border>

109 Sirivunnabood. "Women MPs in the 2019 Thai Parliament", ISEAS Yusof Ishak Institute, 2019.

# Viet Nam

Viet Nam, which was one of the world's poorest nations 30 years ago, has been transformed into a lower-middle-income country by the Doi Moi political reforms.[110]

85.7 percent of the population belong to the Kinh ethnic group, but there are 54 ethnic minority groups, some of which are among the most marginalised groups in the country.[111]

In spite of having an ageing population, a third of the Vietnamese population is young. 30 percent belong to Gen Z (those born between 1997 and 2012) and 55.5 percent are below the age of 35.[112]

In spite of its low-middle income status, Viet Nam scores well on education metrics

such as the Programme for International Student Assessment (PISA) index, in which it ranks 13th of 79 countries in reading, 24th in mathematics and 4th in science. These scores were not published in the PISA 2018 report, but by the Ministry of Education and Training in Vietnam.[113]

Ho Chi Minh was among the top 10 cities globally in Facebook users, at 11 million Facebook users.[114]

Internet penetration rate in Viet Nam is above the regional average. Frequent disruptions caused by undersea cable ruptures are common. According to a poll conducted by UNICEF in 2016, 72 percent of Vietnamese youth aged 15-24 were connected to the internet.[115]

In 2020, Viet Nam was ranked among the top 10 countries in the world in smartphone penetration according to the Global Mobile Market Report by Newzoo.[116] According to a 2020 global digital survey by We Are Social and Hootsuite, 93% of internet users in Viet Nam own smartphones.[117]

110 The World Bank, 'Overview - Vietnam', 2021, <https://www.worldbank.org/en/country/vietnam/overview >

111 'Vietnam', CIA.gov., The World Factbook, 8 June 2021, <https://www.cia.gov/the-world-factbook/countries/vietnam/#people-and-society>

112 Nguyen, Thu, 'Exploring Asia's youngest consumer market: Why Vietnam, now?', We Create Content, February 2021 <https://wecreatecontent.asia/content-marketing-blog-asia/2020/3/2/exploring-asias-youngest-consumer-market-why-vietnam-now>

113 'VN gets high scores but not named in PISA 2018 ranking', Viet Nam News, June 2019, < https://vietnamnews.vn/society/569454/vn-gets-high-scores-but-not-named-in-pisa-2018-ranking.html >

114 Quy, Nguyen. 'Vietnamese Spend More Time on Internet, Social Media than Asian Peers: Report', VnExpress International. February 06, 2021. Accessed June 21, 2021. <https://e.vnexpress.net/news/news/vietnamese-spend-more-time-on-internet-social-media-than-asian-peers-report-4232155.html> .

115  'Make the digital world safer for children – while increasing online access to benefit the most disadvantaged', UNICEF,  December, 2017.

116 'Top Countries/Markets by Smartphone Penetration & Users', Newzoo, 8 July 2021, <https://newzoo.com/insights/rankings/top-countries-by-smartphone-penetration-and-users/>

117   Digital 2021 Viet Nam, Datareportal, we are social and Hootsuite, 11 February 2021. <https://datareportal.com/reports/digital-2021-vietnam?rq=vietnam>
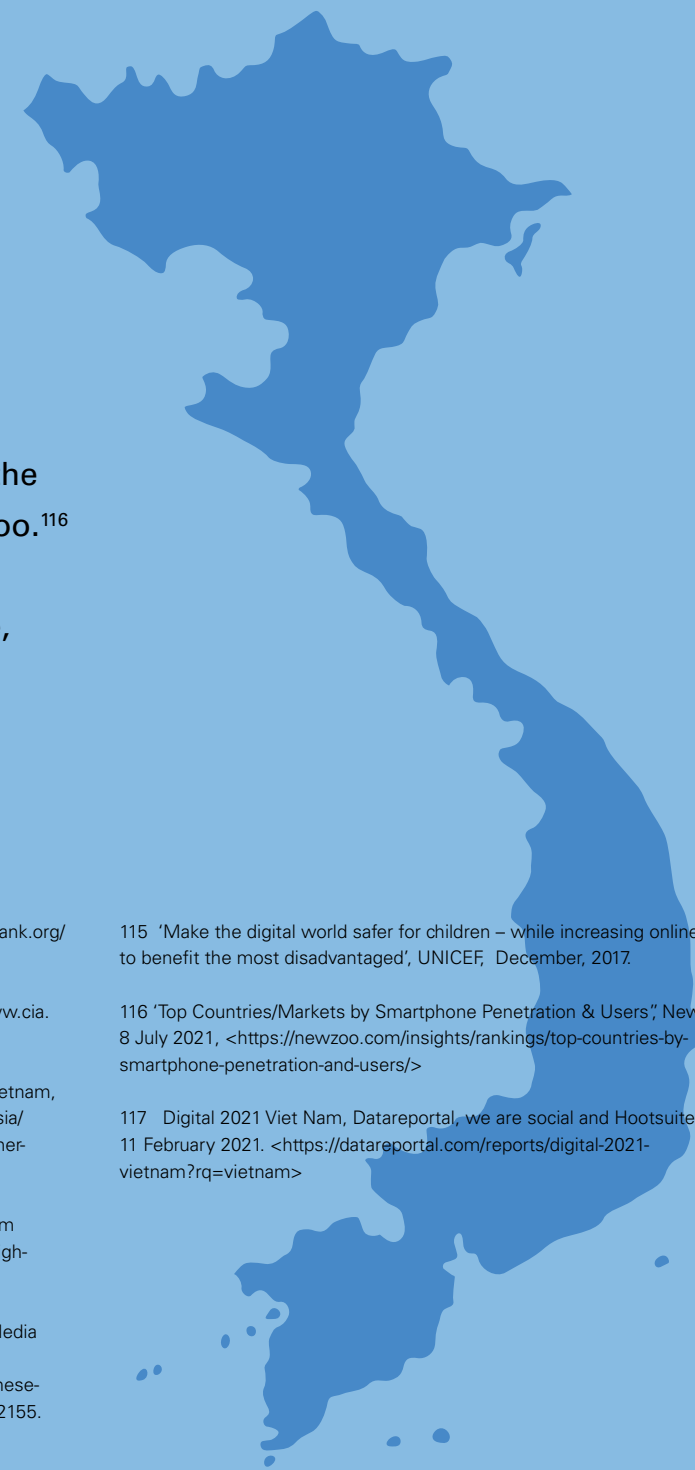
## Key Insights

**Ethnic minorities and those living in remote, mountainous areas do not have access to digital devices, digital skills and facilities, and seem to have limited awareness of the importance of digital literacy for their future.** At 70 percent, Viet Nam has one of the highest internet penetration rates[118] in the region but the stability and average speed remain poor due to frequent undersea cable ruptures. Many of Viet Nam's 21 million[119] students do not have access to digital devices and distance learning opportunities. They often lack digital skills, and their teachers are largely unfamiliar with child-friendly online teaching. A shortage of devices in families often results in boys being given more access than girls.

"For ethnic minority groups languages is an issue, because most online content is in Vietnamese or English, but not in languages of ethnic minorities. Secondly, the location where they live is not equipped with an internet connection."
Teacher, Education expert

**For Vietnamese adolescents, the most popular online platforms are linked to social media.** Vietnamese adolescents remain loyal to Facebook, and Zalo, a local social messaging app, is also widely used [120]. 30 percent of Facebook users in Viet Nam are between the ages of 18-24[121]. TikTok is popular with Gen Z (those born between 1997 and 2012) with 66 percent of TikTok's users in Viet Nam younger than 30 (41 percent are aged 16–24[122]).

118 ibid
119 Pasic, Maida, 'East Asia and the Pacific: Spearheading digital transformation of education', UNICEF Global Development Commons, 2020.
120 Karjalainen, Robert, 'Vietnam's top social media sites.' Brand Ninja', December 2019, < https://brand-ninja.co/what-are-the-most-popular-social-media-websites-in-vietnam>
121 ibid
122 ibid

"TikTok is more common now with younger people. Interest to use social media is primarily about 'selfie' or personal information, rather than education."
*NGO, community expert, Viet Nam*

**Students from lower socio-economic backgrounds are often unable to achieve higher digital competencies.** According to a research journal by MDPI,[123] students from poorer families have less access to modern technologies than those from moderately rich families, which limits them from reaching their full potential in developing their digital skills. Socio-economic status seems to be the most significant predictor of students' digital skills. Children from better socio-economic strata tend to gain more significant benefits from online use.

"Viet Nam is a small country with a big population. Income and access to infrastructure like education has a lot of disparities - especially between the countryside and big cities like Hanoi and Ho Chi Minh. Rural spaces do not have very good access. Access to smartphones is not very difficult, but the major issue is

digital literacy. They use digital spaces for gaming, but not for learning."
Education and technology expert, Viet Nam

**Vietnamese adolescents are acquiring digital skills and competencies through social media and with the help of their friends and siblings.** Outside of school, young people are not proactively sharpening their digital skills. Past research shows that 29 percent of adolescents are more likely to learn digital skills from their friends or siblings, with only 22 percent learning from their parents.[124]

"We use gaming platforms like Kahoot to build social and civic engagement. The young people love it and tell their friends about it. The number of engagements increased a lot after introducing this.

They (young people) are very expressive particularly about their concerns (university students more than high schoolers)."
Education and technology expert, Viet Nam

**Formal schooling does not adequately cater to the learning needs of adolescents with disabilities and only a few schools are able to use digital tools and spaces to assist them.** The formal education system is unable to ensure quality education for children with disabilities.[125] In 2014, the out-of-school rate for children with disabilities in primary and lower secondary education was as high as 90 percent.[126] Online platforms, with their audio and visual options, such as voice search, are an accessible and viable source of information and learning for youth with disabilities. 44 percent of Vietnamese use voice-search and voice command.[127] However, adolescents with disabilities who

do not have access to digital devices or the internet, especially those in rural areas, have limited opportunities to benefit from digital spaces.

"For students with disabilities there are not many schools for them to learn. My sister is a teacher in a disability center and digital devices are a dream for them. In Ho Chi Minh city, there are some schools and teachers that support those

123 'How Digital Natives Learn and Thrive in the Digital Age: Evidence from an Emerging Economy', MDPI Journals, September 2020.

124 'Bringing the Voice of Youth to the ASEAN Ministers of Education!', SAP, #DigitalFutureForYou, 15 October 2020.

125 Digital 2021 Viet Nam, Datareportal, we are social and Hootsuite, 11 February 2021, <https://datareportal.com/reports/digital-2021-vietnam?rq=vietnam>

126 'Inclusive Education for Children with Disabilities', UNICEF Vietnam, <https://www.unicef.org/vietnam/inclusive-education-children-disabilities>

127 Digital 2021 Viet Nam, Datareportal, we are social and Hootsuite, 11 February 2021, <https://datareportal.com/reports/digital-2021-vietnam?rq=vietnam>

who are visually impaired. They use applications and voice-over functions for them. But in rural areas, where I am from, there are few schools and opportunities like this for disabled, or they do not know of any such opportunities"
Teacher, Viet Nam

**Facebook's popularity in Viet Nam has made it a tool for civic engagement for adolescents.** Offline campaigns designed to enlist adolescents in Vietnam in public activities have not been too successful.[128] In contrast, social initiatives started by NGOs such as Live and Learn, ISEE and Viet Pride are able to reach out to adolescents via social media channels like Facebook.[129] Facebook is considered to be one of the main sources of information for Vietnamese adolescents[130] and Vietnam is one of the top ten countries for active Facebook users.[131]

**Female mobile gamers outnumber males.** According to a report released by India's and Southeast Asia's leading smartphone advertising platform for mobile games POKKT, in association with Mobile Marketing Association (MMA) and Decision Lab, the penetration of regular mobile gaming has surprisingly become higher amongst females (59 percent) than males (54 percent) in Viet Nam.[132] In Southeast Asia, a strong growth in mobile gaming is anticipated. It is estimated that by 2021 there will be 250 million mobile gamers in the region, led by Viet Nam.[133] Women seem to be driving the growth of the mobile gaming market in Viet Nam, though only 20-30 percent in the ICT field are women,[134] and girls are outnumbered by male peers in STEM degrees.[135]

**Viet Nam ranks low on child online safety, with a high incidence of cyberbullying, especially for LGBTQIA+ and girls and particularly on social media platforms.** According to the DQ Institute's Child Online Safety Index of 2020, Viet Nam ranked 28th out of 30 countries because of cyberbullying and lack of social infrastructure, which includes the legal framework and government policies for child online protection.[136] According to a survey by UNICEF in 2019, 21 percent of adolescents in Viet Nam were victims of cyberbullying, most commonly on platforms like Facebook, Zalo, YouTube and Instagram.[137] 13 percent of Vietnamese said that bullying online happened in online games, while 68 percent pointed to social media.

**Vietnamese adolescents display vigilance online and peers play an important role in providing knowledge on online safety.** In a UNESCO Digital Kids Asia Pacific survey

that was administered to 5,129 students aged 15 in four Asia-Pacific countries – Bangladesh, Fiji, Republic of Korea and Viet Nam, it was found that more Vietnamese children, compared to those from the other countries, receive internet safety knowledge from their peers and not guardians or teachers.[138] Vietnamese adolescents also demonstrated the highest amount of vigilance amongst the four countries. When asked what they would do in an uncomfortable or dangerous situation online, the common answers were 'blocking', reporting and scrolling away.

128 Duong, Yen, 'The Political Apathy of Vietnamese Youth', New Naritif, 1 December 2017, <https://newnaratif.com/the-political-apathy-of-vietnamese-youth>
129 ibid
130 ibid
131 ibid
132 Aspin, Jon, 'At a glance: The everything you need-to-know of mobile gaming in Vietnam', Decision Lab, <https://www.decisionlab.co/blog/what-you-should-know-about-mobile-gamers-in-vietnam>
133 ibid
134 'Girls and ICT, why not?', Vietnam times, 7 October, 2021, <https://vietnamtimes.org.vn/girls-and-ict-why-not-15748.html>
135 'VN needs more women working in STEM: experts', Viet Nam News, 14 November, 2017, <https://vietnamnews.vn/society/417457/vn-needs-more-women-working-in-stem-experts.html>

## Key Opportunity Areas:

*How might we improve digital access for ethnic minorities, especially with respect to language?*

*How might we leverage the popularity of social media amongst Vietnamese adolescents for them to achieve higher digital competencies?*

*How might we increase access to digital tools and spaces for rural Vietnamese adolescents with disabilities?*

*How might we incentivise the creation of mobile games on topics around ICT and STEM, in order to encourage more adolescent girls to go into these fields of study and work?*

*How might we leverage peer networks to capacitate Vietnamese adolescents with the skills required for digital safety?*

**Example in practice:**

Topica, a Hanoi-based EdTech startup in Viet Nam aims to increase the talent pool by equipping adolescents with the skills they need to thrive in a fast-paced working environment in the digital age. Topica has more than 3,000 e-learning courses, in topics such as social media marketing and computer programming, and has so far trained more than 6,000 students.

136  Child Online Safety Index, DQ Institute, 2020.<https://www.dqinstitute.org/child-online-safety-index/>
137  Quy, Nguyen, 'Vietnam fares poorly in online child safety ranking', VnExpress International, 15 February 2020.
138 Digital Kids Asia-Pacific: Insights into Children's Digital Citizenship, UNESCO, Bangkok, 2019, <https://www.gcedclearinghouse.org/sites/default/files/resources/190165eng.pdf>

# Opportunity Areas for Action

This section presents recommendations to empower adolescents as they navigate online spaces. It makes suggestions for improving access, enhancing learning experiences, building digital literacy, while ensuring that adolescents are safe online and are fully included in the opportunities offered by digital spaces to unlock their potential. The recommendations are grounded in research and propose strategies that are user-centric and policy focused. The key themes are as follows:

1. Enable inclusive access to online spaces for all children

2. Re-engineer formal learning systems to be more fun and effective

3. Equip adolescents with digital and employability skills

4. Create enabling environments for adolescents to realise their online potential

5. Mitigate online risk exposure and address gender-based discrimination and harm

## Opportunity 1:

# Enable inclusive access to online spaces for all children

**A. Make digital infrastructure affordable through private sector participation**

Bring down the cost of internet connectivity, in collaboration with the private sector, by co-funding initiatives to subsidise last mile connectivity and through cost-sharing in network deployment.

Fund the creation of "digital commons", access points in public spaces where WiFi and computer costs can be underwritten by technology and telecom providers especially for girls and vulnerable groups.

Nudge the private sector to provide low-cost alternatives such as lower entry-level devices, second-hand devices and rental services, as well as consumer credit options, to ease access to digital device ownership.

Encourage innovation in design of hardware and software that are data light, mobile-first, and can be used in offline modes.

**Example in practice:**
The Aflatoun Educational Platform has adapted a technological device for low-resource settings involving a Raspberry Pi mini-computer. The Raspberry Pi can generate WiFi that can be used by up to 30 children through tablets/smartphones in its vicinity.

**Example in practice:**
The GIGA initiative attempts to address internet connectivity issues to increase access to educational resources through means like maintaining a real-time map of school connectivity to identify demand for infrastructure and funds and  advising governments on building affordable and sustainable country-specific models for finance and delivery, subsidising market creation costs and incentivising private sector investment.

## B. Overcome gender barriers for equal digital access

Create programmes to boost the confidence of girls and adolescents of various Sexual Orientation, Gender Identity, and Expression (SOGIE) groups to use digital technology in local access centres. The programmes should focus on skill-building and safe internet use in a gender-sensitive manner.

Provision for girls' access to devices in community centres, schools, and other public places that they frequent and allocating specific days and hours for their exclusive use. These should be operated by trusted members and women changemakers in the community.

Enable access to digital devices for girls and young women at minimal or a subsidised cost to bridge the digital gender divide.

Educate communities through campaigns and dialogue that champion the cause of girls-in-tech and dispel myths around girls' use of technology and the internet - especially targeting parents and male peers.

Support interventions that encourage girls towards digital technology through engaging means like digital games, tech fairs, tech clubs and scholarships, among others.

**Example in practice:**
In 2018, UNESCO in Thailand launched an initiative entitled, "Women Make the News", an online database of female experts, including women in STEM. Thai journalists access this and it has resulted in better representation of women in STEM and the media.

**Example in practice:**
In Indonesia, the CSO Generation Girl organises a biannual, free "Holiday Club" for girls which includes introductory and intermediate-level classes on topics like Computer Science, Mobile App Development, and Website Development. They also invite female role models to share their stories of success.

**C. Ensure platform designs are inclusive, to serve the diverse needs of marginalised and vulnerable adolescents**

Publish guidelines and advocate for the integration of accessibility features on digital platforms (including EdTech platforms), based on research and co-created with adolescents with disabilities.

Collaborate with the private sector and encourage the co-design of content both with adolescents with disabilities that are sensitive to their user needs and other adolescents to allow for the creation of content in their local languages.

Advise schools, teachers, and CSOs to make adolescents aware of and train them on the use of various accessibility features.

**Outside inspiration:**
Texthelp, based in the UK, allows schools to integrate a Read&Write toolbar on Chrome servers. Read&Write reads documents aloud, offers picture dictionaries, checks spelling and grammar, and can be accessed on Chrome devices at home.

## Opportunity 2:

# Re-engineer formal learning systems to be more fun and effective

**A. Invest in education systems that use blended learning to maximise learning outcomes**

Co-build a centralised online learning system with students, teachers, and EdTech providers, to deliver online learning and set minimum standards and guidelines. This should be available in 'data light' and offline versions for those who are in areas of poor or limited connectivity.

Equip teachers to blend classroom learning with digital spaces and online challenges with which students are already familiar like social media platforms.

Encourage collaboration between schools and EdTech platforms to create differentiated and interactive learning experiences.

Partner with EdTech providers to make access to quality and interactive digital education content more affordable for adolescents, especially those in low-income settings.
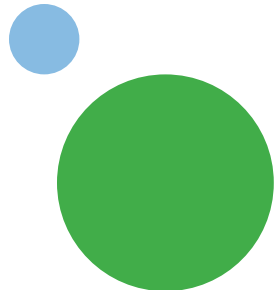
**Example in practice:**
The Ministry of Education and Culture in Indonesia has collaborated with private EdTech companies to get diverse content for free access on its EdTech platform, Rumah Belajar. Many private sector digital learning providers are also offering free services under the government distance learning initiative called Pembelajaran Jarak Jauh (PJJ).

**Outside inspiration:**
BBC's Bitesize Daily service, on the popular social media platform YouTube, hosted lessons by 200 teachers and celebrities over 14 weeks. These included Manchester City footballer Sergio Aguero teaching children how to count in Spanish and award-winning music stars Mabel and Liam Payne combining music and reading for secondary school children.

**B. Empower young people to be co-creators of their own learning experiences**

Encourage adolescent-led content creation by working with diverse adolescents to understand their learning needs and create contextual content through competitions and grand challenges.

Catalyse the potential of peer-to-peer learning on online platforms, which enable adolescents to study with one another collaboratively, creating room for improved motivation while holding each other accountable.

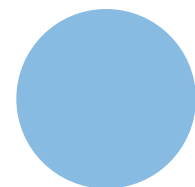Champion youth-led innovation in education by acknowledging and showcasing the success stories of adolescents and entrepreneurs at national and local levels.

**C. Engage diverse stakeholders in the innovation and amplification of edu-tainment and learning content**

Encourage EdTech interventions to build the skills required for adolescents to engage in digital livelihoods, like digital entrepreneurs who are earning through online sales, content creation, and community building.

Leverage social media influencers and K-pop artists amongst adolescents to aggregate, amplify and encourage the creation of educational resources and content online.

Encourage gaming and entertainment providers (K-Pop, Anime, Manga) to invest in creating serious content for the overall well-being of adolescents in the domains of mental health, sexual reproductive health, education and entrepreneurship and civic knowledge and engagement.

**Example in practice:**
TikTok set up the Creative Learning Fund in May 2020. The Fund was bundled and launched together with the #LearnOnTikTok hashtag, which amalgamates educational content on the platform. They committed $50 million in grants globally to encourage and support educators, professional experts, and non-profits whose real-world skills and expertise can make educational information and useful course material accessible in a distance-learning format.

**Example in practice:**
Workshop in the Moodle Learning Management System (LMS) administers the submission of assignments and then allocates these assignments to peers for review. This tool allows students to assess the submissions of their peers using structured assessment rubrics shared by the course instructor. It allows students to learn from the perspectives of others as they evaluate the work of their peers. Instructors can also use Workshop to empower students to assess and evaluate the performance of their peers in a collaborative manner.

**Example in practice:**
In Indonesia, the Ministry of Communication and Information Technology, under its Siberkreasi initiative, has a programme called "The School of Influencers", which invites young Indonesians to produce creative content such as positive videos, images, articles, blogs or vlogs.

Editorial credit: fotone agus / Shutterstock.com

## Opportunity 3:

# Equip adolescents with digital and employability skills

**A. Teach digital literacy, skills, and safety in schools**

Prioritise digital skill development in the curriculum to enable adolescents to use software and complete tasks online from an early age. A standardised digital skills framework from basic to advanced mastery should be devised, to provide customised learning opportunities.

Provide ongoing and age-appropriate information and interactive learning modules on the basics of the internet in schools, community centers and through other delivery mechanisms. This should include information on possibilities and risks online. Additionally, it should include online safety modules on how to protect personal data and deal with harmful content or abuse online. Online safety modules should also provide

guidance on how to identify and navigate fake news, which was found to be a prevalent issue.

Explore with adolescents various online and offline approaches to developing skills like critical thinking, empathy and resilience and socio-emotional learning to enable them to make informed decisions and manage conflict when online.

**Example in practice:**
In Malaysia, the Ministry of Education, in collaboration with Cybersecurity Malaysia plans to introduce a National Cyber Security Awareness Module in 300 schools nationwide. It will include topics like online ethics, balanced internet usage time, cyber-bullying, social media and digital citizenship.

**B. Establish online and offline learning centres for digital skills development opportunities outside of formal education**

Create hubs in schools and community centers for skill development oriented towards digital livelihoods, entrepreneurship and jobs. Local changemakers, mentors, and influencers can direct adolescents towards these centers. Mobile learning centers should be deployed for areas with limited internet connectivity.

Collaborate with private sector companies in the domains of retail, public health, banking, infrastructure and technology for training on skills corresponding to job opportunities and also offering on-the-job training and internships.

Set up an online portal to provide information and skill development on new and alternative digital livelihoods that adolescents can explore and access from their homes, including setting up online businesses, becoming a social media influencer (on YouTube, Instagram, TikTok etc.), data entry and other topics. Teachers and career counsellors should guide adolescents to this online portal.

**Example in practice:**
Websites like https://www.wespace.in.th/ provide opportunities for adolescents to ask themselves questions for self reflection, explore careers, and engage with activities and online communities related to various professions.

**Example in practice:**
The Malaysia Digital Economy Corporation have created a Digital Skill Training Directory which is a catalogue of courses and online training providers that have been reviewed and endorsed by a panel of digital industry experts to guide adolescents in selecting courses that meet their career needs for digital economy jobs.

## Opportunity 4:

# Create enabling environments for adolescents to realise their online potential

**A. Guide access to safe and reliable platforms for information, self-help, and self-expression**

Create and amplify access to a repository of verified public and private online resources to suit the unique needs of marginalised adolescents, in partnership with youth activists, CSOs, and youth influencers.

Mandate collaboration of online support groups with government and/or civil society organisations - especially those that provide mental health, psycho-social or distress support - to provide quality in-person and online support to adolescents, including SOS support.

Leverage the power of technology companies to advance credible, ethical and non-

discriminatory platforms that protect and benefit children, while preventing those that disseminate child-abuse material or fake information.

**B. Provide teachers and parents with skills and knowledge to work with adolescents to ensure they are safe, supported and empowered when online**

Ensure that messaging around online engagement is consistent at home and in school by supporting teachers and parents with evidence-based information to guide and positively mediate - rather than restrict - exposure to digital spaces.

Schools should extend counselling support to teachers and parents to help them navigate

problems like online bullying and exposure to inappropriate or distressful content that adolescents could face in their online environments. The training material for such support services should be developed in collaboration with adolescents to support their uptake and effectiveness and parents and teachers should also encourage adolescents to speak up about any online risks they face.

Establish public engagement initiatives and training programmes in schools for parenting in a digital age, by integrating technology into parenting and carer programmes. This should include building parent and carer digital literacy and skills, specifically targeting

women and those in low-resource settings. They should be provided guidelines on age-appropriate digital parenting for adolescents and encouraged to communicate and make joint decisions with their children on online use.

Empower teachers to be good role models and help them master teaching technology to conduct distance and digital learning.

**Example in practice:**
In the Philippines, the Stairway Foundation is developing an e-learning platform for online safety. It is intended to capacitate teachers for child protection.

Editorial credit: Astono Singgih / Shutterstock.com

## Opportunity 5:

Mitigate online risk exposure and address gender-based discrimination and harm

**A. Raise awareness of online risks, rights and mitigation techniques, especially for girls and LGBTQIA+ adolescents who are most at risk**

Support peer and bystander interventions to accelerate support to vulnerable adolescents, in addition to ensuring safety services for adolescents through helplines and chatbots.

Tap into media and micro-influencer networks to raise awareness of online risks and encourage adolescents to report online abuse.

Promote gender equality, depiction of diverse body types and normalise gender expression in online spaces, including on social media, Over-The-Top (OTT)[134] media platforms, and especially gaming platforms. Schools should sensitise adolescents to the suffering caused by online bullying and body shaming.

**Example in practice:**
In the Philippines, the #BeCyberSafe campaign was launched to raise awareness about cyber safety through educational videos around topics like cyberbullying.

**Example in practice:**
In Thailand, the police department have recently created 'MySis' which is a chatbot and chat room, where girls can get preliminary information about where to go in case of gender-based violence.

139 Over-The-Top (OTT) media platform referring to any streaming service that delivers content over the internet
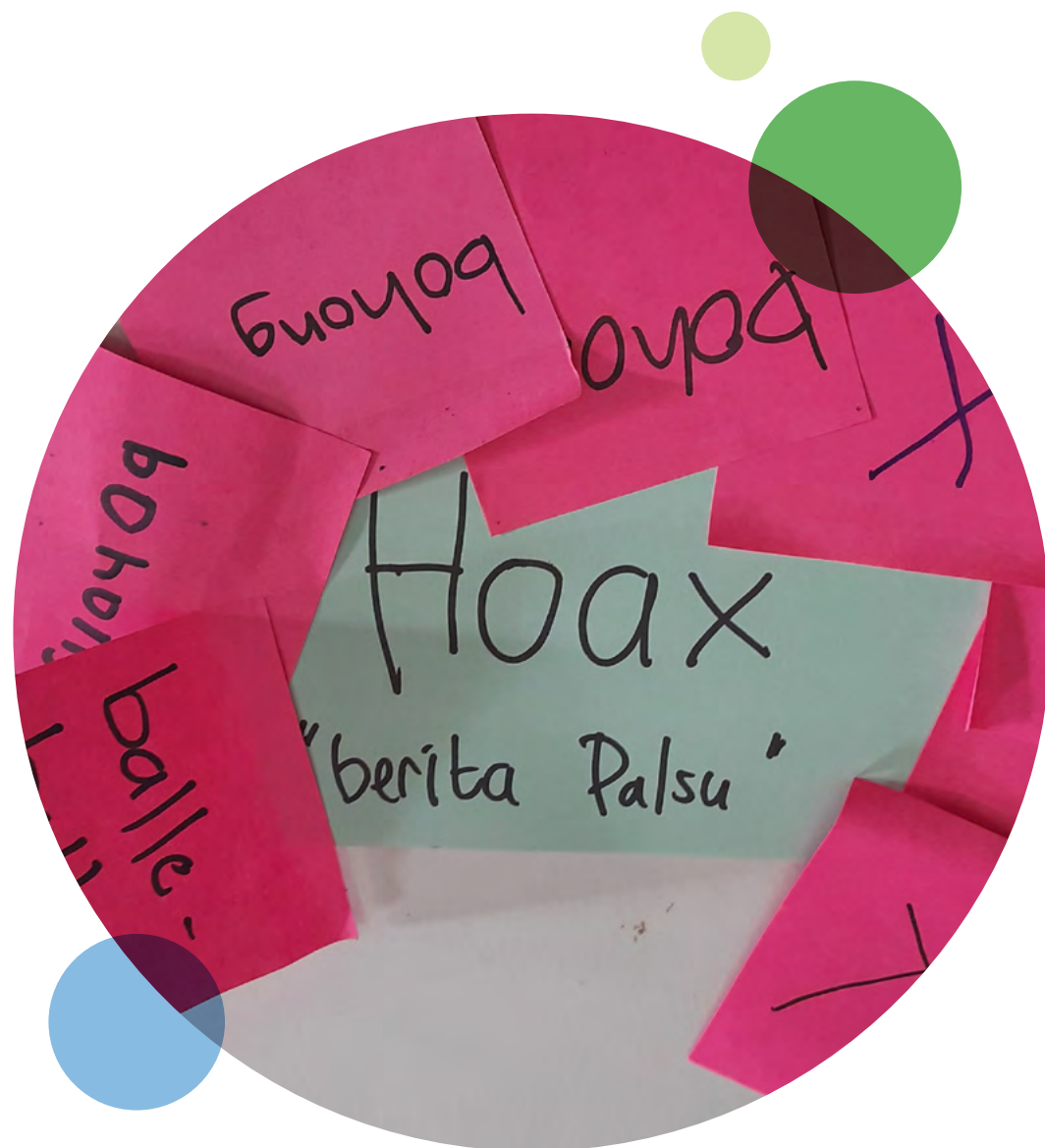
**B. Create safeguarding mechanisms for the online safety of children**

Develop ethical standards for platform providers so that it is easy to access safety features and report online threats, as well as ensure that accounts are private by default.

Build institutional capacity and mechanisms to monitor, investigate, and prosecute reports of online abuse to ensure the law is enforced for child protection.

Review legal policies to ensure that they are sensitive to digital harassment faced by adolescents and make it easy for them to report, especially those who are more vulnerable to online risks. The policies should recognise that online violence may be a part of an adolescent's physical environment. Hence strategies should be incorporated

and implementing organisations should be sensitised to handle such situations.

**Example in practice:**
In the Philippines, UNICEF has recently supported the government's Department of ICT to develop a comprehensive Child Online Safeguarding Policy.

# References

Abi-Jaoude, Elia et al, 'Smartphones, social media use and youth mental health', CMAJ, vol. 192, no. 6, 10 February, 2020.

Ansari, Jamal A. N. and, Nawab A. Khan, 'Exploring the role of social media in collaborative learning the new domain of learning', Smart Learning Environments, vol 7, no. 9, 16 March 2020.

Arinto, Patricia B., Liezl F. Dunuan and Monalisa T. Sasing, EdTech Ecosystem Report: Philippines, USAID, 2020.

Aziz, Zarizana A.,  Online Violence Against Women in Asia: A Multi-Country Study, UN Women and MInistry of Gender Equality and Family Korea,  November 2020.

2020 Affordability Report, Alliance for Affordable Internet, 2020.

Because We Matter: Addressing COVID-19 and Violence Against Girls in Asia-Pacific, Save the Children and Plan International,  2020.

Child Online Safety Index, 2020: Real-time Measurement for Child Online Safety and Digital Citizenship, DQ Institute, 2020,.

COVID-19 and Violence against Women: The Evidence behind the Talk, UNFPA, UN Women and Quilt.AI, 21 March, 2021.

COVID-19- The True Test of ASEAN Youth's Resilience and Adaptability Impact of Social Distancing on ASEAN Youth, ASEAN YOUTH SURVEY 2020, World Economic Forum and Sea, July 2020.

Child Online Safety Index, DQ Institute, 2020.

Christens, Peterson B.D., 'The role of empowerment in youth development: a study of sociopolitical control as mediator of ecological systems' influence on developmental outcomes',  J Youth Adolesc, vol. 41, no. 5, 2012, pp.623–635.

Digital Civility Index, Microsoft, 2021.

Digital Kids Asia-Pacific: Insights into Children's Digital Citizenship, UNESCO, Bangkok, 2019.

DIGITAL 2021 INDONESIA, DATAREPORTAL, we are social and Hootsuite, 11 February 2021.

DIGITAL 2021 MALAYSIA, DATAREPORTAL, we are social and Hootsuite, 11 February 2021.

DIGITAL 2021 PHILIPPINES, DATAREPORTAL, we are social and Hootsuite, 11 February 2021.

DIGITAL 2021 VIetn Nam, DATAREPORTAL, we are social and Hootsuite, 11 February 2021.

Distance Learning Technology Rapid Assessment, UNICEF and Thailand Cyber University, 2021.

Executive Summary Malaysia Edition: Our Lives Online: Use of social media by children and adolescents in East Asia - Opportunities, Risks and Harms, Childline Foundation and UNICEF, Malaysia, 2020.

e-Conomy SEA 2020,  Google, Temasek and Bain and Co.,10 November 2020.

ICT Use and Access by Individuals and Household Survey Report 2019, Department of Statistics Malaysia, Putrajaya, Malaysia, 2019.
"Asia–Pacific Employment and Social Outlook 2018", ILO, Bangkok, 2018.

IMD World Digital Competitiveness Ranking 2020, IMD World Competitiveness Center, 2020.

Ingram, George. "Bridging the Urban-rural Digital Divide and Mobilizing Technology for Poverty

Eradication: Challenges and Gaps', Brookings Global Working Paper # 157, Brookings Institution, June 2021, pp. 1-22.

Internet Freedom Scores, Freedom House, 2021.

Learning and earning losses from COVID-19 school closures in developing Asia: Special Topic of the Asian Development Outlook 2021, ASIAN DEVELOPMENT BANK, April 2021.

Livingstone, Sonia,Julia Davidson and Joanne Bryce, Children's Online Activities, Risk and Safety: A Literature Review by the UKCCIS Evidence Group, UKCCIS Evidence Group, London, October 2017.

Marini, Sylvi, Farida Hanum, and Alfian Sulistiyo, 'Digital Literacy: Empowering Indonesian Women in Overcoming Digital Divide', Advances in Social Science, Education and Humanities Research, 398, 2nd International Conference on Social Science and Character Educations (ICoSSCE 2019), 2019, pp. 137-41.

National Baseline Study on Violence Against Children: Philippines, Council for the Welfare of Children and UNICEF, Philippines, October 2016.

Middaugh, Ellen, Lynn Schofield Clark and Parissa J. Ballard, 'Digital Media, Participatory Politics, and Positive Youth Development', Pediatrics, vol. 140, no. 2. 2017, pp. 127–131.

"My Teacher Said I Had a Disease": Barriers to the Right to Education for LGBT Youth in Vietnam, Human Rights Watch, 12 February 2020.

Multiple Indicator Cluster Survey (MICS) 2019 Report of 17 Selected Provinces in Thailand, National Statistical Office Thailand and UNICEF, Thailand, March 2021.

Our Lives Online: Use of social media by children and adolescents in East Asia- opportunities, risks and harms, UNICEF East Asia and Pacific and Center for Justice and Crime Prevention, Thailand, 2020.

Out Online: The experiences of lesbian, gay, bisexual and transgender youth on the internet, The Gay, Lesbian & Straight Education Network, Center for Innovative Public Health Research and Crimes Against Children Research Center, New York, 2013.

Philippines Kids Online Report: The Online Experiences of Children in the Philippines: Opportunities, Risks and Barriers, UNICEF, IACACP, Australian GOvernment, De LaSalle University Manila, Philippines, 2020.

Programme for International Student Assessment 2018, OECD, 2018.

Rapid assessment on the social and economic impacts of covid-19 on the children and families in Viet Nam, UNICEF Viet Nam, August 2020.

SITUATIONAL ANALYSIS ON DIGITAL LEARNING LANDSCAPE IN INDONESIA, UNICEF Indonesia, February 2021.

Speedtest Global Index, SPEEDTEST, August 2021

Spotlight on Indonesia: Seizing the digital transition opportunity now, GSMA, February, 2020.

Stalker, Peter, Sonia Livingstone, Daniel Kardefelt- Winther and Marium Saeed, Growing up in a connected world, Innocenti Research Report, UNICEF Office of Research - Innocenti, Florence,Italy, 2019.

The Inclusive Internet Index, The Economist, 2020.

Tran, Trung et al., 'How Digital Natives Learn and Thrive in the Digital Age: Evidence from an Emerging Economy', Sustainability, vol. 12, no. 9, 7 May 2020.

UNICEF'S APPROACH TO MENTAL HEALTH DURING COVID-19 IN East Asia and Pacific, UNICEF East Asia and Pacific Regional Office, October 2020.

Voelker, Mark, Digital Literacy in Education Systems across ASEAN, UNICEF East Asia and Pacific Regional Office, February 2021.

Wang, Rui, Brian Hempton, John P Dugan, and Susan R Komives, 'Cultural Differences: Why Do Asians Avoid Extreme Responses?' Survey Practice, vol. 1, no. 3, 2008.

World Population Prospects 2019: Data Booklet, United Nations Department of Economic and Social Affairs, 2019.

Women's Rights Online Report Card Indonesia, World Wide Web Foundation, 2016.

# Annexes

## Annex 1: Key Lines of Inquiry for the Research

| | |
|---|---|
| **Platforms and Content** | What are adolescents consuming in terms of digital engagement and educational content — whether formal, non-formal or informal — including what they like or value, specifically noting if there are differences between age groups, genders and regions?<br><br>What are some of the platforms with which adolescents engage to acquire credible information and knowledge — and what is it about these platforms that are liked? |
| **Equitable access** | What are the key barriers to access, including internet connectivity and device ownership?<br><br>To what extent do marginalised groups have access to digital learning platforms?<br><br>How is access determined by age, gender, geography, financial capacity and disability? |
| **Digital Literacy** | How do adolescents interface with digital platforms?<br><br>Do adolescents know where to find the right kind of information and what is the level of expertise/familiarity with EdTech/digitech?<br><br>How can we understand the difference in levels of literacy across income groups, education status and genders?<br><br>What are the literacy skills that adolescents currently lack, and wish to build further? |
| **Digital Risks** | What are the increased vulnerabilities, mental health challenges, and other risks that come with online learning and engagement with peers?<br><br>How does this differ for girls as they are at a higher risk of cyber crime, bullying, and privacy? Are there coping mechanisms and support services that exist currently? |
| **Digital Potential** | How are adolescents engaging with each other and acquiring various skills - including digital and soft skills - through online recreation and networking?<br><br>What are possibilities for expanding the potential of various cohorts of adolescents across genders, ages and socio-economic divides? |

# Annex 2: Sample of Primary Research

**32 ethnographic-style interviews** with adolescents exhibiting diverse behaviours using human centered design tools. In each country, 8 interviews were held including 2 content creators and individuals from vulnerable communities including LGBTQIA+, those with disabilities and ethnic minorities.

| Demographic factor | Philippines | Indonesia | Thailand | Malaysia |
|---|---|---|---|---|
| Age - 10-14: 15:19 | 50:50 | 50:50 | 30:70 | 50:50 |
| Gender - Male:Female | 60:40 | 60:40 | 50:50 | 50:50 |
| Geography - Rural:Urban | 50:50 | 50:50 | 40:60 | 50:50 |
| Total | 8 (6+2) | 8 (6+2) | 8 (6+2) | 8 (6+2) |

**20 co-design workshops** with 162 adolescents including 81 boys and 81 girls, using participatory and visual human centred design tools. 5 workshops were conducted in each country. These workshops were inclusive of vulnerable groups like adolescent parents and refugees.

| Demographic factor | Philippines | Indonesia | Thailand | Malaysia |
|---|---|---|---|---|
| Age - 10-14: 15:19 | 40:60 | 40:60 | 50:50 | 30:70 |
| Gender - Male:Female | 40:60 | 50:50 | 60:40 | 50:50 |
| Geography - Rural:Urban | 60:40 | 60:40 | 50:50 | 50:50 |
| Total | 40 | 41 | 40 | 41 |

**Survey with 1000 adolescents** to understand online behaviours and access patterns

| Demographic factor | Philippines | Indonesia | Thailand | Malaysia |
|---|---|---|---|---|
| Age - 10-14: 15:19 | 50:50 | 60:40 | 50:50 | 60:40 |
| Gender - Male:Female | 50:50 | 50:50 | 50:50 | 50:50 |
| Geography - Rural:Urban | 40:60 | 50:50 | 40:60 | 20:80 |
| Total | 254 | 306 | 200 | 249 |

# Annex 3: Ethical Considerations

The research team took a number of steps to ensure that the well-being and safety of the adolescents participating in the study was paramount at all times, and the study was subject to rigorous ethical standards. Ethical clearance for the study was taken at an international level by UNICEF's independent ethics reviewer. National level clearances were taken in Indonesia and the Philippines. All researchers and country partners undertook the UNICEF ethical research training programme, "Introduction to Ethics in Evidence Generation", prior to the research rollout. The researchers ensured safety for all participants through protection measures for all child participants in-country. When research was conducted offline, COVID-19 safety protocols in accordance with standards of the World Health Organisation (WHO) were ensured.

Before the study commenced, informed consent forms were signed by all participants or carers of minor participants. Where adolescents were recruited through schools or shelters, consent was obtained from the mandated guardians. In every country all the children received an information leaflet with details about the study, along with contact and referral numbers. Verbal instructions that repeated the information on the consent forms were given at the beginning of each focus group in the preferred language of the participants.

To the greatest extent possible, adolescents were interviewed in a safe and closed environment with no other adults present (except the facilitator(s) and the translator). No instances of trauma or harmful experiences were reported during this study.

# Annex 4: Status of Internet Freedom

| Country | Internet Freedom Status | Score |
|---|---|---|
| Indonesia | Partly Free | 49 |
| Malaysia | Partly Free | 58 |
| Philippines | Partly Free | 64 |
| Thailand | Not Free | 35 |
| Viet Nam | Not Free | 22 |