DIGITAL LITERACY IN EDUCATION SYSTEMS ACROSS ASEAN

Key insights and opinions of young people

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Digital literacy in education systems across ASEAN
Key insights and opinions of young people

This report is based on an online survey that was conducted as a lead up to the "Conference on the Digital Transformation of Education Systems throughout ASEAN," co-hosted by the Government of Viet Nam, ASEAN and UNICEF, in October 2020. The report was commissioned by UNICEF East Asia and Pacific Regional Office, and prepared by Marc Voelker, Institute for Population and Social Research, Mahidol University.

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INTRODUCTION

Strengthening the digital literacy of its youth populations has been a key challenge for ASEAN countries. Digital literacy refers to a person's ability to use digital platforms for finding, consuming, evaluating, creating and communicating digital content. In an increasingly digitalized world, young people's success often depends on such skills as it determines their capability to participate in a modern labour force and make well-informed decisions on matters that affect their lives. The COVID-19 pandemic has accelerated the digital transformation of ASEAN societies and further highlighted the importance of digital literacy[1]. The educational, private and work life of young people has changed dramatically with the rise of online learning and remote working. Investing in the digital skills of young girls and boys will help them adapt to this new situation, acquire new skills and knowledge, increase their ability to connect with different people and communities and express their voices, contribute to the success of ASEAN businesses in increasingly competitive global markets[2] and help ASEAN nations to achieve their social development goals through its empowering effect on young people[3].

ASEAN countries show strong commitment to bolster the digital literacy of young people[4]. In 2019, ASEAN and UNICEF agreed to renew their Framework Agreement of Cooperation (FAC)[5]. In October 2020, ASEAN education ministers, chaired by Viet Nam, held the "Conference on the Digital Transformation of Education Systems throughout ASEAN" and agreed in principle to a joint statement which expresses their agreement of working towards the stronger development of digital literacy skills among their youth populations[6]. In particular, as a youth representative, Audrey Pe presented key findings of the survey, and shared her ideas and opinions on the digital learning system. She is 19 years old, and the founder and executive director of WiTech. The conference is planned to integrate digital literacy in the ASEAN Work Plan on Education 2021–2025, which promises to provide a boost to the digital transformation of education systems in ASEAN. In November 2020, the ASEAN Youth Ministers adopted the Joint Statement of ASEAN Youth Ministers on Enhancing Youth Cooperation for a Cohesive and Responsive ASEAN Community, encompassing a commitment ensuring inclusivity and sustainability in skills development among ASEAN Youth in preparation for the Fourth Industrial Revolution (4IR). The Joint Statement was subsequently noted by the ASEAN Leaders at the 37th ASEAN Summit and will inform the ongoing development of ASEAN Work Plan on Youth 2021-2025, which includes programmes on digital skills development.

To ensure that policies and investments in digital learning and infrastructure meet the needs of young people, their inclusion in this process is crucial. Governments and partners across ASEAN countries recognize the importance of engaging with young people to address the challenges and provide solutions. Thus, to ensure that policymakers and practitioners can benefit from the important feedback of adolescents and youth themselves on this important topic, UNICEF EAPRO conducted an online survey with about 8,000 participants between 4 September and 20 September 2020, focusing on securing their inputs on digital literacy in education systems across ASEAN.

1 World Economic Forum (2020), COVID-19 – The True Test of ASEAN Youth's Resilience and Adaptability Impact of Social Distancing on ASEAN Youth, (URL: https://www.weforum.org/reports/covid-19-the-true-test-of-asean-youths-resilience-and-adaptability).

2 Kearney (2020), The ASEAN digital revolution, (URL: https://www.kearney.at/web/guest/digital-transformation/article/?/a/the-asean-digital-revoluti-1).

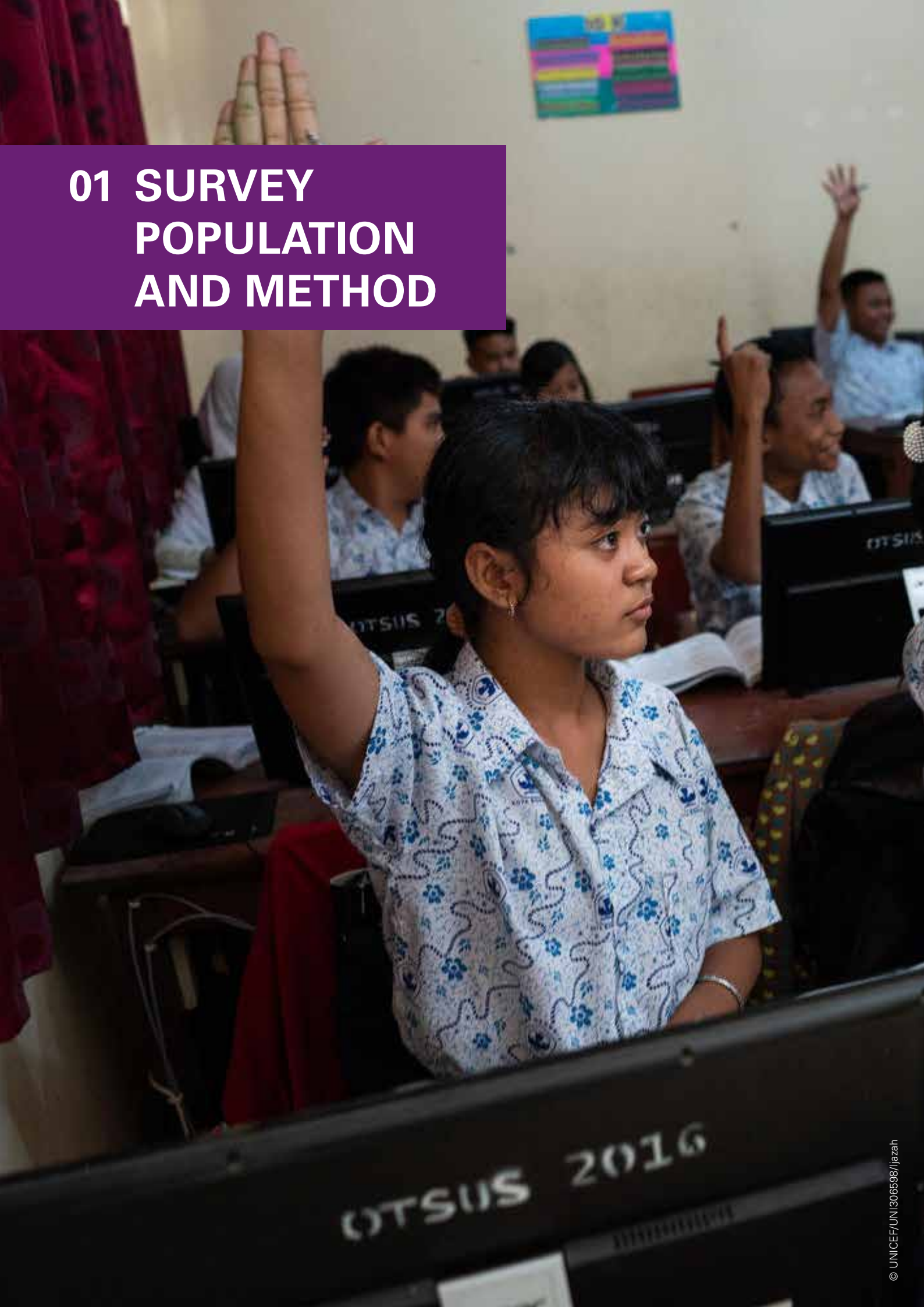
3 UNICEF (2020), ASEAN and partners meet to accelerate action on child online protection, (URL: https://www.unicef.org/eap/press-releases/asean-and-partners-meet-accelerate-action-child-online-protection).

4 UNICEF (2020), East Asia and the Pacific: Spearheading digital transformation of education, (URL: https://gdc.unicef.org/resource/east-asia-and-pacific-spearheading-digital-transformation-education).

5 ASEAN (2019), ASEAN renews partnership with UNICEF, UN Women, (URL: https://asean.org/asean-renews-partnership-unicef-un-women/).

6 ASEAN (2020), Joint Statement Conference on the Digital Transformation of Education Systems throughout ASEAN, (URL: https://asean.org/joint-statement-conference-digital-transformation-education-systems-throughout-asean).

01 SURVEY POPULATION AND METHOD



01 SURVEY POPULATION AND METHOD

The survey was administered online and generated a convenience sample of pre-adolescents, adolescents and young adults between 10 and 24 years of age for each ASEAN country (Table 1), part of which is the younger segment of ASEAN youth (15-35 years old)[7]. The link to the questionnaire was shared through UNICEF social media channels, UNICEF youth partners, NGOs, CSOs, UN agency partners and working groups, private sector groups, universities, entrepreneurship groups, youth networks, networks of regional UNICEF offices, the United Nations Major Group for Children and Youth (UNMGCY), UN regional agencies, ASEAN entities, the ASEAN Senior Officials Meeting on Youth (SOMY), and ASEAN-affiliated youth organisations. In Myanmar, the survey was administered through U-report, a social messaging tool allowing young people from various parts of Myanmar to respond to polls on issues that matter to them. In Cambodia, phone calls were used to reach a larger number of youth respondents. Response rates across countries varied substantially, resulting in considerable differences in sample size across countries, with youth from Myanmar and Viet Nam accounting for about 88% of all survey respondents. The survey was anonymous as no personal identification information of respondents was collected.

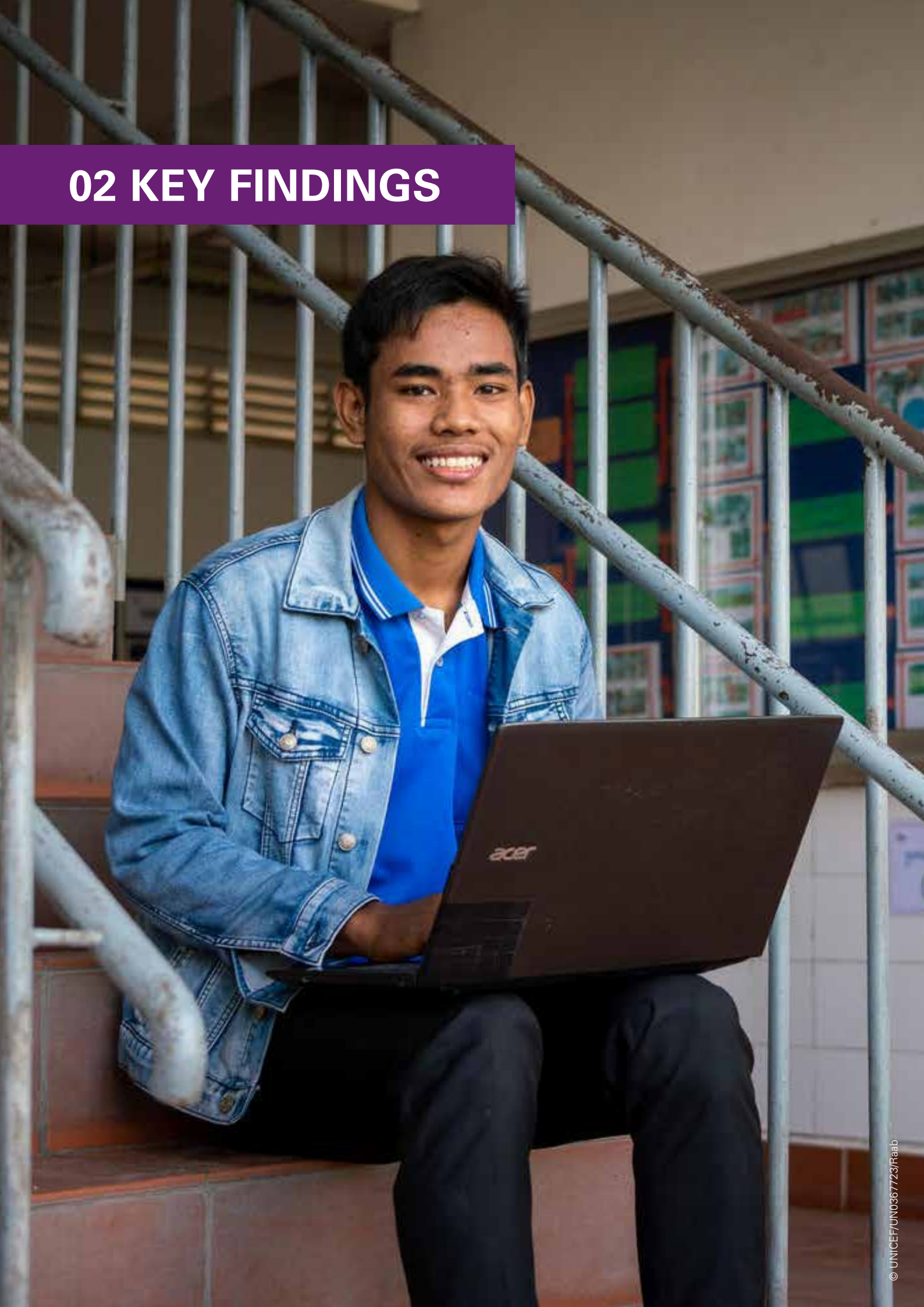
TABLE 1. Sample size across participating countries

Country	Number of youth respondents
Brunei Darussalam	10
Cambodia	79
Indonesia	325
Lao PDR	68
Malaysia	197
Myanmar	6,166
Philippines	296
Singapore	34
Thailand	84
Viet Nam	1,497
Total	8,756

When interpreting the results of the survey, several methodological limitations need to be taken into consideration. First, due to the non-probability sampling approach that was used to select the survey respondents, the findings presented in this report are not statistically representative of the underlying population of young people. While the results could be indicative of underlying trends and patterns, they should be regarded as tentative and further, methodologically rigorous, investigation is needed. Second, because of the uneven distribution of the non-probability sample of respondents across countries, particular caution is warranted when interpreting the results from countries with relatively small numbers of respondents. The large differences in the number of respondents across countries are, at least partly, due to different approaches in administering the survey questionnaire. In Myanmar, for instance, the survey was administered through U-report, which likely facilitated the process of data collection. Third, as this was an online survey, it should be noted that the findings might be biased towards respondents with access to the internet, which possibly excludes the most technologically disadvantaged parts of the youth population. Last but not least, respondents' answers to questions which involved a self-assessment of abilities or knowledge could be subject to bias as some respondents might have been unable or unwilling to provide accurate replies.

7 ASEAN member states use an age range of population categorized as youth of between 15 and 35 years of age, while the United Nations defines youth as that part of the population between 15 and 24 years of age.

02 KEY FINDINGS



02 KEY FINDINGS

The number of observations in the following figures may differ from the total sample size reported in Table 1 if a question was only asked to a specific sub-group of the total sample or in case of missing values. The number of observations for each statistic is reported below each figure.

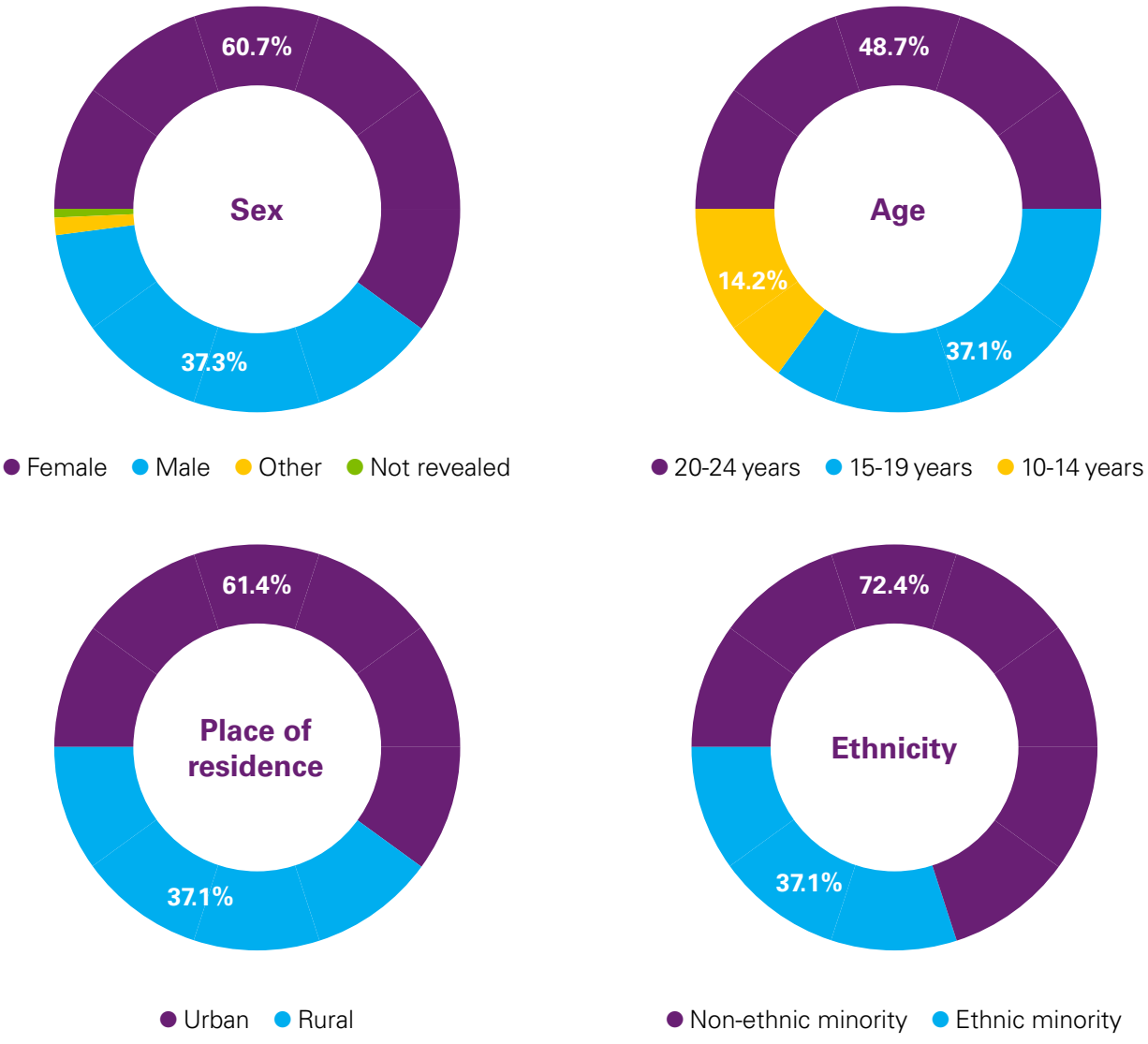
1. GENERAL DEMOGRAPHIC INFORMATION

Figure 1 shows that the survey has a higher representation of female respondents. A small share of respondents indicated their sex as "other". Another small share of respondents chose not to reveal their sex. In terms of age, the survey includes mostly young adults between 20 and 24 years of age, followed by adolescents between 15 and 19 years of age and pre-adolescents between 10 and 14 years of age, which is beyond the age range of ASEAN youth. The major share of survey respondents lives in urban areas. Moreover, about three quarters of interviewed girls and boys are non-ethnic minority youth.

In terms of respondents' disability status, about 4% were girls and boys with disabilities.

FIGURE 1. Demographic characteristics of survey respondents

(n = 8,756 for sex and age; n = 8,611 for place of residence; n = 8,655 for ethnicity)



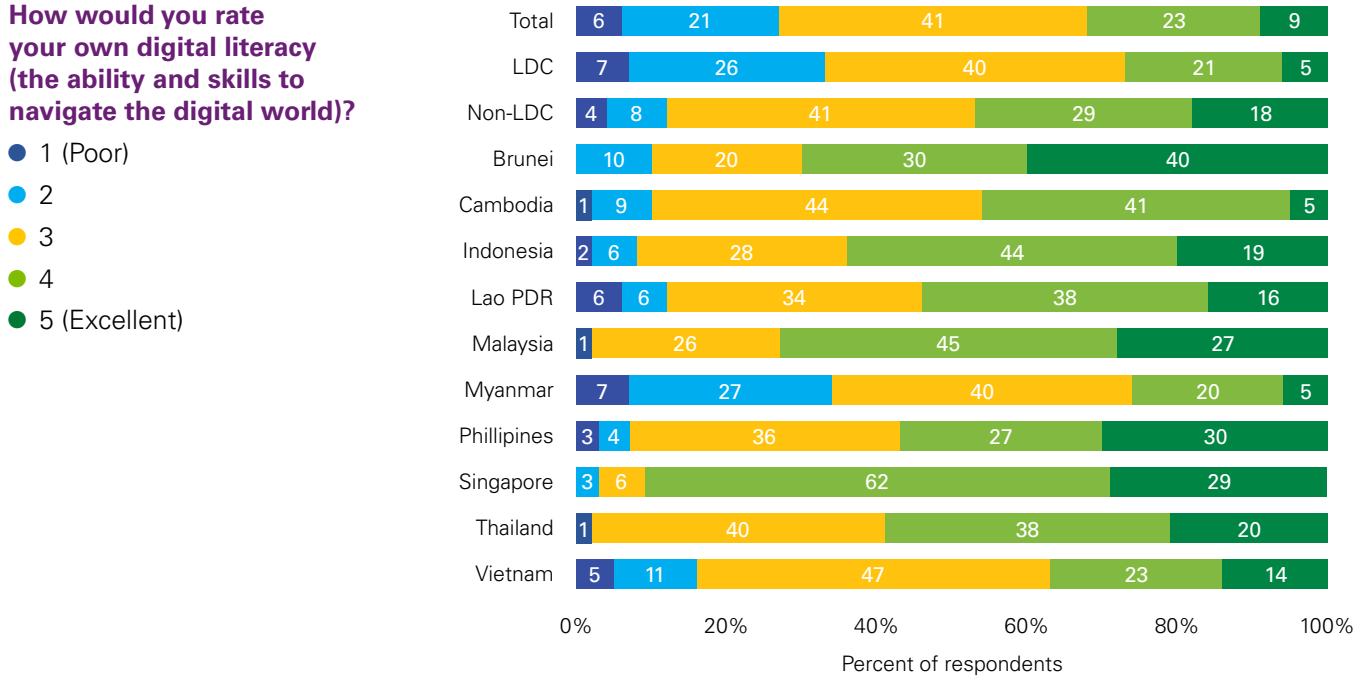
2. LEVEL OF DIGITAL LITERACY AMONG YOUNG PEOPLE

One of the main objectives of the survey was to assess young people's current level of digital literacy and identify sub-groups of the ASEAN youth population who may be falling behind others in terms of their digital skills. To this end, respondents were asked to provide a self-assessment of their ability and skills to navigate the digital world on a scale from 1 (poor) to 5 (excellent). The answers to this question are presented in Figure 2, which provides a break-down of the results by country, and Figure 3, which breaks down the findings by a number of socio-demographic factors.

The majority of young people in ASEAN has a moderate level of digital literacy, but large differences exist between individual countries.

FIGURE 2. Self-perceived level of digital literacy by country

(n = 8,585)



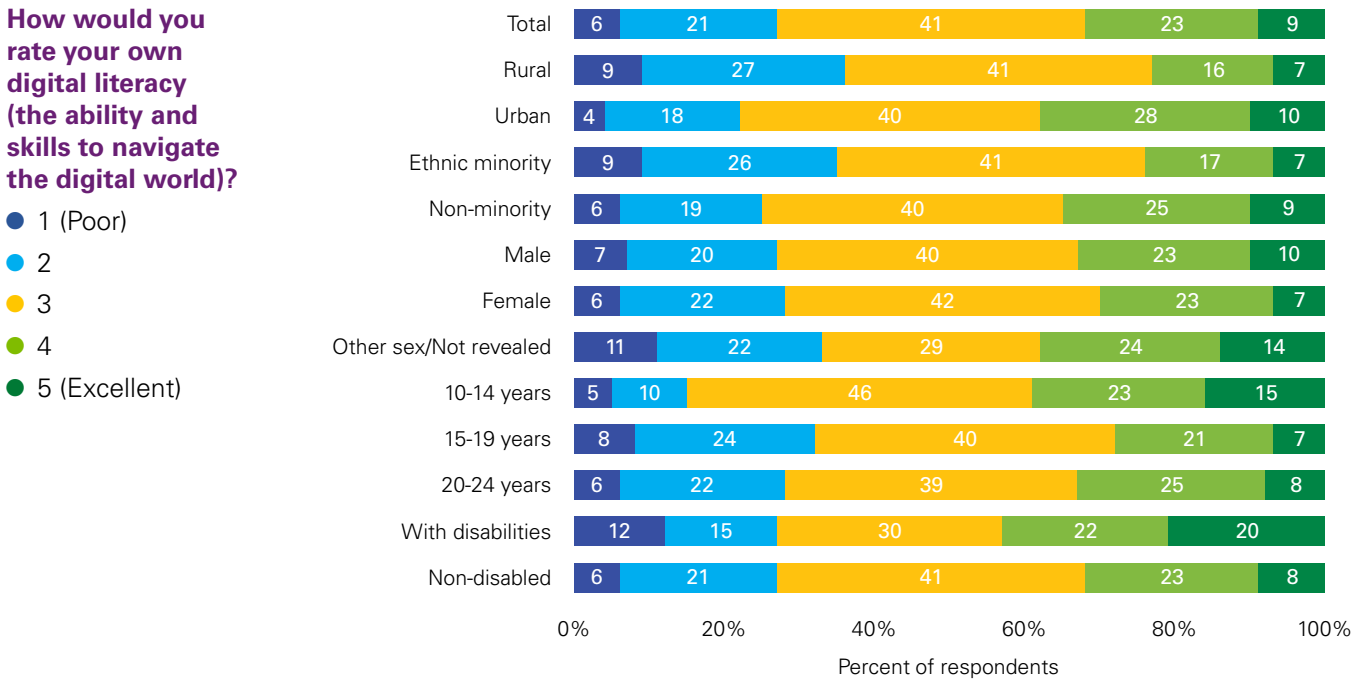
Results show that most girls and boys assessed their digital literacy as 3 out of 5, with only a small share of respondents stating that their digital literacy is either excellent or poor (Figure 2). However, survey findings indicate a sharp digital divide between countries, with a considerably larger percentage of respondents from least developed countries (LDCs) self-assessing their digital literacy as rather poor than their peers from non-LDCs who noticeably more often assessed their digital literacy as rather excellent. A closer look at the responses to this question by country reveals that, among least developed countries, Burmese respondents gave a considerably lower assessment of their digital literacy than young people from Lao PDR and Cambodia. On the other hand, among non-LDCs, the nation with the by far highest digital literacy was Singapore, followed by Malaysia and Brunei Darussalam.

Rural respondents, ethnic minority respondents and those between 15-24 years old lag behind their urban, non-minority and younger peers in terms of digital literacy.

Differences in the level of digital literacy were also revealed between young people from rural and urban environments, with rural respondents lagging behind their peers from urban areas (Figure 3). Furthermore, it was found that young people who belong to ethnic minorities have a lower level of digital skills than non-ethnic minority respondents. In terms of differences between age groups, it was found that the youngest group of respondents, those between 10 and 14 years of age, more frequently assessed their ability and skills to navigate the digital world as rather excellent than older adolescents and young adults. Perhaps surprisingly, a larger share of young people with disabilities reported excellent digital literacy than respondents with no disabilities. However, at the same time, the percentage of respondents with disabilities with poor digital literacy was also higher than among respondents with no disabilities. Girls and boys did not differ much in terms of their assessment of their digital literacy.

FIGURE 3. Self-perceived level of digital literacy by socio-demographic sub-groups

(n = 8,454 for rural/urban comparison; n = 8,585 for all other categories)



3. PERCEIVED IMPORTANCE OF DIGITAL LITERACY

Young people were also asked to rate the importance they think digital literacy has for their lives and future on a scale from 1 (poor) to 5 (excellent). Figure 4 provides an overview of their respective assessment by country. Overall, results indicate that most respondents consider digital literacy as important. However, young people's attitude towards the importance of digital literacy differs between least developed countries and non-LDCs, the latter of which view digital literacy as much more important. At the individual country level, respondents from Myanmar placed the lowest importance on digital literacy, while the respective rating was highest among girls and boys from the Philippines.

Most girls and boys see digital literacy as important for their future. Respondents from the Philippines and Singapore place highest importance on digital skills.

FIGURE 4. Perceived importance of digital literacy

(n = 8,494)

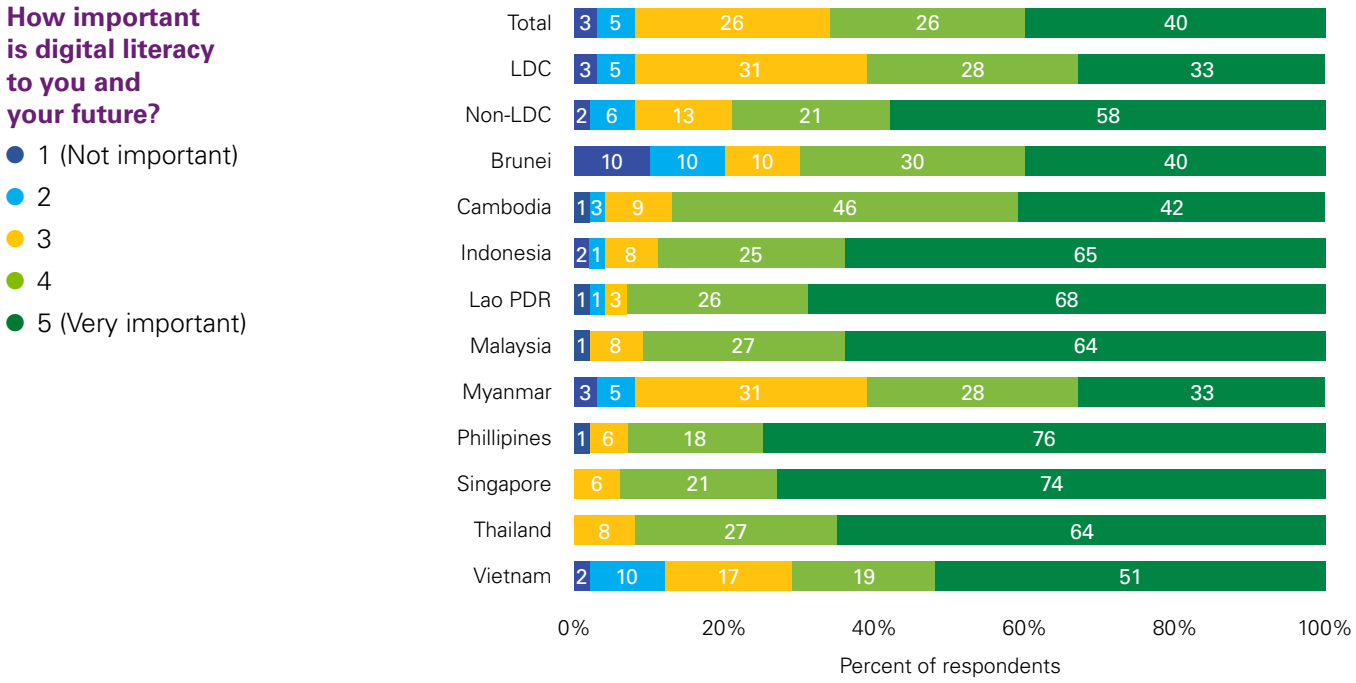
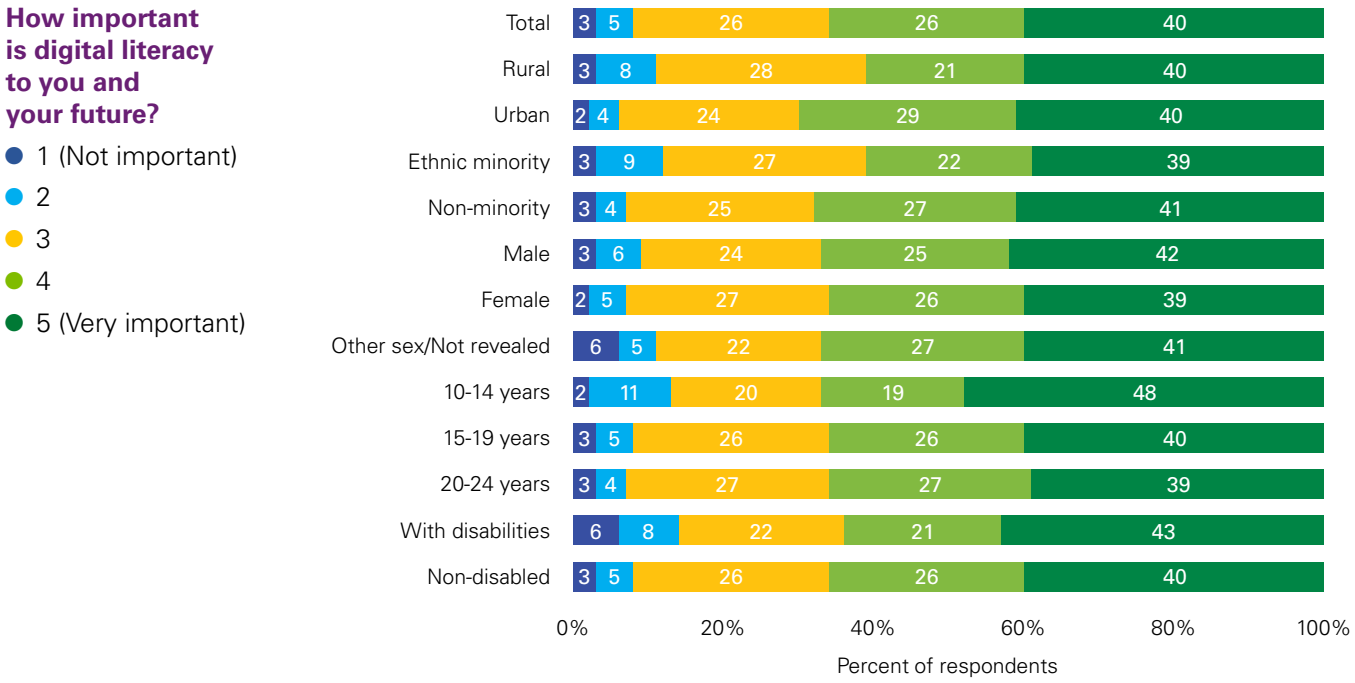


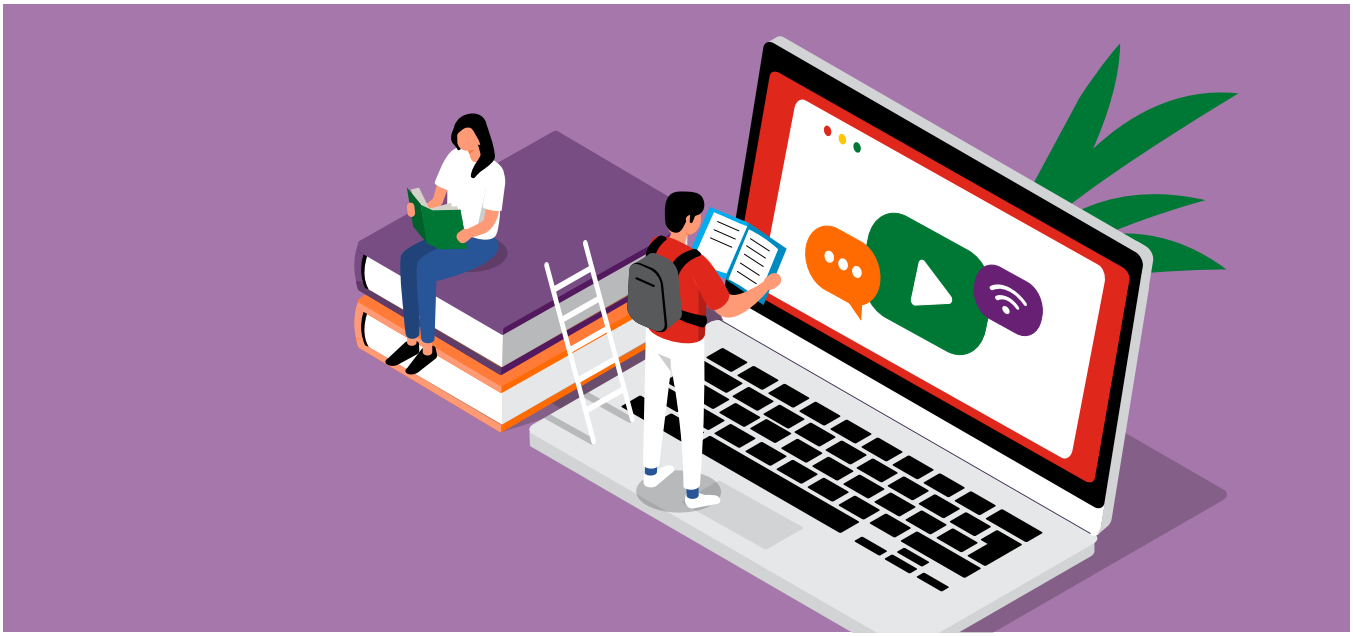
Figure 5 disaggregates the findings by a number of socio-demographic factors. Results show no strong differences between sub-groups of respondents, though urban respondents, non-ethnic minority respondents, young people aged 10-14 years and respondents with no disabilities view digital literacy as more important than their respective counterparts. No considerable difference can be noticed between female and male respondents.

Urban respondents, non-ethnic minorities, respondents aged 10-14 years and non-disabled respondents view digital literacy as slightly more important than their peers.

FIGURE 5. Perceived importance of digital literacy

(n = 8,366 for rural/urban comparison; n = 8,494 for all other categories)



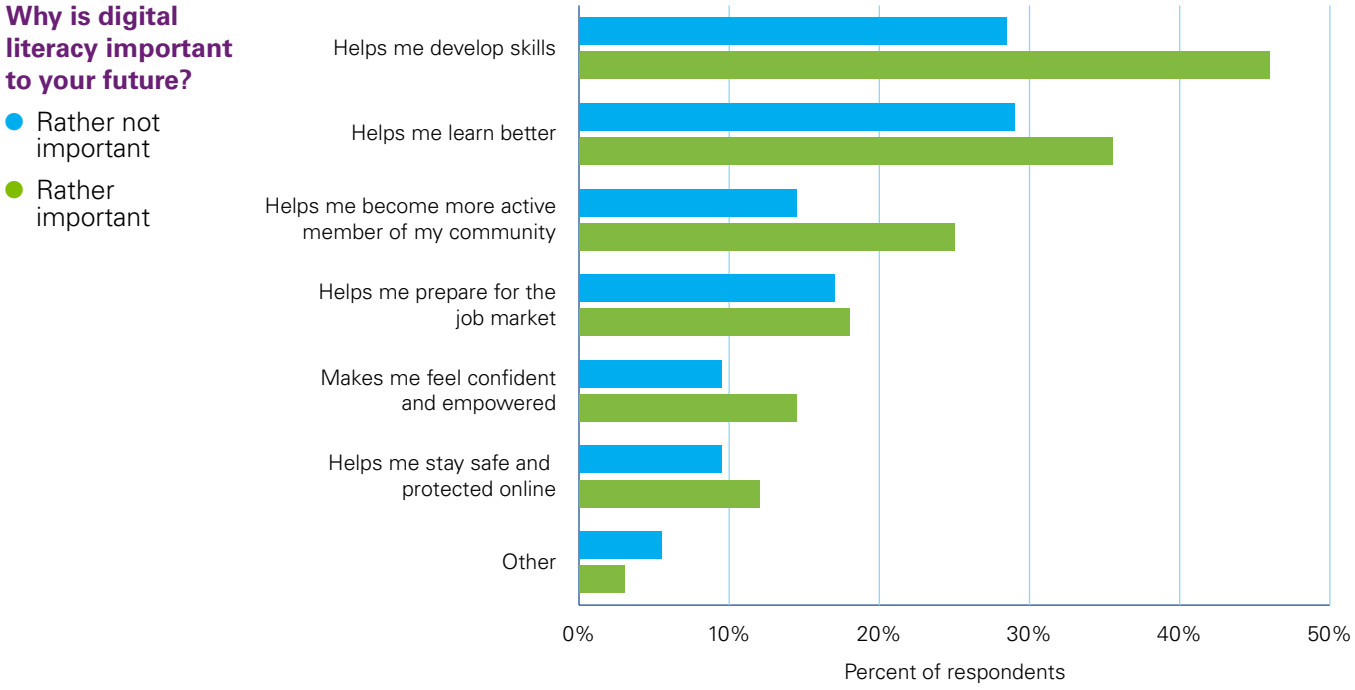


An overview of the reasons why girls and boys perceive digital literacy as important for their future is given in Figure 6. Among those who view digital skills as rather important (i.e. those who gave a score of 4 or 5 in the preceding question), the top reasons for doing so is that it helps them develop skills (50% of girls and 49% of boys) and learn better (40% of girls and 35% of boys). Other, less frequently mentioned, reasons were related to young people's ability to become active members of their communities (29% of girls and 24% of boys), preparation the job market (19% of both girls and boys), general confidence and empowerment (17% of girls and 14% of boys) as well as the feeling of being safe and protected online (13% of both girls and boys). Younger respondents as well as those from non-LDC countries and with disabilities tended to mention more reasons for their perception of the importance of digital literacy than their respective counterparts (not shown in Figure 6)

The main reason why young people view digital literacy as important is that it helps them develop other skills and learn better.

FIGURE 6. Reasons for perceived importance of digital literacy

(n = 8,756)



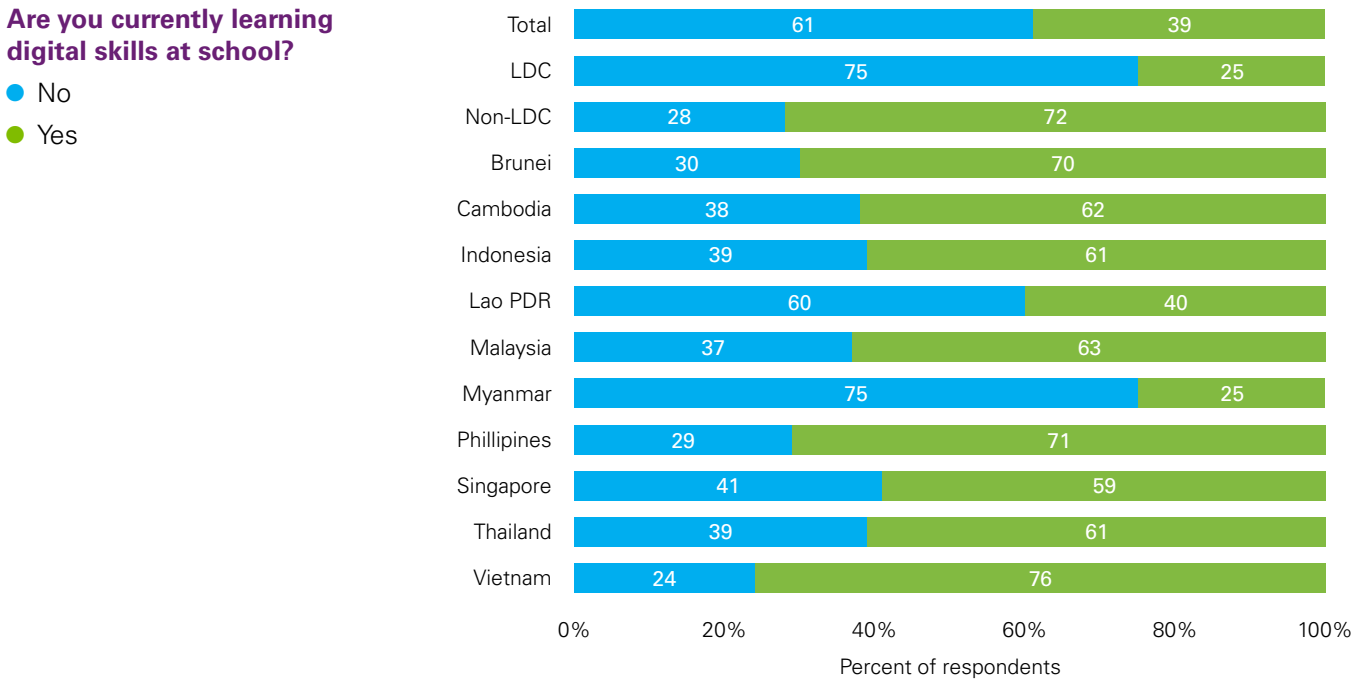
4. DIGITAL LITERACY EDUCATION IN SCHOOLS

A further set of questions investigated young people's experience with learning digital skills at school. Overall, only 39% of respondents indicated that they currently learn digital skills at school (Figure 7), although it must be taken into account that around 70% of all survey respondents were from Myanmar. In fact, the share of girls and boys who currently receive digital skills at school is lowest in Myanmar with 25%. Overall, among least developed countries, which include Myanmar, the share of respondents learning digital skills at school was also 25%. However, while this percentage was low among respondents in both Myanmar and Lao PDR, the share was much higher and comparable to non-LDC countries in Cambodia despite it also being a least developed nation.

> 61% of young people aged 10-24 years old in this survey were not learning digital skills at school. In Lao PDR and Myanmar only a minority receives digital skills education.

FIGURE 7. Digital literacy education in schools by country

(n = 8,230)

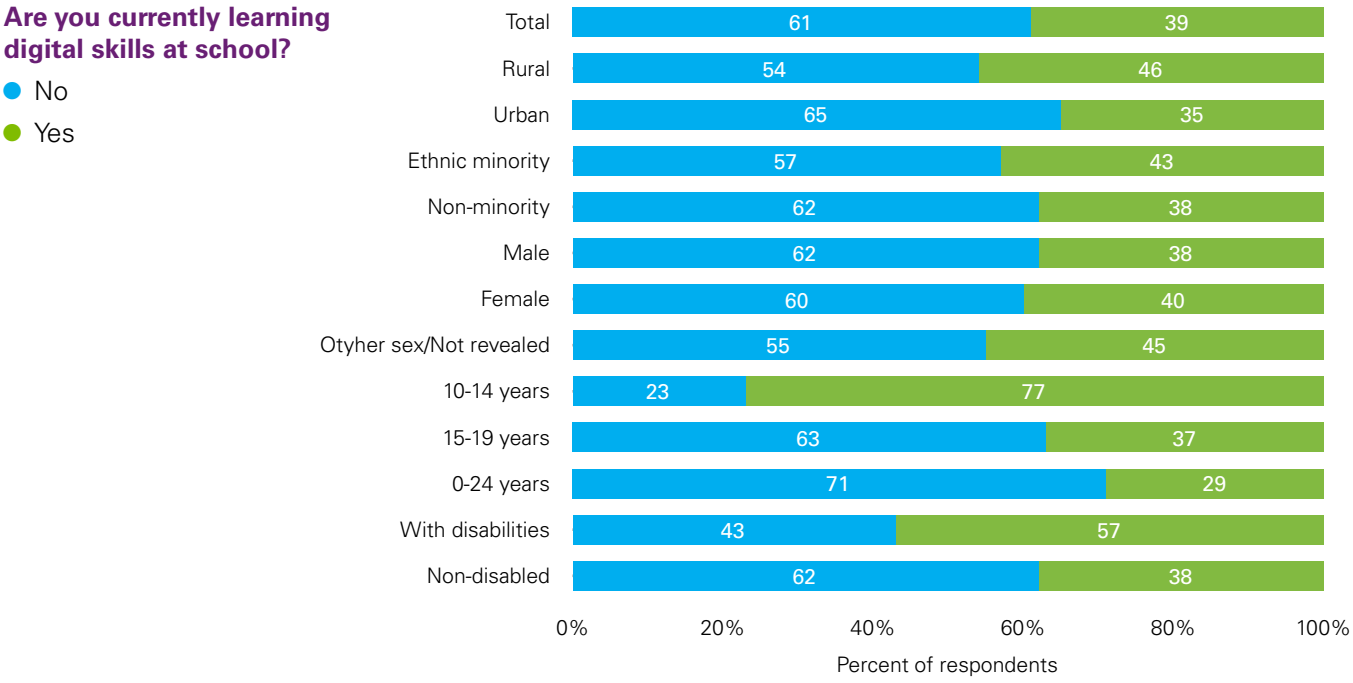


Furthermore, when looking at age groups separately, it can be seen that among respondents between 10 and 14 years of age, the share of those currently learning digital skills at school is much higher with 77%. (Figure 8) However, even in that sub-group of the respondents a considerable share of 23% stated to not receive any digital skills education at school. The percentage of girls and boys learning digital skills at school was also noticeably higher among those with disabilities and slightly higher among those living in rural areas or belonging to ethnic minorities. Female and male respondents were similar in terms of their exposure to digital skill education at school.

The share of young people currently learning digital skills is lower among rural respondents, ethnic-minority respondents, young people aged 15-24 years and youth with disabilities.

FIGURE 8. Digital literacy education in schools by geolocation, gender, minority status, age and disability

(n = 8,104 for rural/urban comparison; n = 8,230 for all other categories)



Respondents were also asked how they would rate their overall experience with digital learning at school. About 62% of respondents to this question were girls, 30% were between 10 and 14 years of age and 35% were aged 15-19 or 20-24 years, respectively. As shown in Figure 9, most girls and boys gave a moderate assessment of their experience (44%), followed by those who viewed it a rather positive (26%) or excellent (15%). The perceived quality of digital learning at school is higher in non-LDC countries, with Singapore receiving the best and Myanmar the lowest score.

Overall, young people give a moderate assessment of their experience with digital learning at school. Singapore respondents rate their experience as positive.

FIGURE 9. Perceived quality of digital literacy education in schools

(n = 3,213)

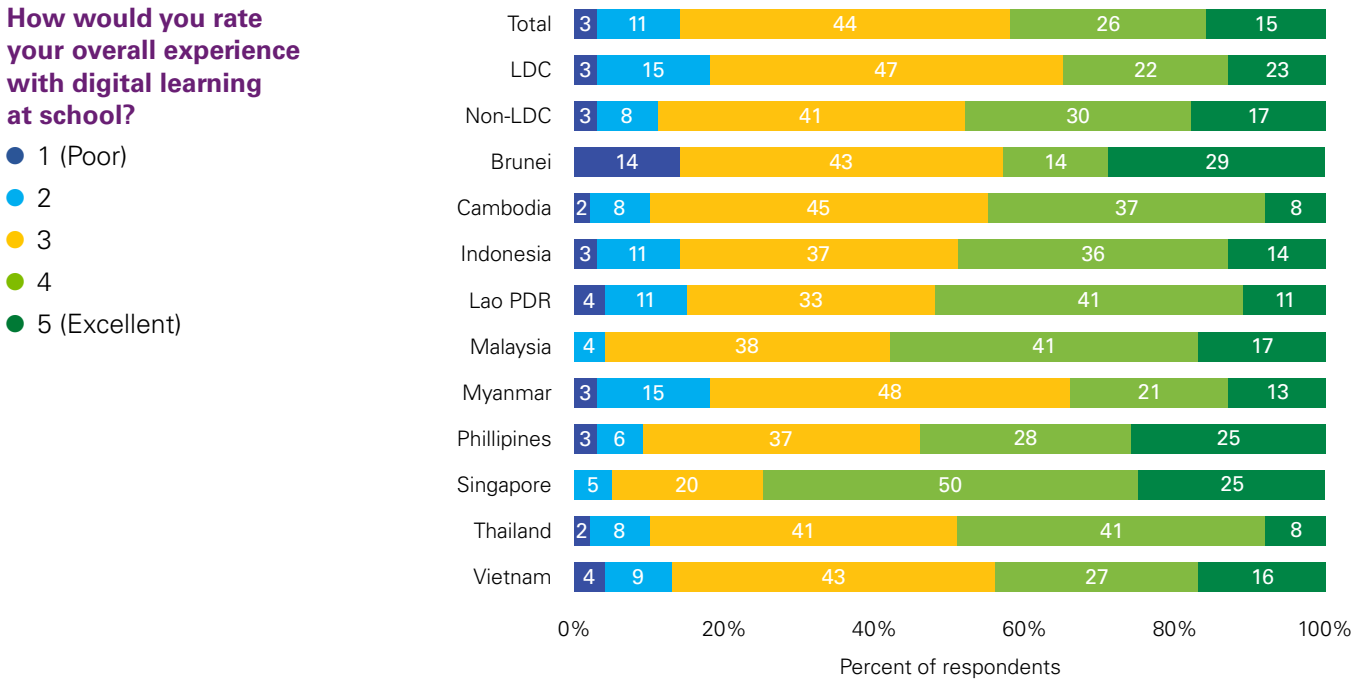
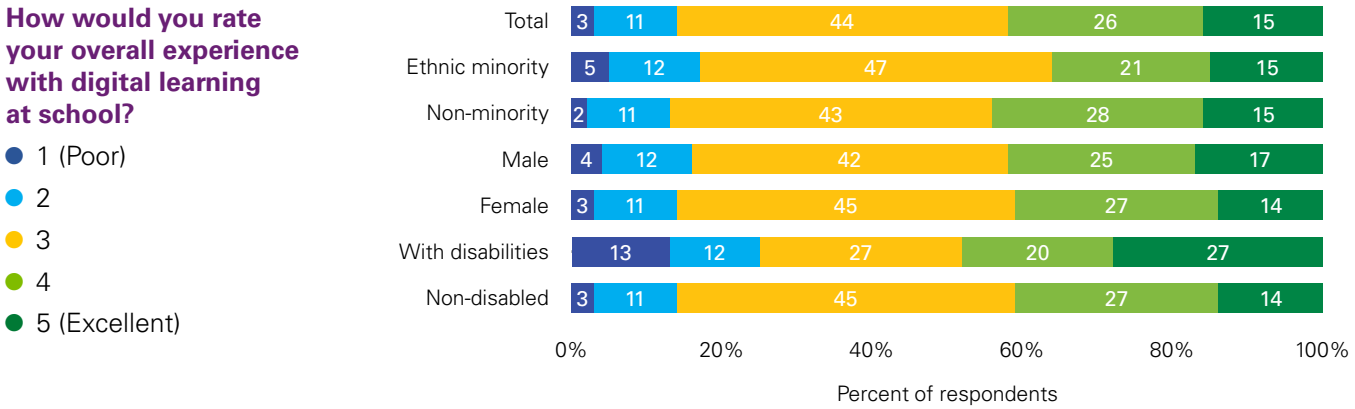


Figure 10 further illustrates that the perceived quality of digital learning at school was higher among non-ethnic minority respondents and girls and boys between 10 and 14 years of age. Between respondents with and without disabilities, 25 % of youth with disabilities rated their experience as poor and average. It is a much higher percentage compared to their peers with no disabilities.

25% of young people with disabilities have poor or average experience with digital learning while only 14% of non-disabled youth rated their experience as poor or average.

FIGURE 10. Perceived quality of digital literacy education in schools

(n = 3,153 for rural/urban comparison; n = 3,213 for all other categories)



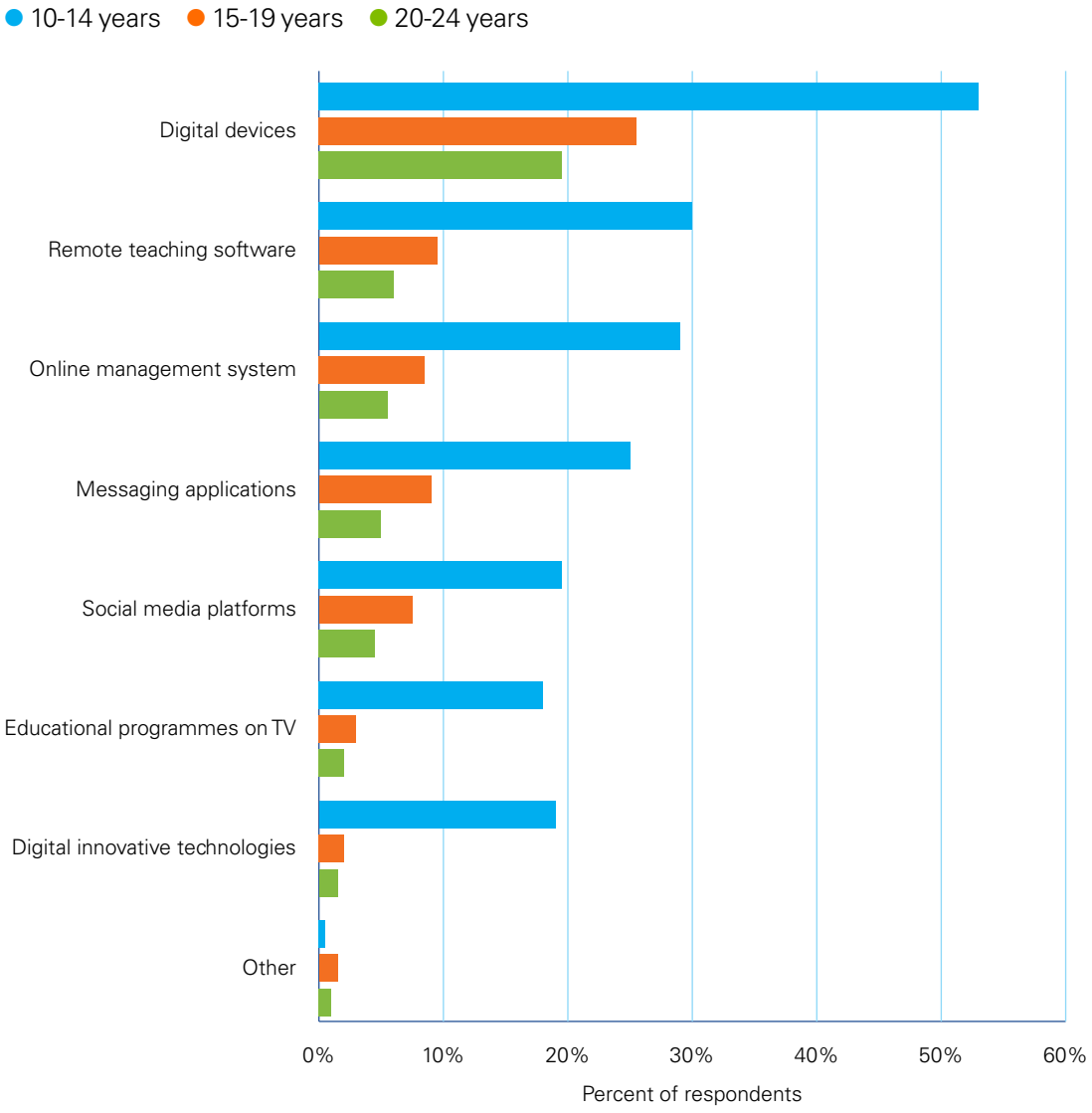
Respondents were furthermore asked which IT tools their school uses for teaching. Again, we need to take into account that not all respondents who participated in the survey might be in education, which is why the results are disaggregated by age group in Figure 11. While the majority of young people between 10 and 14 years of age stated that their school uses digital devices (55%), only a minority of older respondents gave the same answer. Other IT tools, including remote teaching software such as Google Classroom or Canvas, online management systems, messaging applications such as LINE, social media platforms, educational programs on TV and other digital innovative technologies, were only used by school of a minor share of girls and boys, even among those between 10 and 14 years of age. Among respondents from non-LDC countries, the use of IT tools at school was also much more frequently reported than by young people in least developed countries. Respondents with disabilities reported a slightly higher use of IT tools in their schools than their non-disabled counterparts.

Digital devices seem to be the most used IT tool for teaching. Few schools use remote teaching software, online systems and other digital innovative technologies.

FIGURE 11. IT tools in schools

(n = 8,756)

Does your school use any of the following IT tools for teaching?



5. DEVELOPMENT OF DIGITAL LITERACY IN PERSONAL LIFE

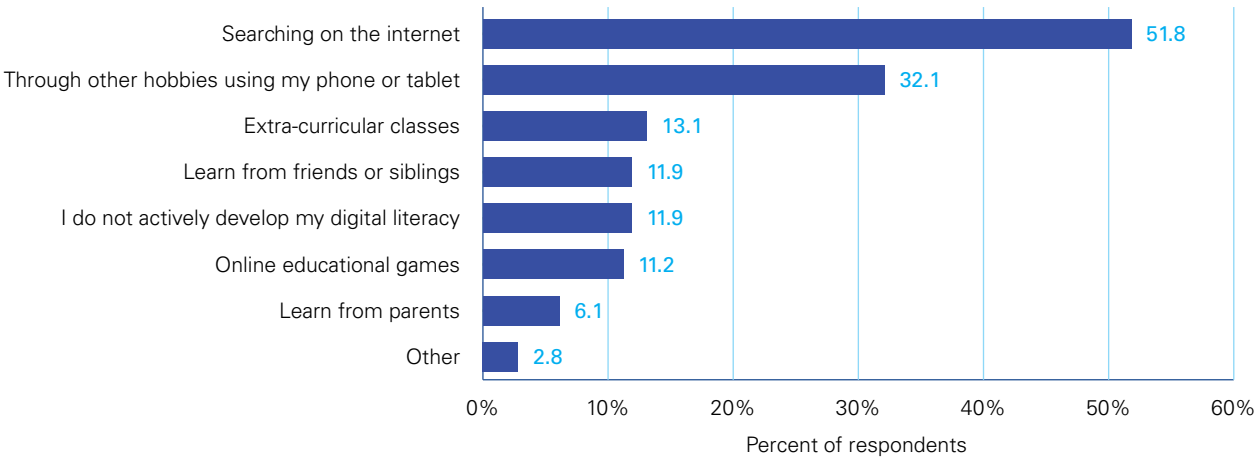
In addition to acquiring digital skills at school, young people can develop digital literacy in their personal life by using digital platforms beyond schooling. The various ways in which this happens are shown in Figure 12. Most importantly, many young people search for information on the internet (54% of girls and 49% of boys), thereby improving their skills to find digital content. Moreover, young people develop digital skills through other hobbies that involve the use of phones or tablets (32% of both girls and boys), extracurricular classes (13% of both girls and boys), with the help of friends or siblings (13% of girls and 11% of boys), online educational games (10% of girls and 13% of boys) and from parents (6% of girls and 7% of boys). On the flipside, 13% of girls and 11% of boys stated that they do not actively develop their digital literacy. More approaches of acquiring digital skills out of school were mentioned by young people from non-LDC countries, respondents between 10 and 14 years of age and respondents with disabilities.

Beyond schooling, girls and boys develop their digital literacy mainly by searching for information on the internet. Other approaches are less popular.

FIGURE 12. Development of digital literacy in personal life

(n = 8,756)

How do you develop your digital literacy in your personal life (out of school environment)?



6. PERCEIVED BENEFITS OF DIGITAL LITERACY

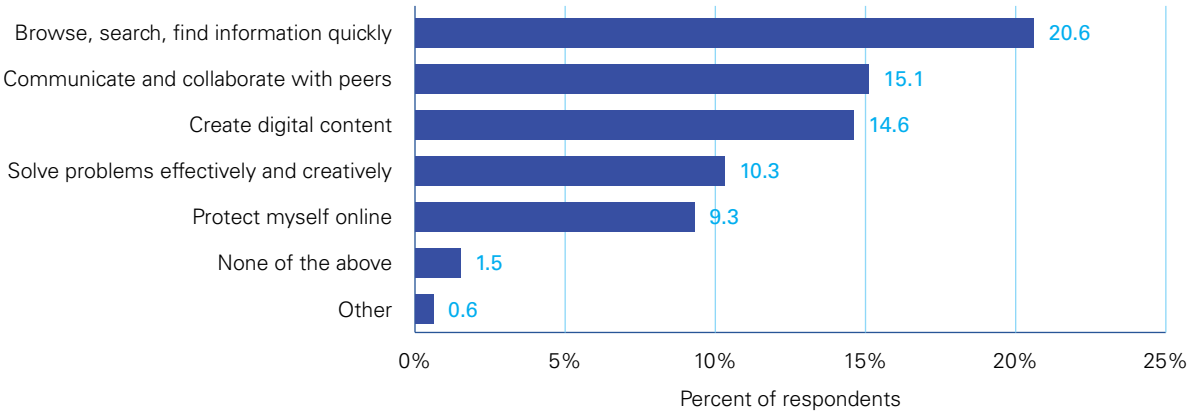
As shown in Figure 13, the most frequently perceived benefit of being digitally literate among young people is the ability to search for and find information quickly (22% of girls and 19% of boys), followed by the ability to communicate and collaborate with peers (15% of both girls and boys), create digital content (15% of girls and 14% of boys), solve problems (10% of both girls and boys) and being safe and protected online (9% of both girls and boys). A higher number of benefits was mentioned by respondents from non-LDC countries, rural respondents, respondents aged 10-14 years and respondents with disabilities.

The two greatest benefits of digital literacy to most young people are the ability to find information and communicate and collaborate with peers.

FIGURE 13. Perceived benefits of digital literacy

(n = 8,756)

What has being digitally literate enabled you to do?



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7. CHALLENGES IN GAINING DIGITAL LITERACY

It is important to understand the challenges that young people face in gaining literacy as this can guide interventions to create an enabling environment. In the survey, respondents mentioned a variety of challenges (Figure 14). The main challenges are partly related to the availability of technical resources and infrastructure, as many girls and boys raised the issues of insufficient access to technological devices as well as lacking or insufficient internet access. On the other hand, young people criticized the lack or insufficient supply of training at schools, including missing skills of teachers in teaching digital literacy.

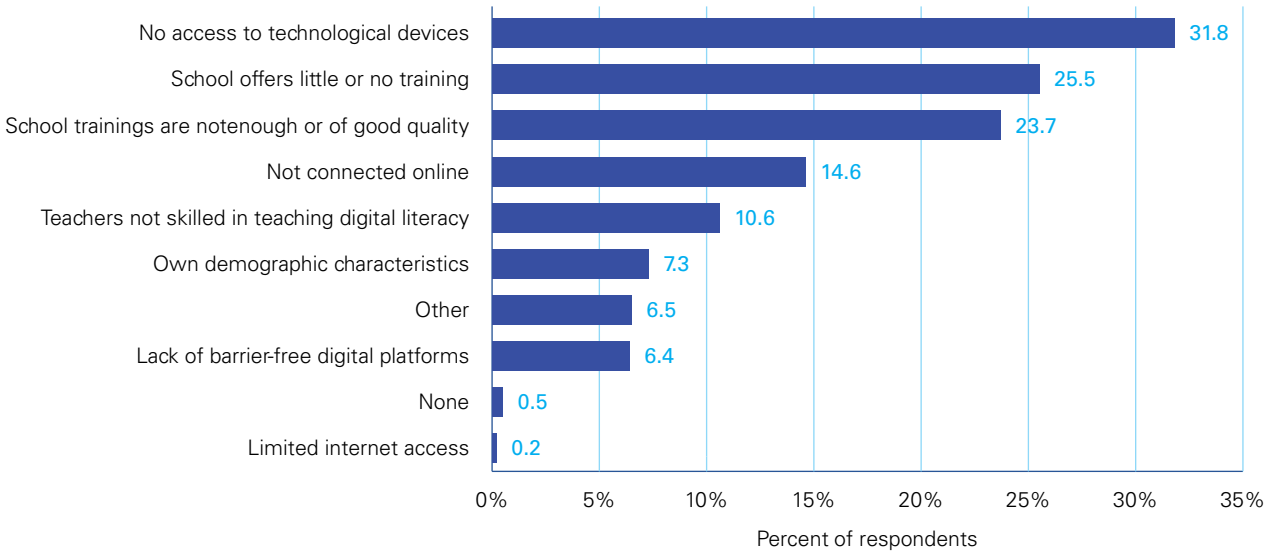
> Main challenges of young people in gaining digital literacy are inadequate access to digital devices, lack of internet access and insufficient training at school.

Interestingly, young people from non-LDC countries raised more points of concern, despite having better access to digital literacy education and a higher level of digital literacy than their peers from least developed countries. Moreover, rural respondents more frequently raised the challenge of the lack of access to technological devices, adequate training and online connection than their urban counterparts. Younger respondents generally mentioned more challenges. Girls and boys with disabilities voiced very specific challenges, including a lack of barrier-free digital platforms as well as their own socio-demographic limitations.

FIGURE 14. Perceived challenges in gaining digital literacy

(n = 8,756)

What are your main challenges in gaining digital literacy?



8. YOUNG PEOPLE'S NEEDS FOR IMPROVED DIGITAL LITERACY EDUCATION IN SCHOOLS

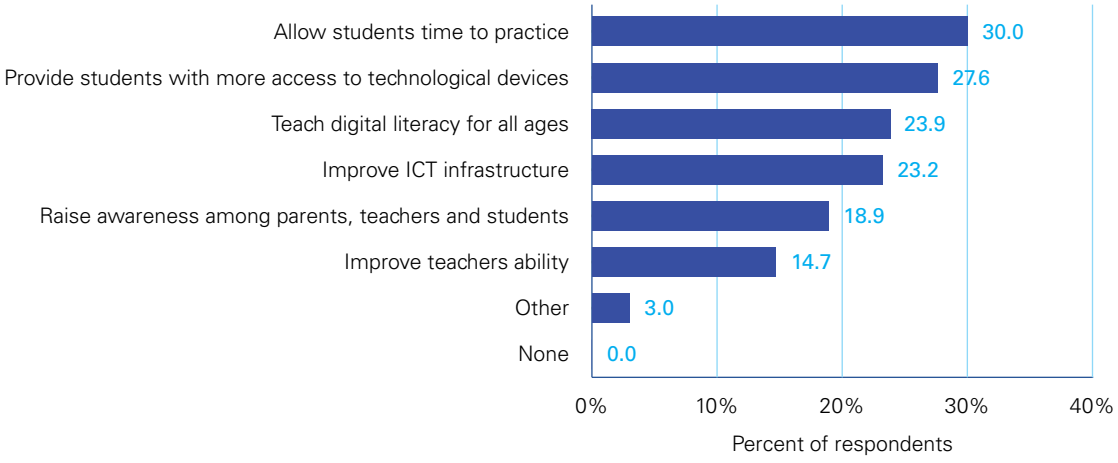
Last but not least, young people were asked to express their wishes in terms of what their schools could do to better help them develop their digital literacy. Figure 15 shows that key requests of respondents are to have more time to practice their digital skills (31% of girls and 28% of boys), to have better access to technological devices (28% of girls and 27% of boys) and ICT infrastructure (24% of girls and 22% of boys), being taught digital literacy throughout their school career (22% of girls and 26% of boys). Moreover, they would like that awareness of this issue will be raised among parents, teachers and students (20% of girls and 16% of boys), and that teacher's skills respective teaching will be improved (15% of both girls and boys). Across different socio-demographic sub-groups, respondents from non-LDC countries, respondents between 10 and 14 years of age and respondents with disabilities expressed more wishes than their respective counterparts.

Young people across all age groups want more time to practice digital skills, easier access to digital devices, a better ICT infrastructure, more awareness and improved teachers' ability.

FIGURE 15. Needs for improved digital literacy education in schools

(n = 8,756)

What would you like your school to do to help you develop digital literacy?



03 SUMMARY OF KEY FINDINGS

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The survey sheds light on the digital literacy of young people aged 10-24 years old in education systems across ASEAN. This report documents the attitude of young people towards digital literacy and their experience of acquiring digital skills at school and in their personal lives. The analysis also illustrates young people's challenges in gaining digital literacy and what they want schools to do to further improve digital education.

The following points highlight key results that may be relevant for policy and decision makers across ASEAN working to put in place educational reform:

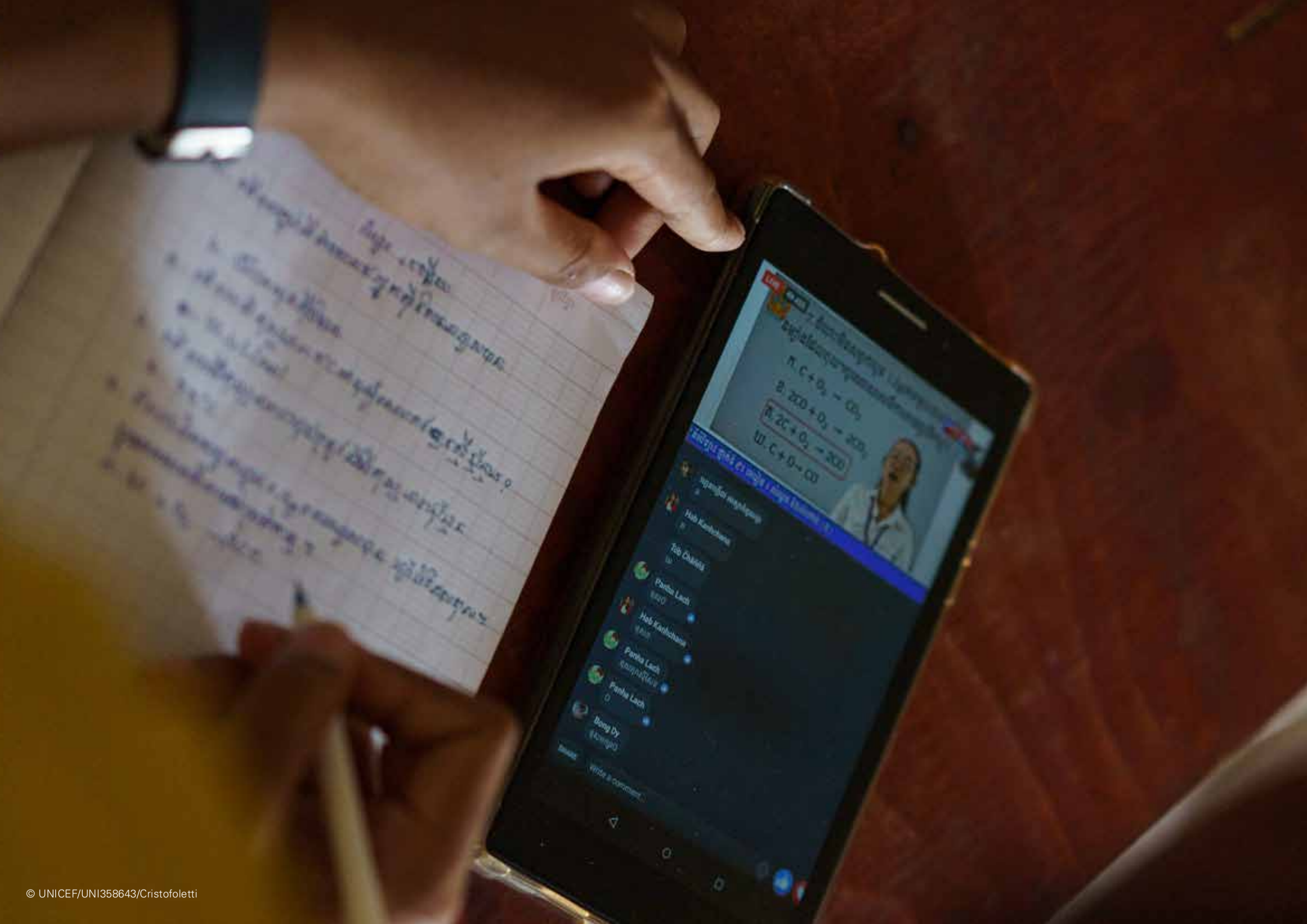
1. Most young people who responded to the survey view digital literacy as important for their future, but do not think they possess good digital skills. Less than half of respondents gave a positive rating of their level of digital literacy. Some countries, including both least developed countries and non-LDCs, lag behind others in terms of their level of digital literacy among youth. Less digitally literate groups also include rural respondents, ethnic minority respondents, as well as older adolescents and young adults in comparison to their younger pre-adolescent peers. Young people with disabilities are a unique group as they account for a higher share of both those who assessed their digital literacy as excellent and those who felt that it is poor.

2. The main reasons why young people view digital literacy as important for their future are that it helps them to develop other skills (as such being a transferable skill) and learn better. Young people also mainly mentioned the searching for and finding of information when asked what being digitally literate enabled them to do. Other reasons why young people perceive digital literacy as important, such as being useful in preparing for the job market and contributing to confidence and empowerment, were only mentioned by a smaller share of respondents. Only few respondents reported that being digitally literate enabled them to perform more challenging tasks such as creating digital content, solving problems effectively and being safe online.

3. There is a large divide between ASEAN countries in terms of digital literacy education in schools. Only small minority of students in Myanmar and Lao PDR learn digital education at school. This share is much higher in other countries, but even in non-LDCs a considerable share of young people remains without digital education at school. The perceived quality of digital literacy education at school tends to be only moderate overall, though higher in non-LDCs. With the exception of digital devices, IT tools are rarely used at school. Many young people with disabilities tend to rate their experience with digital education at school as either very negative or very positive.

4. In personal life, girls and boys develop their digital skills mainly by searching for information online. More pro-active approaches, including taking extra-curricular courses, are less popular. A minor share does not actively develop their digital literacy.

5. Young people view the limited availability of technical resources and infrastructure as well as the insufficient quantity and quality of digital training at school as major barriers to their development of digital skills. In order to strengthen their digital literacy at school they want more time to practice their digital skills at all grades, better access to technological devices and ICT infrastructure, more qualified teachers, and higher awareness of this issue among parents, teachers and students.



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