



Southeast Asian
Ministers of Education
Organization

POLICY BRIEF

**Insights into Children's
Digital Lives in
the Philippines**
Digital Kids Asia-Pacific

Introduction

Digital lives in the Philippines, as with the rest of the world, have changed due to the ensuing COVID-19 pandemic. As we grapple with lockdowns and school closures, we have come to rely more on the Internet and our technical gadgets to continue communicating and interacting with family and friends.

Faced with today's challenges, the government realised that digital literacy should be a must if the youth is to keep pace with the rate at which machines are becoming smarter. In line with this seeming wakeup call, it is the right time for the Philippines to assess if Filipino children are competent enough to become digital natives. That is where the Digital Kids Asia-Pacific (DKAP) approach can help.

Research Objectives

To determine if the Philippine youth are ready to face the challenges of the 21st century, we conducted a survey of 15-year-old students across 32 schools nationwide to meet the following goals:

- Establish a statistically validated and reliable framework and tool to measure their competence to become digital citizens
- Obtain comprehensive baseline data through a validation study to determine how they use ICT in education
- Identify factors that affect their digital citizenship competence

Survey Respondents and Research Methodology

Based on the United Nations Educational,



+66 (0) 2391-0144
+66 (0) 2391-0256
+66 (0) 2391-0554

secretariat@seameo.org

4F Mom Luang Pin Malakul
Centenary Building
920 Sukhumvit Road
Phra-Khanong Khlong Toei
Bangkok 10110 Thailand

Scientific and Cultural Organization (UNESCO) guidelines, this quantitative study used an online survey questionnaire to collect data from 15-year-old students from 68 schools scattered throughout the Philippines.

To obtain a balanced sample, a two-stage random sampling method was used by first naming an equal number of public and private schools from urban and rural areas. After that, random sampling was applied to choose 60 grade 10 students from each school to participate in the survey using the Basic Education Information System (BEIS) of the Department of Education (DepEd).

A total of 1,186 students answered the survey on 11–27 November 2020. Of them, 342 (29%) are from private schools and 844 (71%) are from public schools. A total of 695 (59%) students are from urban areas and 491 (41%) are from rural areas. Finally, 686 (58%) of the students are female (58%) and 500 (42%) are male.

The survey responses were analysed by determining frequencies, percentage and mean scores, and standard deviations to ascertain the students' digital citizenship competency. When applicable, answers to certain questions were reverse-coded.

Results and Findings

This research determined how digitally competent Filipino students are by gauging their digital literacy, digital safety and resilience, digital participation and agency, digital emotional intelligence, and digital creativity and innovation, given their level of access to the Internet and necessary devices.

DIGITAL LITERACY

Digital literacy was measured based on two competencies—information and communication technology (ICT) and information literacy. The researchers sought to find out if the students can use available hardware and software by gauging their ICT literacy. They also determined if the learners can evaluate data to make informed decisions by measuring their information literacy.

Subcompetency	Mean Score	Standard Deviation
ICT literacy	3.21	0.52
Information literacy	3.15	0.58

Compared with the results of the first DKAP survey, the Filipino students' ICT literacy mean score was lower than South Korea's and Fiji's but higher than Vietnam's and

Bangladesh's. Their mean score for information literacy, meanwhile, was also lower than Korea's but higher than those of all other surveyed countries.

The Filipino respondents thus have adequate digital literacy, which could indicate the effectiveness of related DepEd programmes.

DIGITAL SAFETY AND RESILIENCE

A digitally safe and resilient person can protect himself or herself and others from harm in the digital space. Students proficient in this domain are able to evaluate the information they get online so they can make informed decisions.

Subcompetency	Mean Score	Standard Deviation
Understanding children's rights	3.56	0.45
Knowledge of personal data, privacy, and reputation	3.56	0.50
Promoting and protecting health and well-being	3.27	0.55
Practicing digital resilience	3.44	0.56

The learners are most confident about understanding children's rights even if their mean score is lower compared with those of the four countries that took part in the first survey. They also proved knowledgeable about personal data, privacy, and reputation with a higher mean score than all of the first survey's respondents. They also scored better than all the countries in terms of digital resilience.

On average, the Filipino 15-year-olds proved more than adequate in this competency, but may need to improve their understanding of children's rights in the digital realm. That is especially critical given the increasing incidence of cyberbullying and other online misbehaviours in social media.

DIGITAL PARTICIPATION AND AGENCY

Digital participation and agency refers to the ability to equitably interact and engage with and positively influence society through ICT use.

Subcompetency	Mean Score	Standard Deviation
Interaction, sharing, and collaboration	3.36	0.55
Civic engagement	2.73	0.67
Netiquette	3.45	0.53

The students scored highest in netiquette, suggesting they are courteous and behave appropriately online. They got the lowest mean score in civic engagement. But while this was well below the midpoint, they actually did better than the four countries in the first survey.

The results suggest that Filipino 15-year-olds participate well online. Nevertheless, they may need further training and opportunities to volunteer and influence others positively online.

DIGITAL EMOTIONAL INTELLIGENCE

Digital emotional intelligence refers to one's ability to recognise, navigate through, and express emotions in their digital intra- and interpersonal interactions.

Subcompetency	Mean Score	Standard Deviation
Self-awareness	3.39	0.50
Self-regulation	3.30	0.54
Self-motivation	3.31	0.51
Interpersonal skills	3.18	0.57
Empathy	3.17	0.58

The students possess digital emotional intelligence. They scored highest in self-awareness, better than any of the four countries in the first survey. The same is true for their score in interpersonal skills. And while they scored low in empathy, they actually did better than the other countries, except South Korea.

Interestingly, while the learners seem to be conscious of their activities, self-regulate, and are intrinsically motivated, they need to work on understanding and relating well with others.

DIGITAL CREATIVITY AND INNOVATION

Digitally creative and innovative people can express themselves through content creation using ICT tools.

Subcompetency	Mean Score	Standard Deviation
Creative literacy	2.96	0.63
Self-expression	2.96	0.63

The students scored the same for the two subcompetencies. That suggests a less-than-adequate level of digital creativity even if they actually scored higher than all four countries in the first survey.

Like other children in Asia-Pacific, the 15-year-olds need to be more confident and creative in using digital tools to craft content and express themselves. Creativity is an important 21st-century skill so it is imperative that they be digitally creative as well.

DIGITAL DEVICE ACCESS AND USAGE

Smartphones are most accessible to the students at home, in school, and in local community centres. That is consistent with the trend observed in countries where smartphones are most used. The second-most accessible device at home are laptops and in school are desktops.

Some of the learners do not own any of the digital devices listed (10%), which suggests a digital divide. While schools and local community centres can help bridge the gap in digital device access at home, more can be done.

Some 8% of the students never use any digital device, while 22% have been using such for less than a year. That means around 30% never used digital devices until they reached the age of 14. Further analysis revealed that digital device use is an influencing factor for all domains, except digital creativity and innovation. More experience in using digital devices means better digital literacy, digital safety and resilience, digital participation and agency, and digital emotional intelligence.

Only 6% of the learners hardly ever access the Internet, while 40% did so 1–2 hours a day. More, however, access the Web at least three hours each day. Further analysis revealed that the more frequently they went online, the more digitally competent they got.

The students access the Web and use digital devices for 1–2 hours for schoolwork (32%), personal purposes (37%), leisure (31%), and socialising with friends (33%). Surprisingly, a significant number hardly ever access the Internet or use digital devices for schoolwork (15%), which could be another indicator of the existing digital divide.

Wireless access is more common at home, in school, and in local community centres. However, a significant percentage of the learners lack Internet access,

regardless of location.

When asked who taught them how to use a computer, 34% of the students learned on their own, while 30% did so from their teachers. The trend differed a bit for accessing the Web, as 49% learned by themselves, but more did so from family or friends than their teachers.

More learners said their parents or guardians guide them in accessing the Internet safely all the time compared with other people. The results also showed that more are guided by their teachers often, very often, or all the time.

More students said their teachers encourage them to learn new things from the Web all the time compared with other people. The results also showed that more get encouragement from their teachers often, very often, or all the time.

Conclusions and Recommendations

This research primarily sought to determine how competent Filipino students are as digital citizens based on the DKAP survey. According to the survey, they proved relatively competent as digital citizens, which could be a testament to the DepEd programmes that promote information, media, and technology skills. Much work, however, still needs to be done to turn them into responsible digital citizens. And that is not attainable if the teachers do not improve their knowledge of and expertise in digital citizenship. Educators need to have the pedagogical skills to help them develop their digital citizenship competence.

The DKAP survey proved to be a good benchmark for future assessment. But if periodic evaluation is required so the learners can keep up with technological advancements, then the questionnaire may require modification over time.

And if the Philippine government truly wishes to churn out digital natives, it needs to address the current digital divide. Those who do not have access to the Internet and other ICT tools require assistance. The government

can develop a holistic framework for digital citizenship education as well. Learning should go beyond making the students digitally literate. After graduating, they should become socially responsible digital citizens. Future educators should be taught about digital citizenship as well. Without the proper training, they would not be able to impart sufficient knowledge and skills to their future students.

The government may not be able to do everything on its own, though. It needs to collaborate with all stakeholders. Developing intersectoral partnerships using the “whole-of-school” framework may help. DepEd can also use the school-based management system for this purpose.

To bridge the digital divide, investing in and strengthening current ICT resources is required. Government agencies can come up with policies and programmes to foster equitable and quality access to ICT tools. Legislations to address the insufficiency of resources may also help.

Finally, conducting further research on the Filipino students' digital citizenship may be a good idea, particularly for teacher and other higher education institutions. Future studies may focus on exploring other personal and contextual factors that can affect the digital citizenship competency of Filipino learners. Other studies may focus on designing and implementing intervention programmes that aim to improve digital citizenship competency. Developing competency- or performance-based metrics for specific digital citizenship competencies may also be explored.

Overall, we can say that the DKAP approach is a critical development, as it gives countries in Asia-Pacific an opportunity to assess how competent their students are as digital citizens. While much work needs to be done to enhance how digital citizenship competence is measured today, this study and others like it can identify other factors needed to enhance digital citizenship competence and help nations design policies and programmes to improve digital citizenship education within their sociocultural context.

The Philippines can particularly continue to explore and elaborate on the current DKAP concepts to empower students to become as competent as possible in terms of digital citizenship.

* This study was funded by the UNESCO and the Korean Republic Funds-in-Trust (KFIT). Special thanks to the DepEd and the Philippine Normal University (PNU) for conducting the survey, analysing the results, and producing the country report.



©2021

Southeast Asian Ministers of Education Organization