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# Enabling policies for digital transformation in education

Toan Dang, Programme Officer, ICT in Education  
UNESCO Asia Pacific Regional Bureau for Education

## ITU Webinars

### Asia and the Pacific regional dialogue on Digital Transformation

*Gearing up for inclusive and  
sustainable development*



Governments are putting **digital transformation at the front and centre** of policy agendas, with 34 OECD countries having coordinated national digital strategy at the highest level of government as of mid-2020.

OECD, Digital Economy Outlook 2020

“...the COVID-19 pandemic is the reality check on education inequality and the digital divide.”

- Ministry of Education official,  
Uzbekistan



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Education  
2030 The Education 2030 icon, which is a circular graphic composed of small dots arranged in a ring.

Inadequate digital skills and competencies are the single greatest barrier to technology use for education, regardless of a country's development status.

- Teachers lack the necessary **digital skills and readiness** for employing distance learning pedagogies.
- Only **1 in 3 countries** reported on having access to internet connectivity and ICT tools to work during school closures.
- **3.5 billion children** still need to be connected by 2030.

Source: UNESCO, UNICEF, and the World Bank (October, 2020). Survey on National Education Responses to COVID-19 School Closures.  
[tcg.uis.unesco.org/survey-education-covid-school-closures/](https://tcg.uis.unesco.org/survey-education-covid-school-closures/)

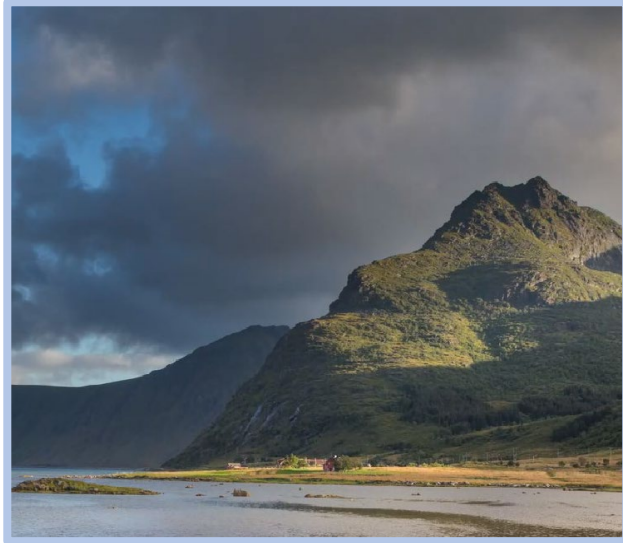


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# UNESCO's support for system strengthening to ensure inclusive and quality digital learning



Evidence-based ICT  
in education policy  
planning



Enabling teacher ICT  
competency standards  
and curricula

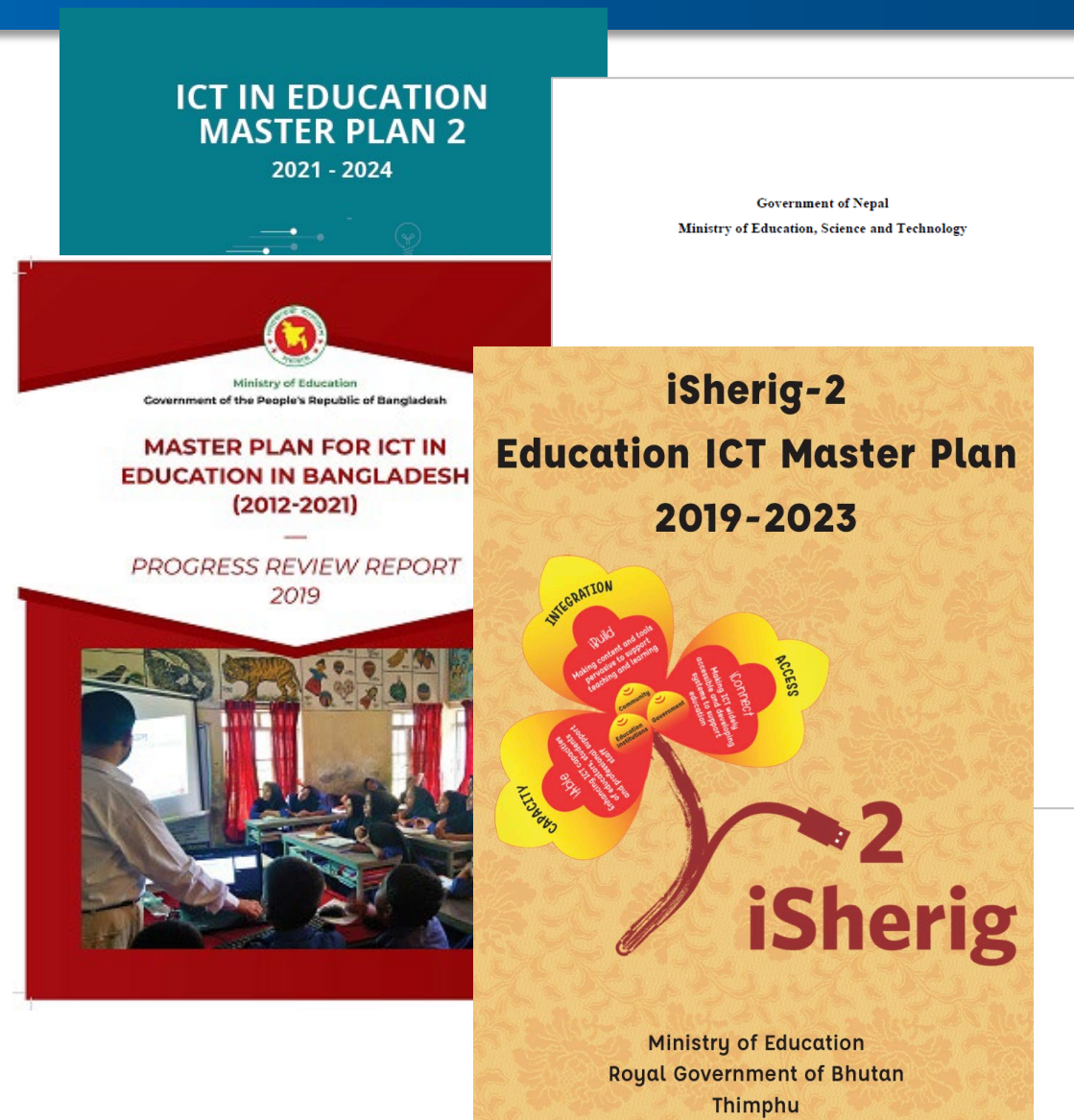


Equitable digital skills  
development with  
focus on girls and  
marginalized

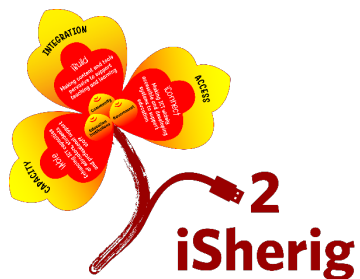
# Evidence-based ICT in education policies and strategies for concrete action

## ICT in Education Policy Planning

- Designed for equity, inclusion, and quality education
- Coherent and aligned with national education sector plans, and digital transformation and ICT policies
- Contains comprehensive financial costing and planning
- Provides strategic activities for projects including:
  - ICT infrastructure
  - Integrated teacher ICT competency standards



# Case of Bhutan: Achievements of ICT in education policies



## Multi-Stakeholder Involvement:

Ministry of ICT

Ministry of Finance

Planning Commission

Colleges of Education

District of Education Offices

Departments on Curriculum and Assessment

Schools, principals, and teachers

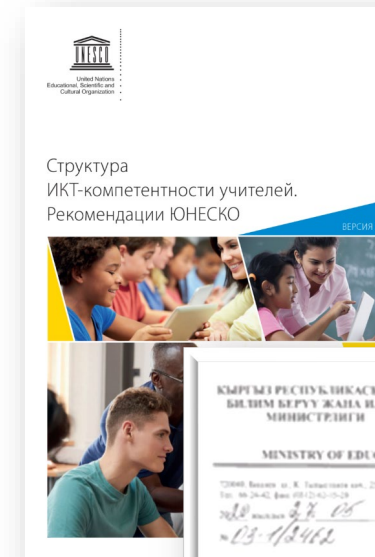
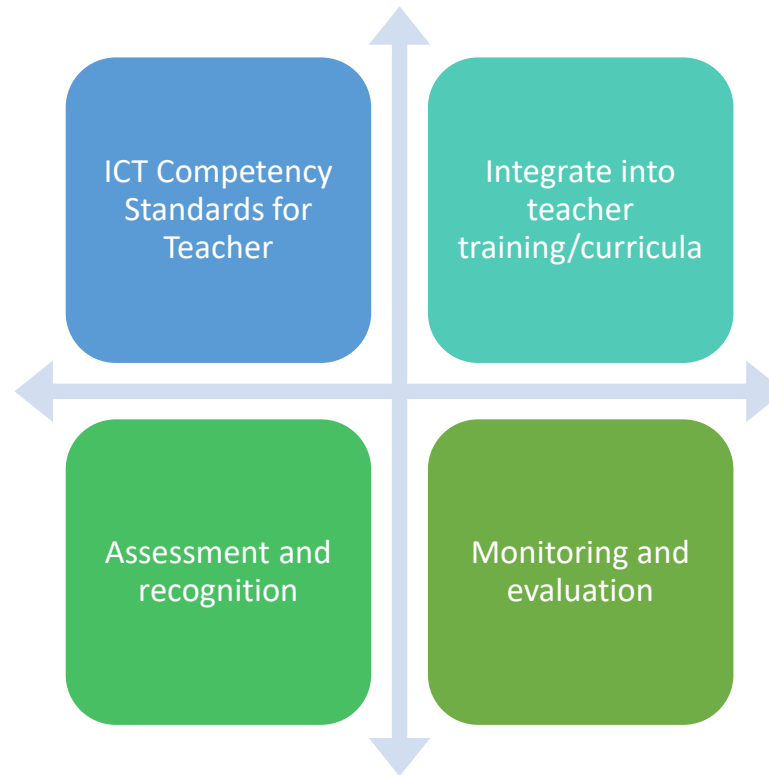
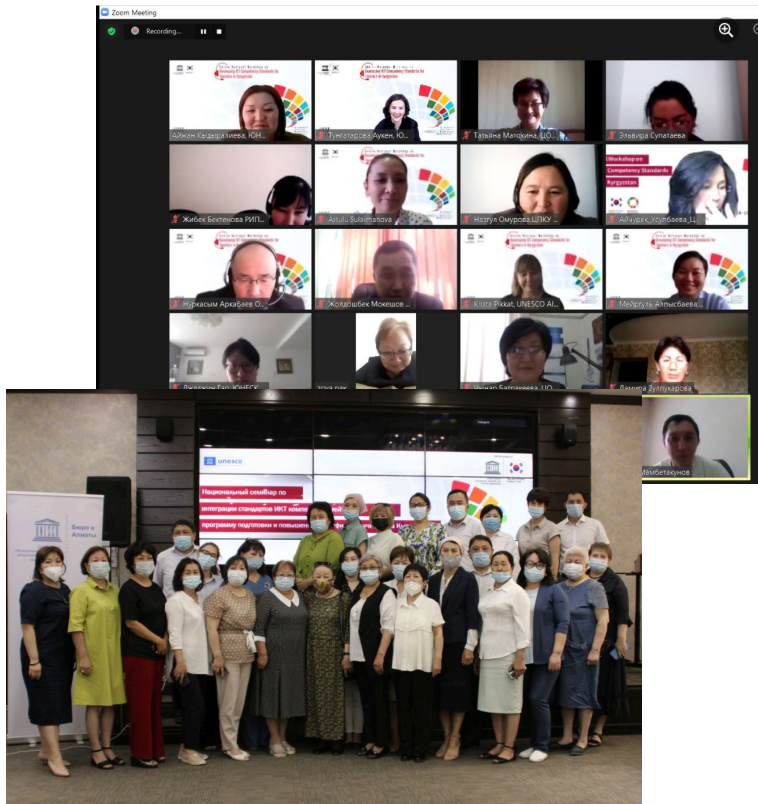
- ICT standards for schools, teacher resource centres, and community learning centres.
- Decentralized provision of digital devices to local governments.
- Partnerships with ISPs to provide high-speed internet connectivity to all schools.
- Integration of the ICT-CST to support systematic teacher development and training.
- 96.7% of the total budget estimated of Nu 1.729 was aligned with the 12th Five-Year Plan



# Competency-based standards for supporting teachers' ICT skills development

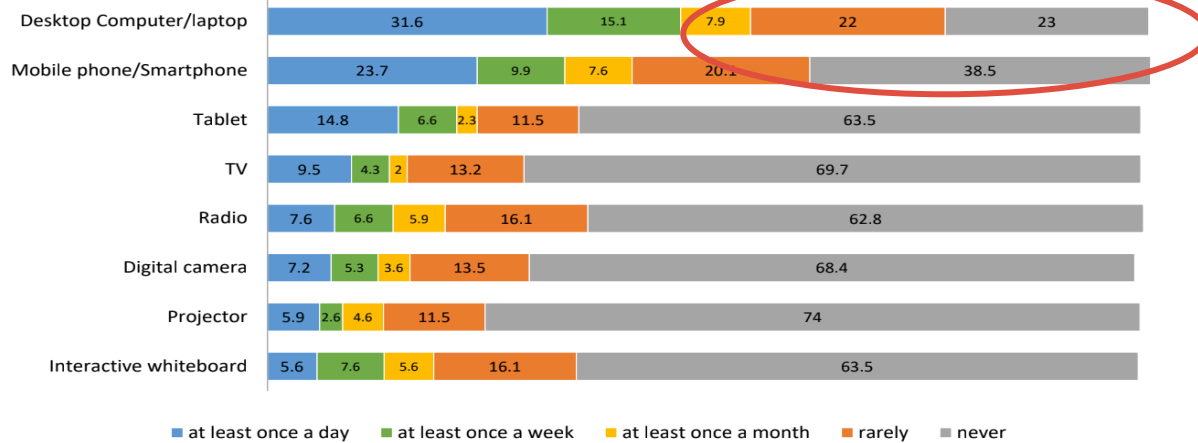
## Development of ICT Competency Standards for Teachers

ICT-CST supports to determine and develop the required ICT competencies for teachers that are clearly aligned with country's policy vision, goals, and ICT in Education Master Plans.

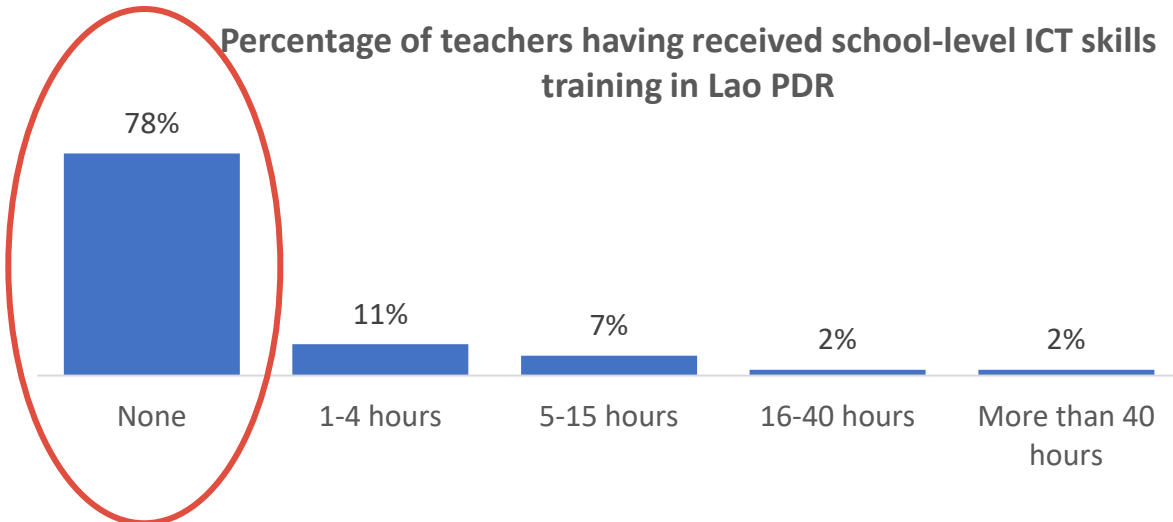


# Reflecting on realities at the teacher level related to ICT skills development

Frequency of the Actual Use of ICT Devices in Classroom by Teachers in Lao PDR



Percentage of teachers having received school-level ICT skills training in Lao PDR



## Countries' challenges in implementing digital learning during COVID-19:

- Inadequate levels of ICT knowledge and skills of teachers and lack of computers and digital devices are the main reasons.
- Poor ICT infrastructure and connectivity in rural areas.
- Inadequate knowledge and skills among teacher training institution staff and teacher trainers to train and support teachers.
- Lack of curriculum for teachers to teach the content of ICT for teachers.

Source: UNESCO Teacher Readiness Survey, Lao PDR, 2020



*A rights-based and holistic approach to developing a generation of effective, responsible, and safe digital citizens*



- 01 Digital Literacy
- 02 Digital Safety and Resilience
- 03 Digital Participation and Agency
- 04 Digital Emotional Intelligence
- 05 Digital Creativity and Innovation

- A holistic framework with validated research tools to measure digital citizenship competencies, contextualized to the Asia-Pacific region;
- Evidence base from research completed 9 countries with over 12,470 students to support digital education policies and interventions;

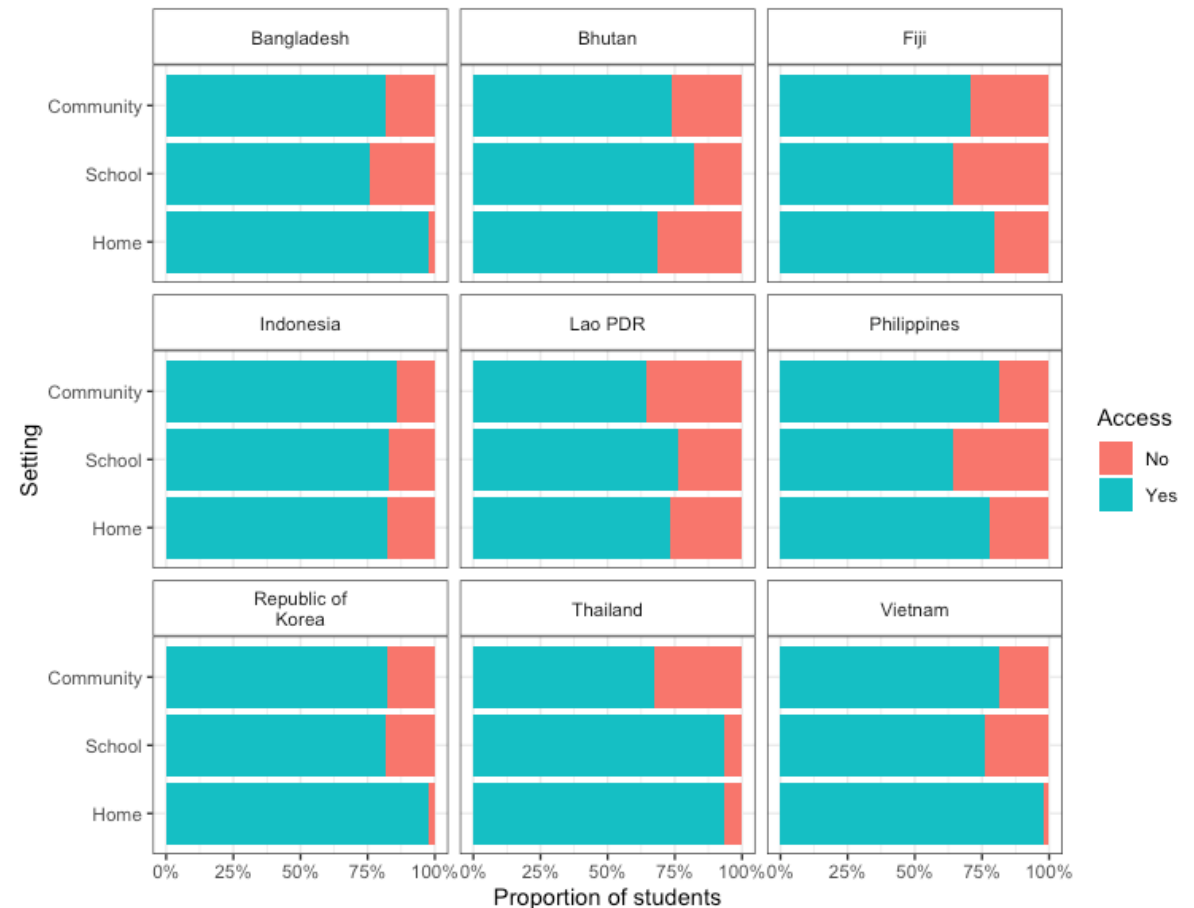
# Key findings: Contributing factors to students' digital skills development

There are **positive relationships** between all domains of digital citizenship and:

- student background
- computer use
- home devices and internet at school

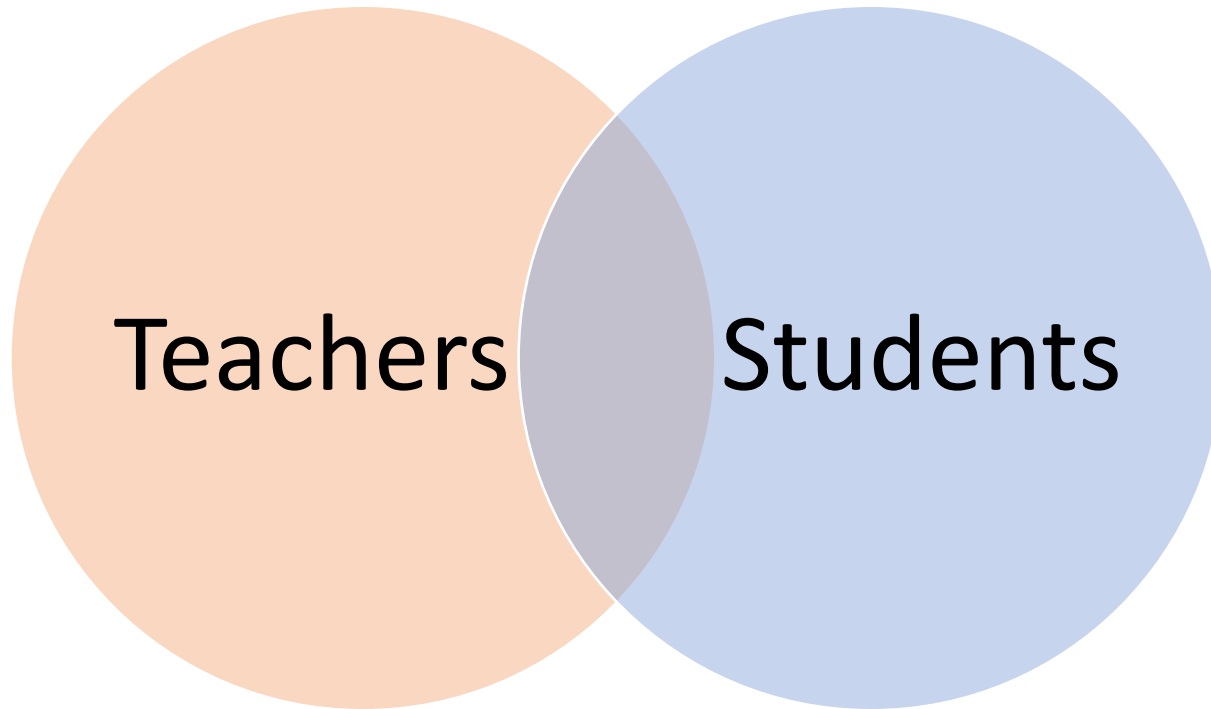
However, a lower proportion of students reported having access to an Internet connection at school in all countries

Proportion of students reporting access to an internet connection at home, school or their community for each country



Source: Digital Citizenship in Asia-Pacific: Translating Competencies for Teacher Innovation and Student Resilience, Monash University

# Key findings: connection between teachers' and students' ICT skills development



1. Students who self-learn about computers and the internet, and are **supported by adequate access ICT outside of school**, scored higher in digital citizenship competencies.

→ Provide equitable conditions in a more systemic fashion, including at the community level and at the school level.

2. There are larger variations within schools than across schools pointing to the **gap that may exist among learners and teachers within a school**.

→ Strengthen support to learners and teachers that are weaker in terms of knowledge and skills. (e.g. enabling peer learning)

3. **Differences observed in how boys and girls learn about using computers and the internet** -- boys have a slight report more self-learning of ICT skills, whereas girls have benefited slightly more from teacher instructed digital safety and resilience skills.

→ Encourage diverse learning opportunities adapted to different learning styles, propensities, and gender.

Source: Digital Citizenship in Asia-Pacific: Translating Competencies for Teacher Innovation and Student Resilience, Monash University

# Key takeaways

- Strategically implement infrastructure to **mutually narrow the digital divide and develop digital competencies** for teachers and students.
- **Align ongoing ICT-related policies** through ICT in education master plans and ICT-CST to provide enabling environments for implementation and synergize projects and funding for sustainability.
- Partnerships and cross-sector collaborations in the development of education policy (**joint task force, governance bodies, consultations, etc.**) to catalyze projects and enable better resource planning.
- Reflect nuances of realities for schools, teachers, and students and incorporate **flexibility and openness in provision of connectivity**.

# Thank you

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