Key strengths

- Students have generally mastered basic digital literacy skills
- Students are able to make use of general communication software for socializing and information sharing
- Schools and teachers in general are able to use technology and provide some guidance and assistance to students
- There are arrangements in some schools to handle cyberbullying and provide guidance on digital safety
- Some schools, both primary and secondary, have been able to help their students to achieve high digital competence and minimize within-school diversity

Key challenges

- Huge divide in digital competence performance across & within schools
- Digital performance divide ↑ with age
- Digital divide in home digital access for extensive use in online learning
- Cyberbullying experience & digital safety issues for all 3 age groups
- Students lack advanced digital competence: evaluating relevance & credibility of information, need help with digital safety & cyberwellness
- Only ~40% students receive parental support on digital tech use and safety
- Lack exposure to extensive e-learning
- Lack system level digital citizenship curriculum, support for professional & leadership development in schools

What needs to be done

System level policy guidance & support:
- On technology infrastructure & professional development to schools for productive online learning to be an integral part of school education
- To ensure that students have home access to Internet and personal digital devices matched to online learning provisions offered by their schools
- To develop a core digital competence curriculum for 21st century skills

School level:
- Develop & implement digital citizenship policy & strategic e-learning plan

Parents/community:
- Community network to support digital learning of parents & students

Number of Participating Schools, Classes, Students, Teachers and Principals

<table>
<thead>
<tr>
<th>Responses</th>
<th>Cohort</th>
<th>Schools</th>
<th>Classes</th>
<th>DLA</th>
<th>CPS</th>
<th>SVY</th>
<th>Teachers</th>
<th>Principals</th>
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<td>104</td>
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</table>

Research instruments

- Assessment of digital competence
- Survey of student background & perceptions
- Survey of teachers & principals
What students can do | What students cannot do

**Information and data literacy**
- Simple search, evaluation & organization of information
- Formulate complex search for highly relevant results, evaluate information

**Communication and collaboration**
- Simple, routine communications & sharing digital information
- Adapt communication strategy to context, protect digital identity

**Digital content creation**
- Can use common productivity tools to create, edit, change media
- Identify media uses that violate intellectual property rights

**Digital Safety**
- Can use simple ways to address risks, protect devices/privacy/content
- Sophisticated safety measures, e.g. identify safe ways to use USB drives

**Problem solving using ICT**
- Can solve simple device/application problems, e.g. smartphone/bookmark
- Solve complex device + application problems, e.g. no sound in video

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**Digital access at home**
- Small percentage have none
- ~10% have only smartphones
- ~half of large screen access has to be shared

**Digital wellness**
- ~35% students experienced cyberbullying
- Cyberbullying victims are more likely to be perpetrators
- ~10% have lost money in online scam
- Over half of S3 students reported risky online behavior

**Digital wellness & digital competence**
- Moderate digital gaming correlates with higher digital competences
- Cyberbullying experience associated with lower digital literacy score
- Higher digital competence correlates with better online safety

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Digital competence & schooling (teachers’ responses)

- Do you teach and emphasize need to evaluate validity of information?
  - No, not really 60% of Ts

- Did you have to handle cyberbullying during the past year?
  - Yes 22% of PTs 45% of S1 Ts 40% of S3 Ts

- Is cyberbullying a common occurrence among your students?
  - Once a month 6% Ts

- Does your school have a cyberbullying policy?
  - Don’t know! 65% PS ~50% SS