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Educational, Scientific and
Cultural Organization

Digital Kids Asia-Pacific:

Insights into Children's Digital Citizenship

10 May 2019

UNESCO Asia and Pacific Regional Bureau for Education (ict.bgk@unesco.org)

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Acknowledgement

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1.

Introduction

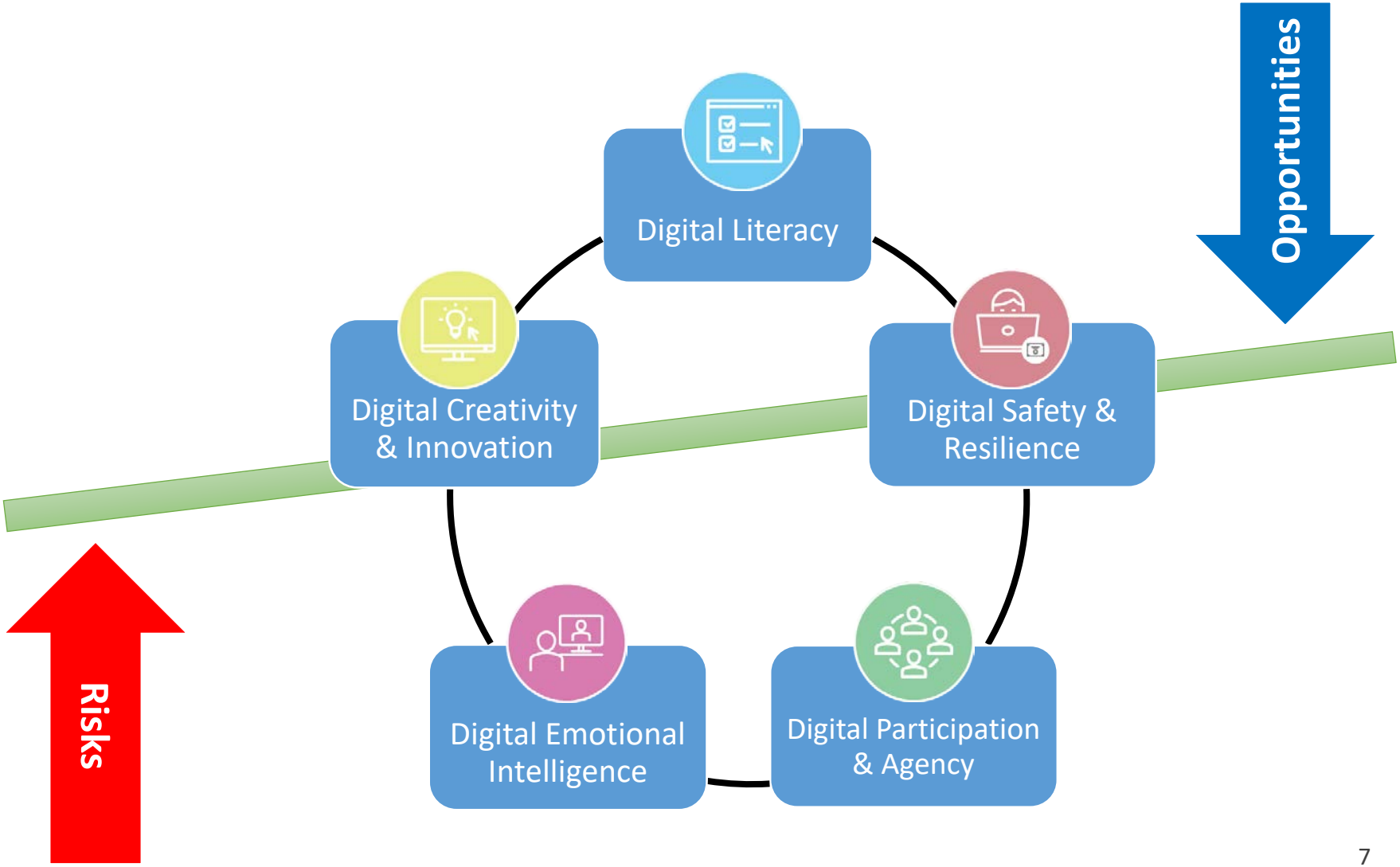
Why DKAP: Gaps in digital citizenship

- **Lack of research and baseline data in the Asia-Pacific** region to understand children's capabilities and behaviours in the digital environment;

- **Limited definitions of digital competencies**, focusing on basic digital literacy;

- **Dominance of the risk and safety paradigms** (and neglect of other key aspects, such as empowering them to effectively participate, create and advance digital opportunities)

Five domains to measure



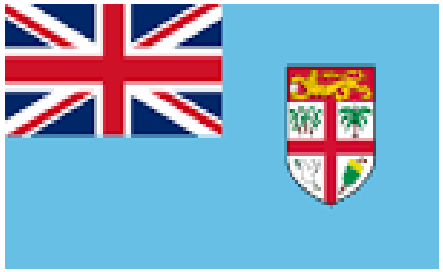
Study

1. **To provide member states with a regional framework and tools to measure digital citizenship competencies among children**

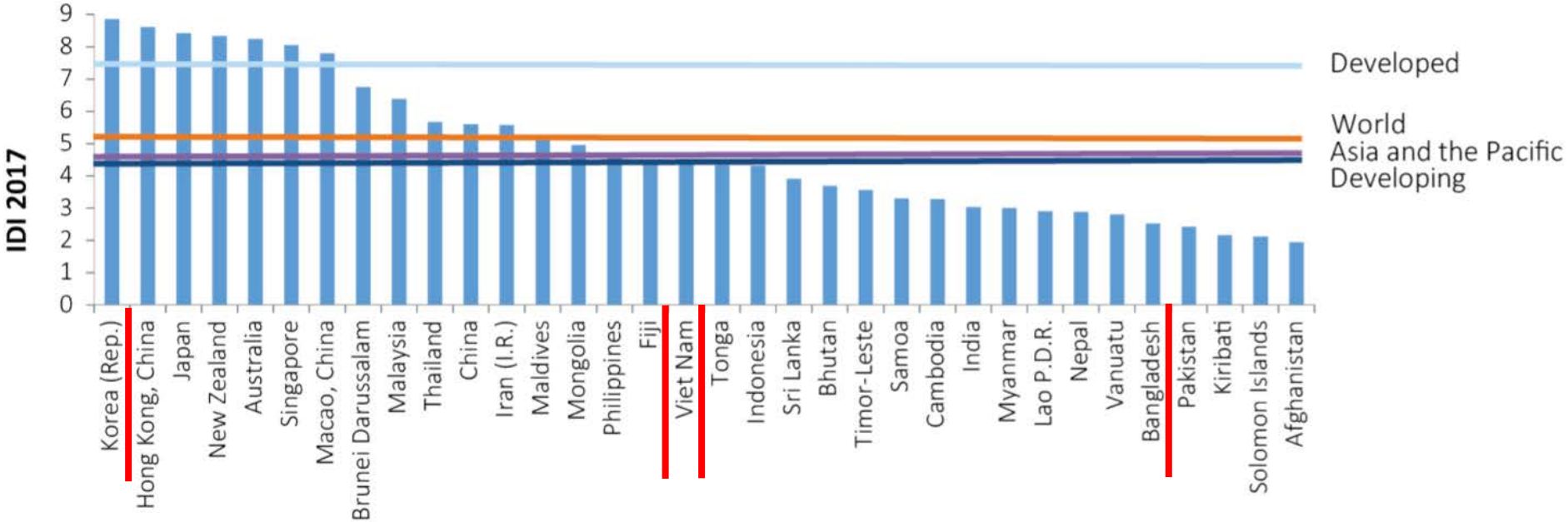
2. **Data collection (May – Oct 2018)**

- 104-question self-assessment
- Targets 15 years old students in 4 countries
- 5,129 responses (min. 1,000 from each country with gender/geographic balance)



Regional Context: ICT Development



Source: Measuring Information Society Report 2017, ITU.

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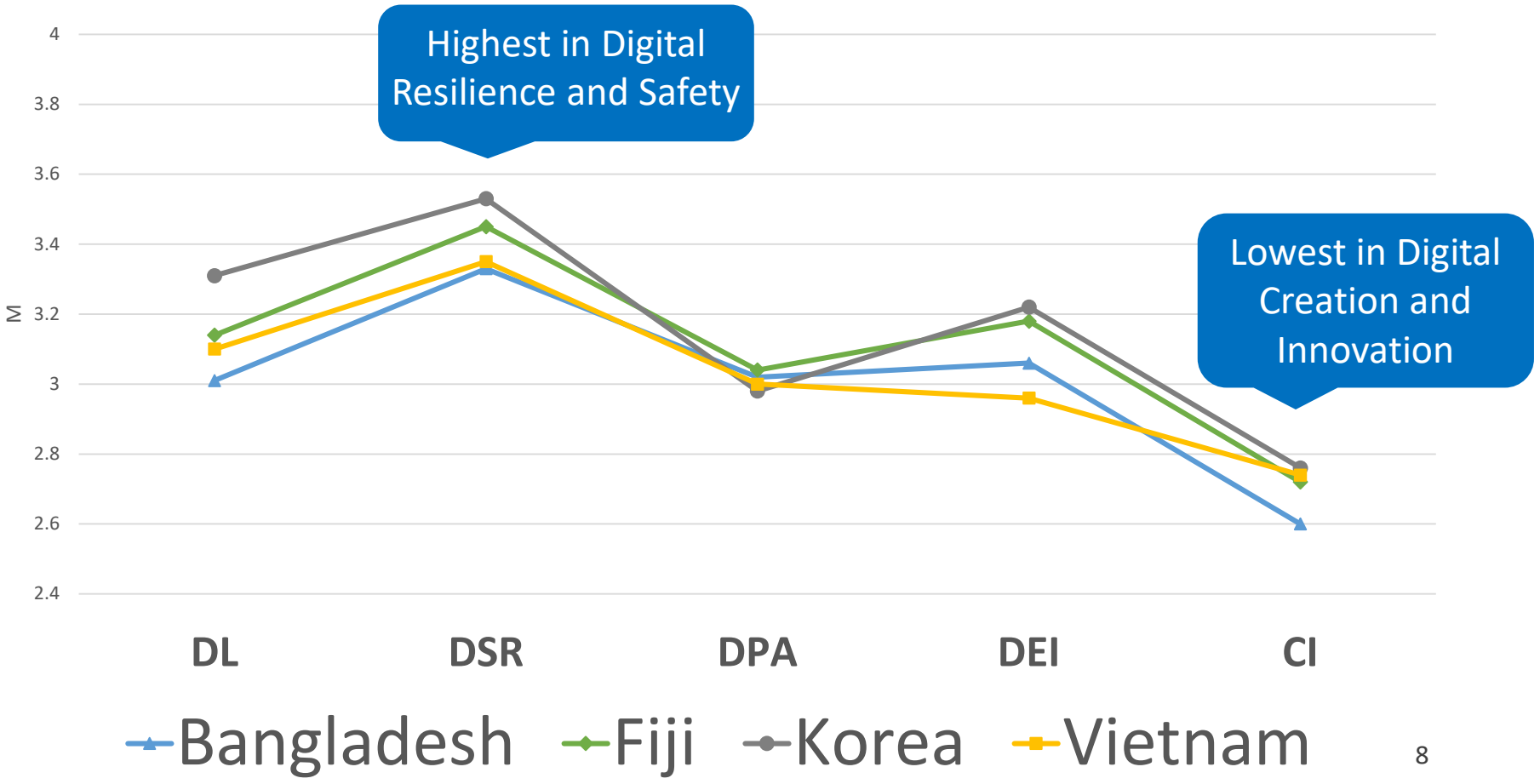
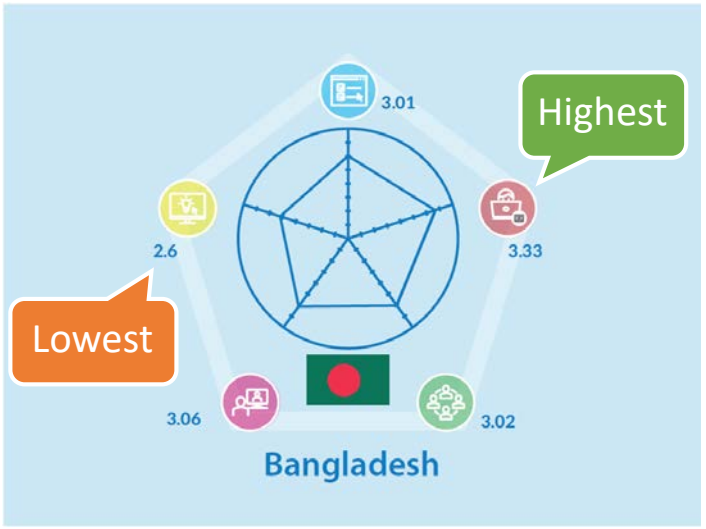
2.

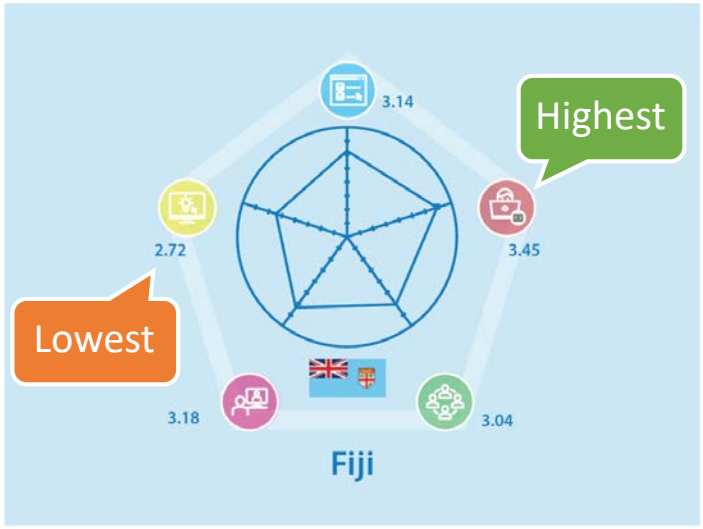
Overall Findings and Factors (affecting student performance)

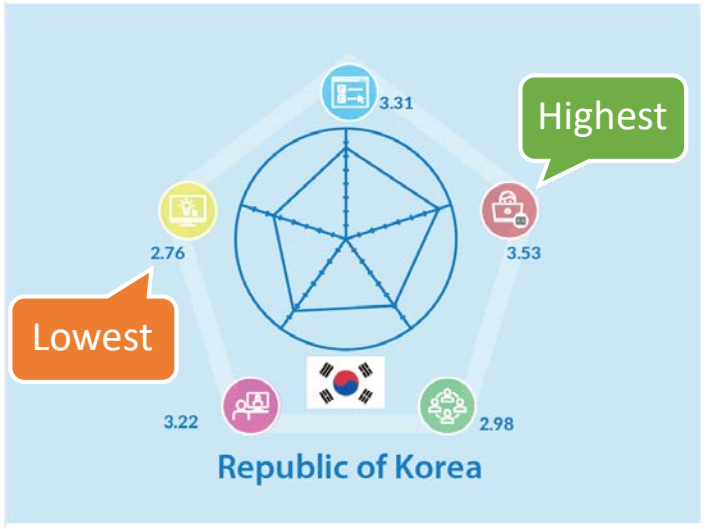
Overall Digital Citizenship Competencies



Country profiles







Does gender matter?

Finding:

With exception to some cases in Fiji and Viet Nam, girls perform better than boys across all five digital citizenship domains.

	Digital Literacy	Digital Safety & Resilience	Digital Participation & Agency	Digital Emotional Intelligence	Digital Creativity & Innovation
Bangladesh	***	***	***	***	***
Fiji	*	No difference	**	No difference	***
South Korea	**	***	***	*	No difference
Viet Nam	No difference	*	*	No difference	No difference

* Level of statistical significance; ***p<.001, **p<.01, *p<.05.

Urban vs. Rural

Finding:

With exception to one case in Fiji, kids in the urban area perform better than the kids in rural area across all five digital citizenship domains.

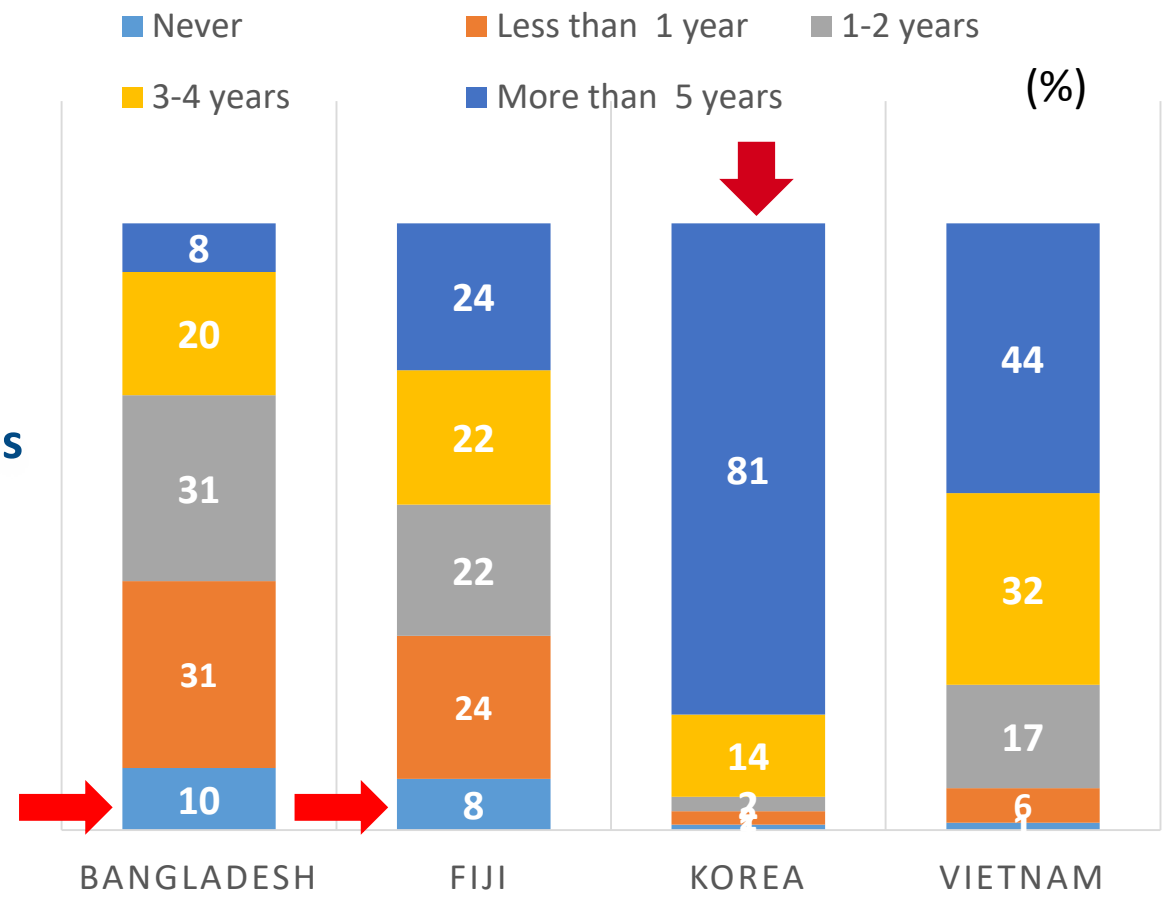
	Digital Literacy	Digital Safety & Resilience	Digital Participation & Agency	Digital Emotional Intelligence	Digital Creativity & Innovation
Bangladesh	No difference	***	No difference	No difference	No difference
Fiji	***	***	No difference	**	***
South Korea	**	*	***	**	***
Viet Nam	**	*	No difference	No difference	**

Digital divides persist and it matters

How long have you been using digital devices? (laptops/desktops, smartphones, tablet PCs, etc.)

Finding:

- **Significant digital divides**
- **Access at home and schools is significantly associated with higher performance in all five domains.**

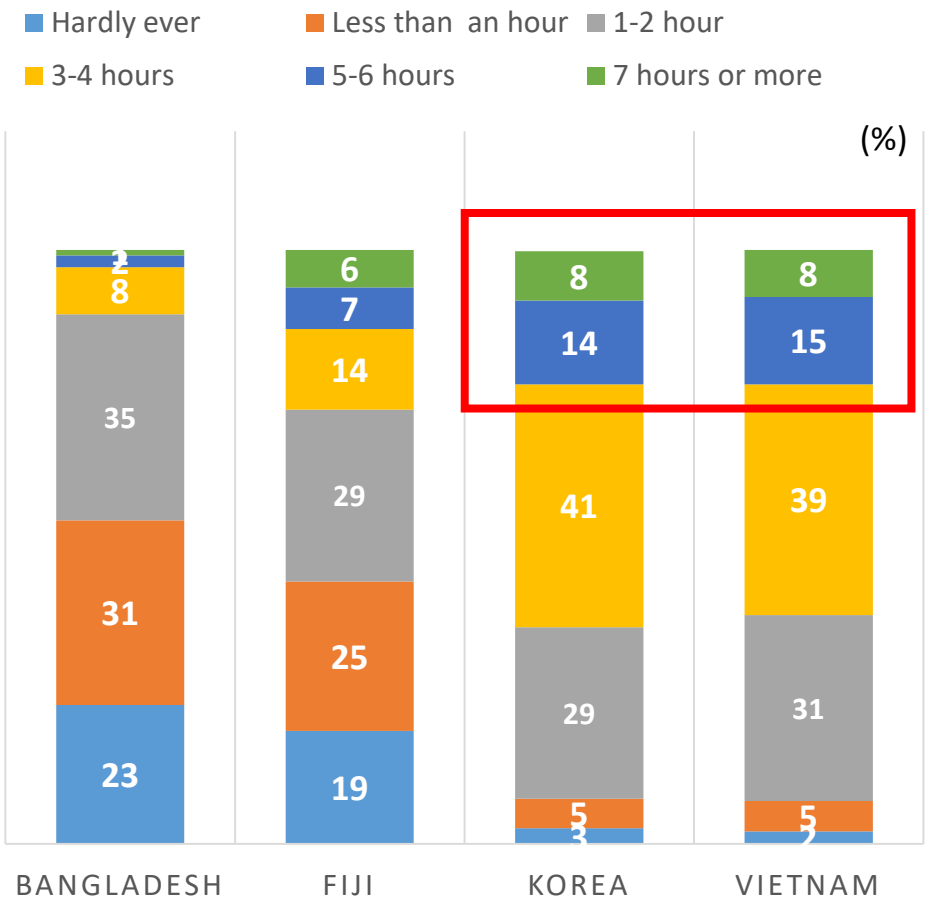


Screen time – is it all bad?

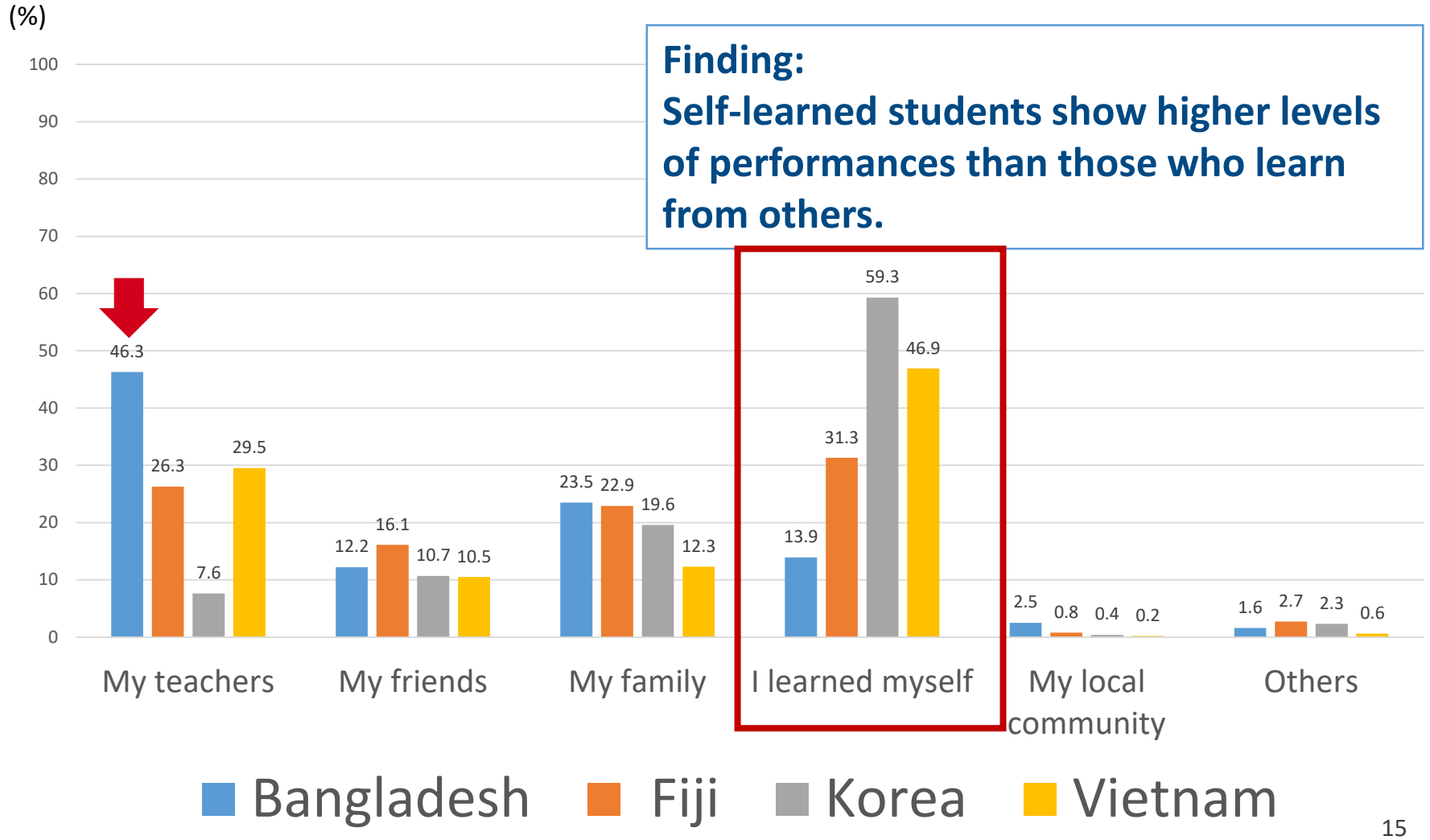
How often do you use digital devices?

Findings:

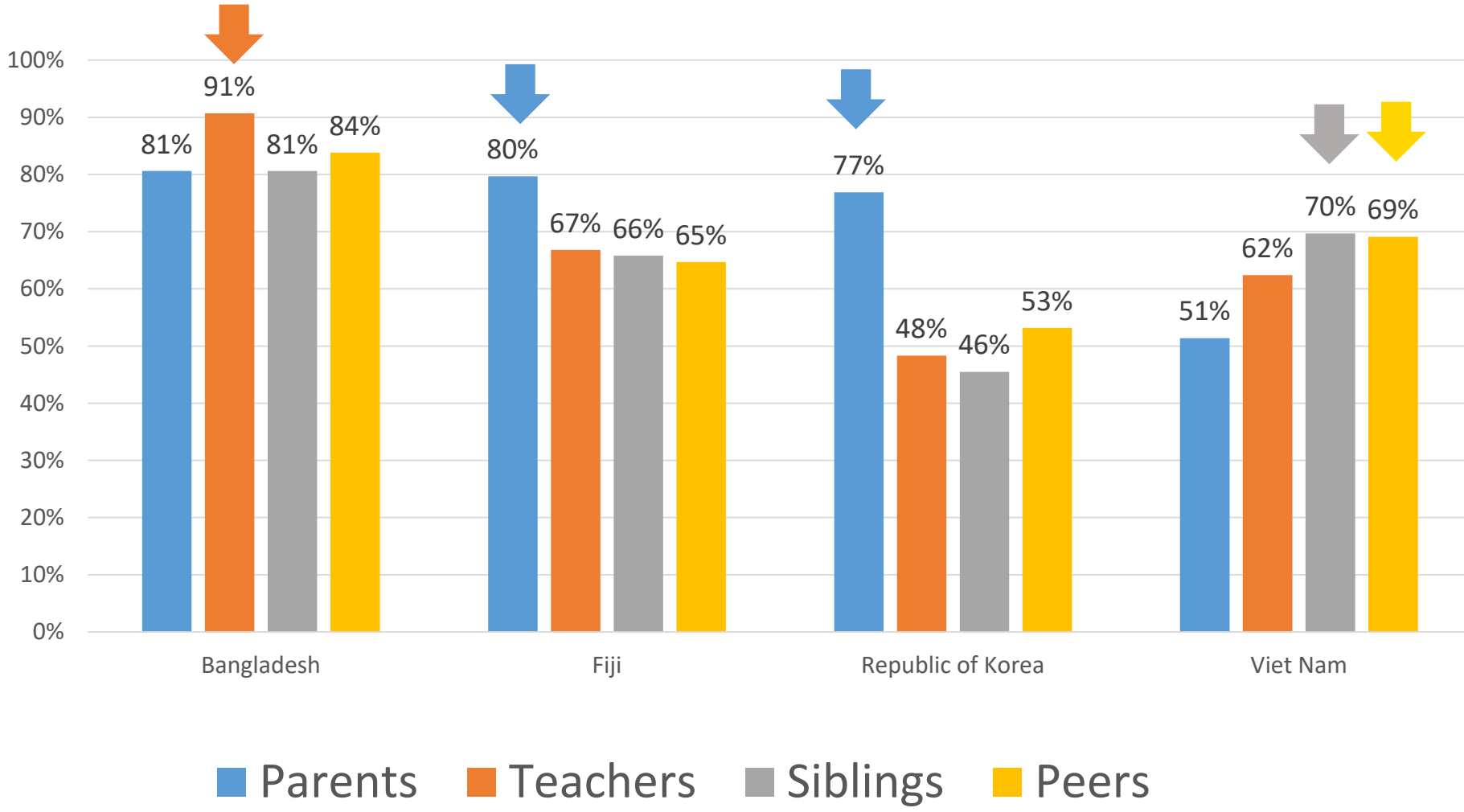
- **8% of Korea and Vietnam respondents spend more than 7 hrs a day on digital devices. (23% 5hrs and more)**
- **Yet, the longer duration of use is positively associated with higher performance in Digital Creativity and Innovation.**



Who taught you most about how to use computers?



Who plays the biggest role in guiding children to use Internet safely?

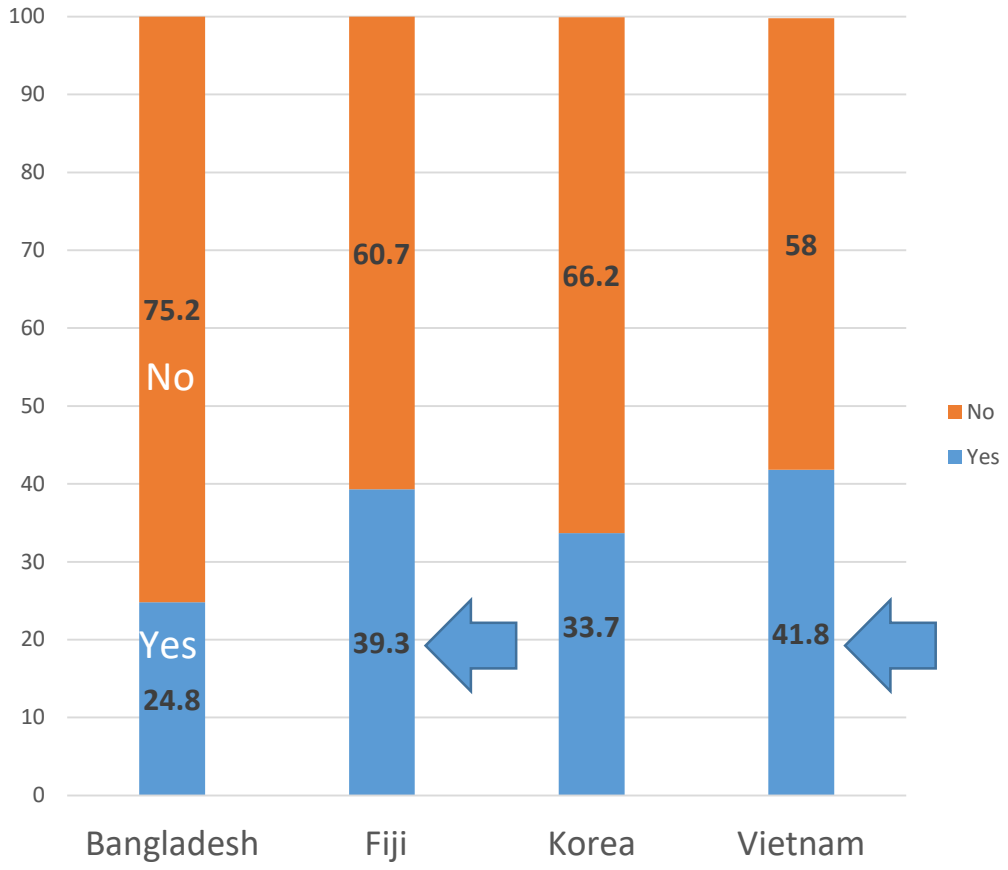


Have you ever learned basic coding skills at school?

Findings:

Positively contributes to:

- **Digital Literacy**
- **Digital Participation and Agency**
- **Digital Creativity and Innovation**



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3.

Domain Specific Findings

- Digital Literacy
- Digital Safety and Resilience
- Digital Participation and Agency
- Digital Emotional Intelligence
- Digital Creativity and Innovation

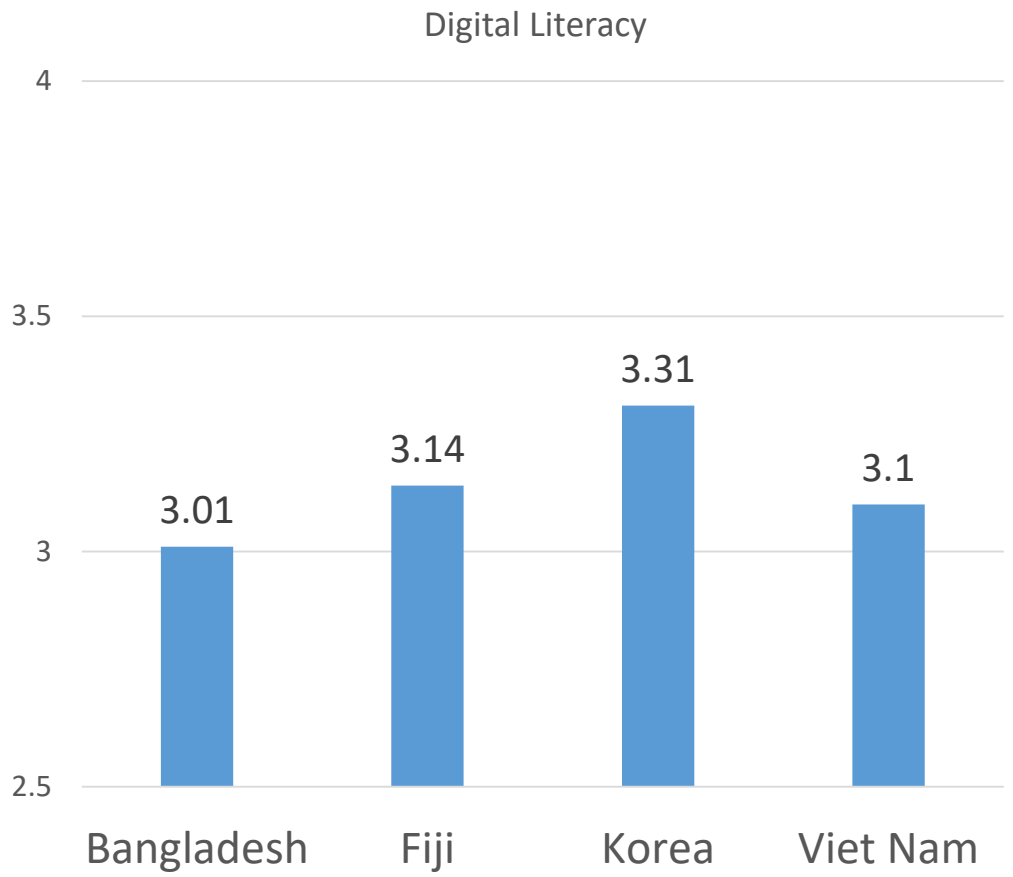
1. Digital Literacy

Finding:

The domain with the widest disparity between countries

Top 3 factors:

- Prior experience in using devices (duration)
- Number of digital devices accessible to students at home
- Previous experience in developing a website or app



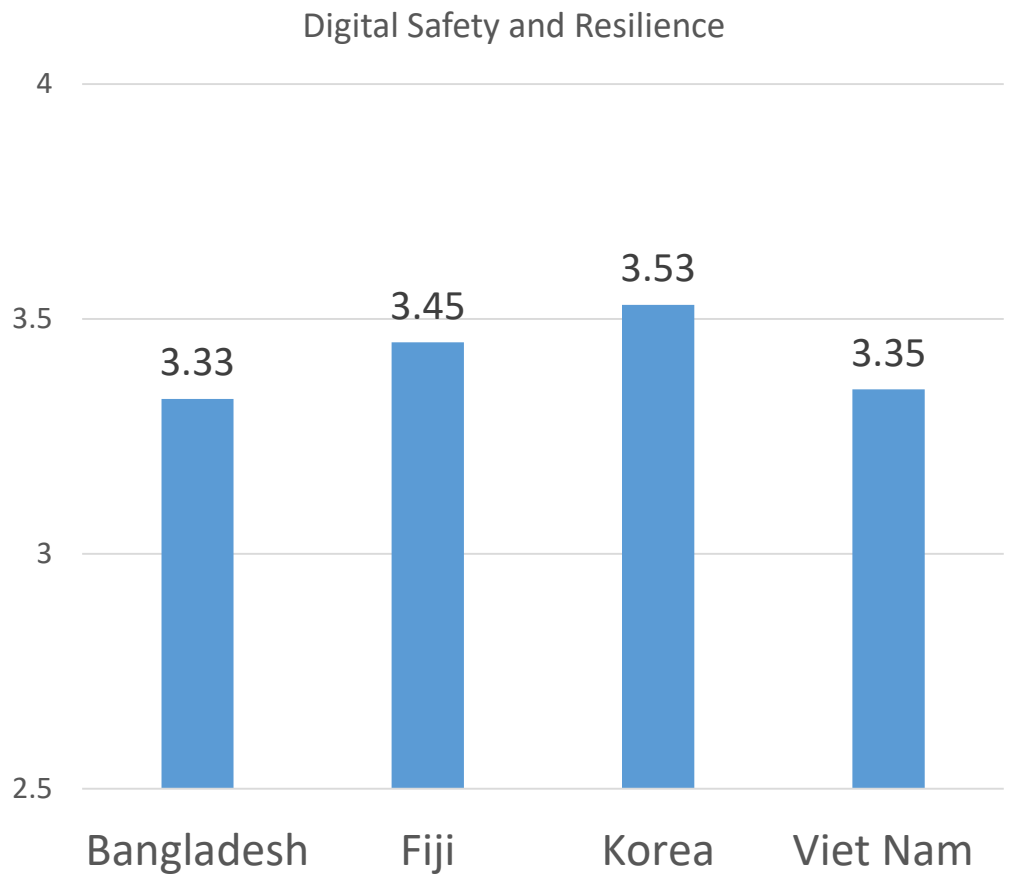
2. Digital Safety and Resilience

Findings:

1. **The domain with the highest performance of all students**
2. **Negative effect with the amount of time spent online**

Top 3 factors:

- Prior experience in using devices (duration)
- Number of devices accessible at home
- Education level of parents



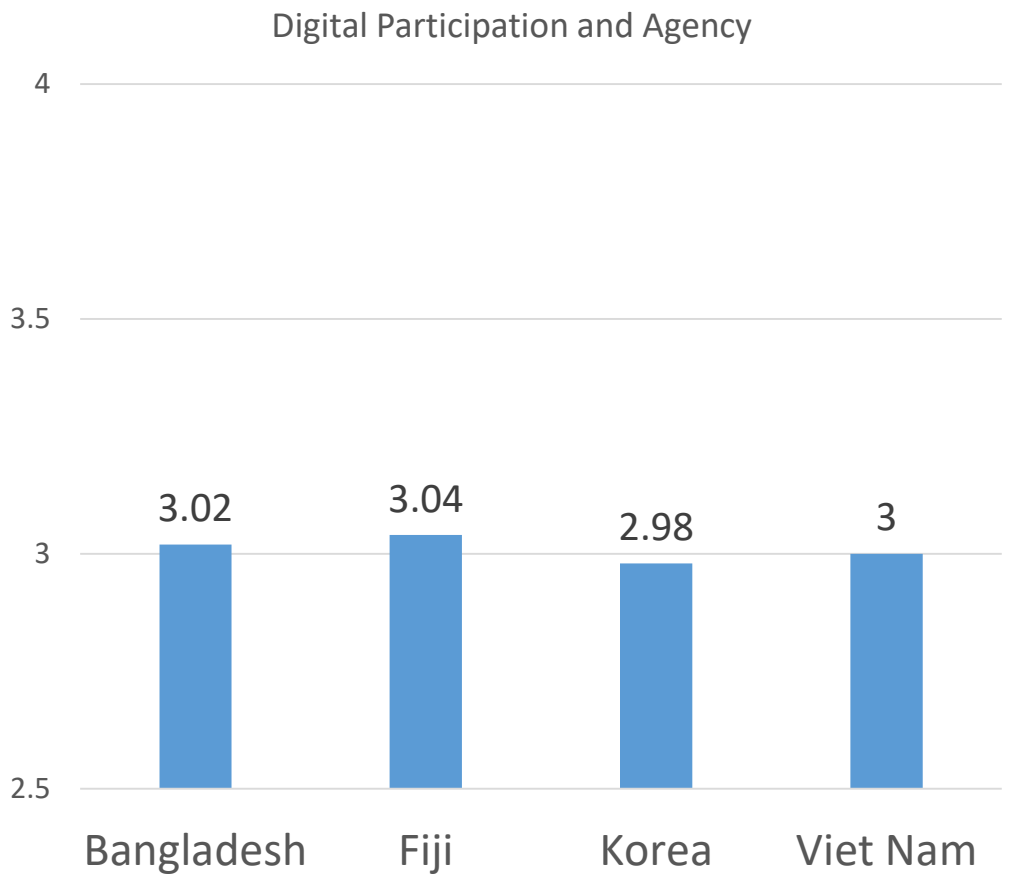
3. Digital Participation and Agency

Finding:

The domain with homogeneous low performance level of all students

Top 3 factors:

- Prior experience in developing a web or app
- Prior experiences in using devices
- Number of devices accessible at home



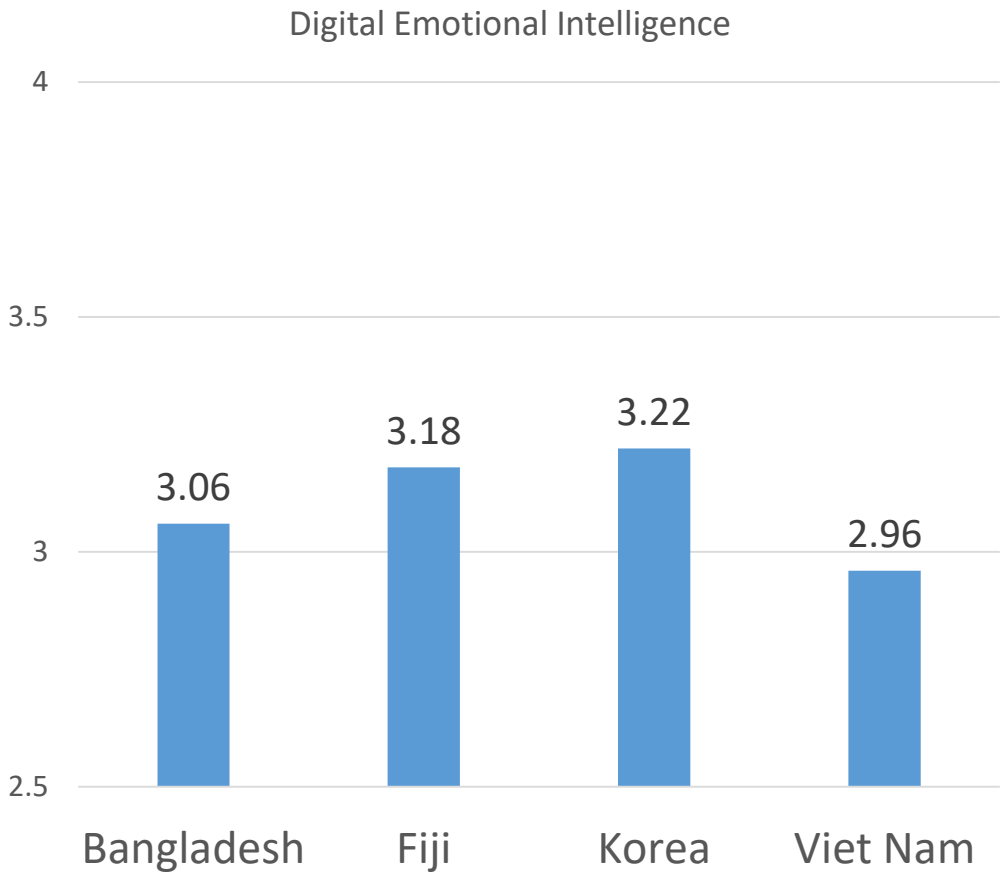
4. Digital Emotional Intelligence

Finding:

Second widest disparity between countries

Top 3 factors:

- Having access to devices at home
- Prior experience in developing a web or app
- Education level of parents



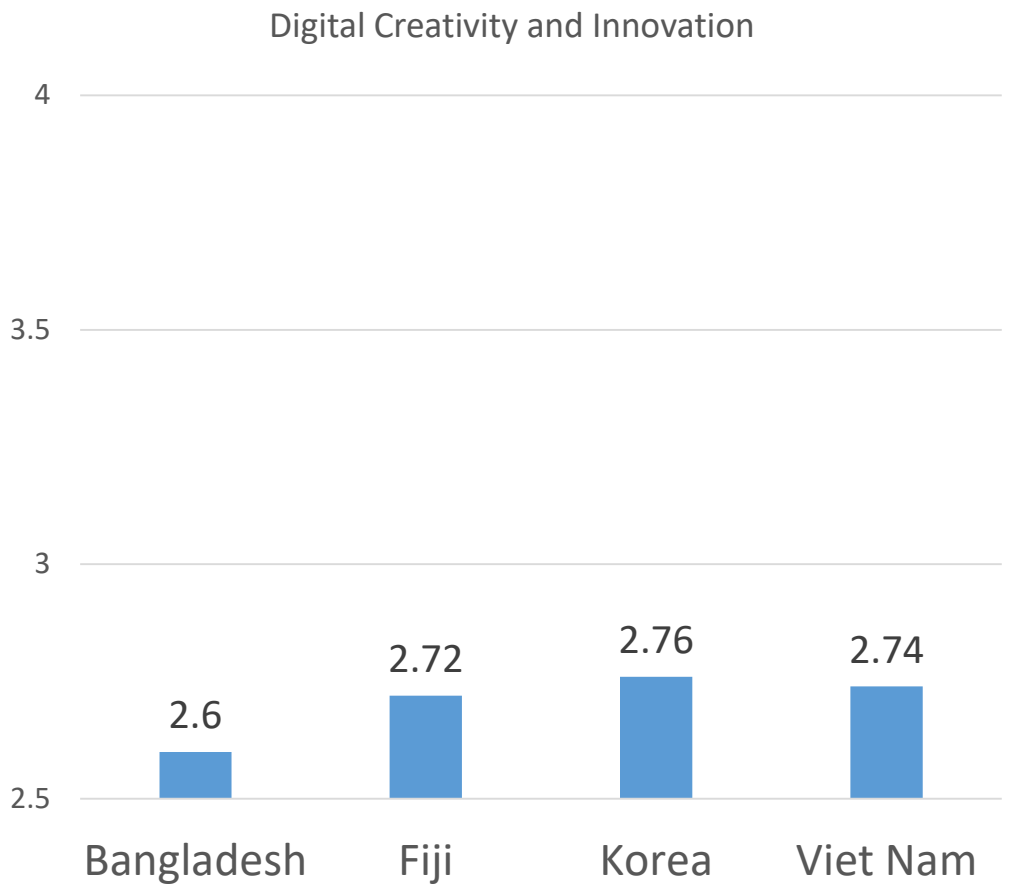
5. Digital Creativity and Innovation

Findings:

1. **Remarkably low performance across the countries**
2. **Also, biggest standard deviations within countries**

Top 3 factors:

- # of hours of using digital devices a day
- Prior learning experiences in coding
- Prior experiences in developing a website or app



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Policy Recommendations and Ways Forward

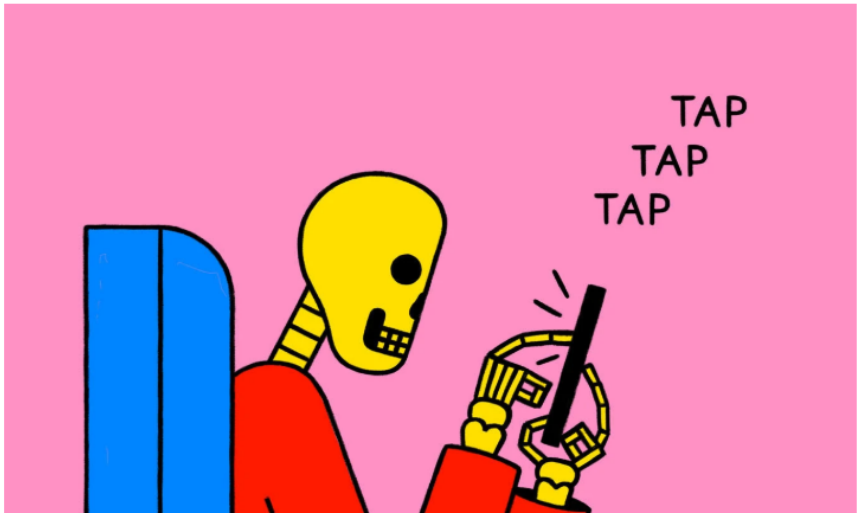
Policy recommendations

1. Expand the scope of digital skills to prepare holistic digital citizenship (beyond basic literacy and safety)
2. Encourage research that reflect children's voice in educational policy and intervention
3. Build support systems with parents, teachers, peers and siblings
4. Embrace positive sides of screen time, but with caution
5. Make a coordinated effort to close digital divides
6. Empower girls – let's help them match their competence with social/cultural confidence.
7. Develop inter-sectoral partnerships to address identified challenges

The New York Times

Putting Down Your Phone May Help You Live Longer

By raising levels of the stress-related hormone cortisol, our phone time may also be threatening our long-term health.



https://www.nytimes.com/2019/04/24/well/mind/putting-down-your-phone-may-help-you-live-longer.html

"the screen time is not the main driver of mental issues" but what they see can have an enormous impact.

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Technology

Teens 'not damaged by screen time', study finds

By Jane Wakefield
Technology reporter

5 April 2019 Share

There have been mounting worries among professionals, government and parents that excessive screen time is harmful to adolescents

https://www.bbc.com/news/technology-47825826

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Technology

The trouble knowing how much screen time is 'too much'

By Amy Orben
University of Oxford

23 February 2018 | Share

Concerns about the harm caused by "too much" screen time - particularly when it is spent on social media - are widespread. But working out what a "healthy" amount might be is far from easy.

Headlines rarely soothe nerves

https://www.bbc.com/news/technology-42907037

"Among those teenagers who were the lightest users, it was found that increasing the time spent using technology was linked to improved wellbeing - possibly because it was important for keeping up friendships.

In contrast, among the heaviest users of technology, any increase in time was linked to lower levels of wellbeing."

Ways forward

1. More research in this area is needed.
2. Effective strategy to communicate the findings
3. Expanding and scaling up: DKAP Champions (Session 3)

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Thank You.

ICT in Education (ict.bgk@unesco.org)

UNESCO Asia Pacific Regional Bureau for Education
(http://bangkok.unesco.org/theme/ict-education)

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