Implications for Korea based on ICILS

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I. Introduction

II. ICILS 2013 Results in Korea

III. Policy Recommendations from ICILS
I. Introduction
Computer and Information Literacy (CIL) is an essential ability

- Many countries are putting effort in enhancing students’ key competencies in education in order to foster future leaders in an era of internationalization.

- South Korea has been attentive to such international trends and participated in ICILS 2013.

- Through ICILS, we were able to measure CIL, identify relationships between contextual variables, and gain insights regarding policies on CIL education at the international level.
II. ICILS 2013 Results in Korea
Students’ CIL

The average CIL scores of Korea was higher than the average ICILS score.

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ICILS average score 500
Students’ CIL by gender

Korea emerged as the country with the largest gender gap in CIL.

* The difference of points by gender was rounded off; therefore the results can be different from the raw difference of each gender.
Korea has the largest gaps between the lowest level to highest level among the top five performance countries.

Percentages of Students at Each Proficiency Level across Countries (%)
Korean students report little experience with learning that makes active use of computers.

- Koreans had the lowest scores, respectively, on the use of computers for learning purposes and completing ICT assignments at school.

- Also, the percentages of students’ computer use at home and school was lower than other participating countries.
Korea showed the highest number of students per computer, and showed a relatively large gap between districts.

- ICILS reveals that about 20 students share each computer at school in Korea, whereas the ICILS average is 18 students per computer.

- There is a persistent gap in the number of computers available at schools between urban and rural areas.
Korean teachers report little experience with learning that makes active use of computers.

- Korean teachers showed the second highest ICT self-efficacy after Australia but were not positive about using ICT in teaching and learning.
Teachers hold negative perceptions of the use of ICT and are reluctant to participate in ICT professional development programs.

- Korean teachers showed the second highest ICT self-efficacy after Australia but were not positive about using ICT in teaching and learning.

- Korean teachers were particularly less likely than their counterparts worldwide to use ICT in their teaching and learning processes.

- The percentages of teachers participating in ICT-related professional development activities were all below 50%, excluding the component ‘observing other teachers using ICT in teaching’.
III. Policy Recommendations from ICILS results in Korea
The CIL education policy in Korea

Mandatory Software Education in the Revised National Curriculum of 2015

- Computer and information education in Korea, first introduced as part of occupational training in the early 1970s

- In the recent years, new efforts have been made to foster and develop computational thinking in students, and beyond teaching students basic ICT skills.

- The MOE has sought to introduce mandatory software education by adding new units to the “Practical Course” classes for G5 & G6 and also introducing the new “Information” subject for middle school students in the revised Curriculum of 2015.
Paradigm shift for reducing the information gap

- The information gap persists in Korea.
- Therefore, Korean policymakers now need to identify and analyze all the causes of this widening gap and find fitting policy solutions accordingly.
Policy Recommendations

Development of human and physical infrastructure for information education at public schools

- An educational environment that allows more student access to ICT in schools should be constructed.
Enhancement of the teacher capability to provide learner-centered information education.

- The Korean government should develop a national system for training teachers, with a view to ensure the sustainability of information education in Korea.
Thank you.