Digital Citizenship Education Practices in South Korea

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ICT in South Korea by Numbers

1st ICT Development Index 2016, ITU
1st UN E-Government Development Index 2014 (3rd in 2016)
1st in Households with access to the Internet (97.2%)

Bar chart showing the percentage of households with access to the Internet (wired only) and the percentage of households with access to the home computer from 2004 to 2015.
Korea tops OECD PISA survey of digital literacy in 2009
Who’s Involved in Government

- Ministry of Education
- Ministry of Science, ICT and Future Planning
- Ministry of the Interior
- Ministry of Culture, Sports, Tourism
- Ministry of Gender Equality and Family
- Ministry of Trade, Industry and Energy

- Korea Education Research & Information Service (KERIS)
- Korea Institute of Curriculum and Evaluation (KICE)
- National Information Society Agency (NIA)
- Korea Internet & Security Agency (KISA)
Internet Literacy Education for Preschoolers

• Activity-based education for age 3~7 in preschools to establish healthy and sound habit of the Internet use

• 1,200 preschools supported
  • Training on proper use of the Internet (for 1,000 preschools)
  • Puppet Show on Internet Ethics (for 200 preschools)
Internet Dream School Project

• Korea Internet Dream Star Program for elementary school students
• Provide online/offline programs
• Activity-based education
• Trains Internet literacy, digital humanity, and leadership
• 7,500 students from 300 elementary schools participated as part of after-school programs
• Supply teaching materials to the schools and allowing them to proceed with education by themselves for around 20 hours/year
Off-campus Creative Activities for Digital Literacy Education

- Activity-based digital literacy education for the elementary school
- Small groups at outside school (Creativity Cultivating Activity Program)
- 150 elementary schools participated
- Programs includes
  - We are the Internet Sheriff
  - How to become a smart Internet Messenger
  - Planting the Relationship Trees
Internet Literacy Education for Disabled Youths (Elementary, Middle, and High Schools)

- Customized program to the disabled youths
- Teach them the functions of the Internet and how to play and communicate through the Internet in properly and safely
- Program includes
  - Access to the Internet
  - Joy of the Internet
  - Making friends in the Internet
  - Expressing yourself in the Internet with UCC
  - Defending cyber bullying
Information Ethics School for Middle and High Schools Program

• Aims to cultivate cyber humanism in youths and support students’ voluntary activities
• Students can improve ability to prevent incidents and respond to issues related to information ethics
• 160 middle and high schools participated
• Organize the ‘Youth Monitor Group’ and carry out voluntary campaigns on proper use of information inside and outside of the school
Education for Cyber Violence (Crime) Prevention (Elementary, Middle Schools)

• Program (in form of lecture or drama performance) on cyber violence and crime prevention for elementary and middle schoolers

• 130 elementary schools and 100 middle schools participated
Cyber Humanity Education (Middle, High Schools)

• Education on cyber humanism for middle and high school students, conducted by dispatched lecturers
• 100 middle and high schools participated
• 1~2 hours of video lecture
• Teach the values and norms in the cyber space and various measures to respond to adverse impact on digital age
Information Ethics Education for Teachers

- Online and offline training program for principals and teachers
- Aimed to stabilize and facilitate Internet ethics education in schools
- 4,300 persons (4,000 teachers and 300 principals) participated
- Programs consist of a 15-hour program (1 credit) and a 30-hour program (2 credits)
  - Online only for the teachers
  - Online and Offline for the Principals
Internet Ethics Education for Parents and Adults

- Program for parents, community residents, and other adults (including military servicemen, etc.)
- Group lectures
- Internet ethics for parents and cyber humanistic education for adults
- Overall 150,000 participated
Software-Oriented Society Initiative

- Launched in 2012 by Ministry of Science, ICT and Future Planning
- To build creative economy, strengthen ICT R&D, reform education system and the government
- Promotion of software-oriented culture at every level, applying software-oriented solutions to socio-economic problems and creating new markets using software, and establishment of an effective ecosystem that can help the software industry grow and develop
- Enhance the software skills for higher education and teach program coding in elementary school
Digital Textbook Project since 2007

- Digital textbooks have a positive effect on students' meta-cognition, self-regulated learning, self-efficacy, information exploration, problem-solving, intrinsic motivation, and self-reflection
- Use of new technologies such as HTML5, AR/VR, AI, Robotics, Cloud Computing, Big Data, etc.
- Provide open and integrated digital textbook sources, platform, and standards
- Need to solve the copyright problems
- Some negative perceptions to digital education
- Budget is vague and uncertain
SMART Education since 2009

- Digital Education Initiative Funded by the Ministry of Education
- Replace chalkboards and textbooks by digital devices like tablet computers, electronic blackboards, smartphone, and digital textbook (software)
- Self-directed, motivated, adaptive, resource-enriched, technology-embedded schooling
- About 69% of students, 75% of teachers and 68% of parents from 373 SMART schools are satisfied
- But some parents worry about their children getting addicted to Internet content via the devices they’re supposed to be using for studying
My Thoughts(1)

• **Teachers and parents must be educated before the children!**
  – Most of countries are facing the digital skill crisis (digital divide, digital skill gap, lack of ICT teachers, cyber security) and the governments try to prevent this skill crisis
  – Schools are making digital literacy as a core subject
  – **Upskilling the teachers and parents are must**

*Digital Technology changes too fast!*
My Thoughts(2)

• How much is enough?
  - Too much DIGITAL can damage the brain causing addiction.

• "Studies show the Internet addiction is associated with structural and functional changes in brain regions involving emotional processing, executive attention, decision making, and cognitive control."
  
research authors summarizing neuro-imaging findings in internet and gaming addiction (Lin & Zhou et al, 2012)
Are We on Right Direction?
My Thoughts(3)

• How to cooperate with other countries?
• Achievement gap? vs. Opportunity gap?
My Thoughts(4)

• Should focus the worst cases: handicaps, unstable family, busy parents and teachers
• Re-education
• Are we really understanding the children?
• Right-or Wrong vs. Like-or-Dislike
• Not the skill but ability to judge
• How to get sustainable budget and policy