“SMART” Learning Trends in Korea

Keol Lim
Assistant Professor, Konkuk University, Seoul
Being “SMART”
Being “SMART”

• Definition in a dictionary

*adjective* smart-er, smart-est.

quick or prompt in action, as persons.
having or showing quick intelligence or ready mental capability: *a smart student.*
shrewd or sharp, as a person in dealing with others or as in business dealings: *a smart businessman.*
clever, witty, or readily effective, as a speaker, speech, rejoinder, etc.
dashingly or impressively neat or trim in appearance, as persons, dress, etc.
Being “SMART”

• “SMART” daily lives in Korea
Being “SMART”

• “SMART” daily lives in Korea

“Smart” School uniforms
Being “SMART”

• “SMART” daily lives in Korea

“Smart” bicycles
Being “SMART”

• “SMART” daily lives in Korea

“Smart”
air conditioners
Being “SMART”

- “SMART” daily lives in Korea
Being “SMART”

• “SMART” daily lives in Korea

Yes, “Smart” Phones!
Being “SMART”

“SMART” means-

- A whole new Paradigm
- Intelligent
- Using Smart Devices-Related Technologies
- Advanced
- State-of-the-Art

in Korea
Mobile Tech. Trends
Mobile Tech. Trends in Korea

• Advent of Smart Devices in Korea
  – Apple iPhone in November 2009
  – Samsung Galaxy S in June 2010
  – Apple iPad in November 2010
  – Samsung Galaxy Tab in November 2010
Mobile Tech. Trends in Korea

• The number of smart devices
  – Oct. 2009 : 0
  – 2010 : 10 million
  – 2011 : 20 million
  – Oct. 2012 : 30 million

* population of Korea : 50 million
Mobile Tech. Trends in the world

• Advanced technologies
  – MWC (Mobile World Congress)
  – CES (Consumer Electronic Show)
  – others
Mobile Tech. Trends in the world

Park and Pay

NFC (Near Field Communication) Technology
Mobile Tech. Trends in the world

- Smart Window
- TV Browser
- Curtain Monitor
Mobile Tech. Trends in the world

Windows of Opportunity

Interactive windows Mobile
Mobile Tech. Trends in the world

Ubiquitous : anywhere, anytime
New Trends of the Web
New Trends of the Web

Web 1.0 (1991-)

- static pages
- personal websites
- HTML extensions
New Trends of the Web

Web 2.0 (2004-)

• user-centered design
• information sharing
• collaboration
New Trends of the Web

Web 3.0 (?-)

- semantic web: personalization
- intelligent agents
- Metaverse: virtual worlds, augmented reality, etc.
New Trends of the Web

• Current Web Trends: Web 2.0

- Openness
- Participation
- Sharing
- Communications
- Collaboration
New Trends of the Web

• The Power of SNSs

But the use of a large number of stand-alone social media tools would be far too overwhelming for many users within an organisation.
“SMART” Learning
“SMART” Learning

• Process of Development

- **eLearning**
  - Electronically supported
  - Using ICT
  - CBI, WBI, etc.

- **mLearning**
  - Learning with mobile devices
  - Using PDAs

- **uLearning**
  - Ubiquitous computing
  - RFID
  - More advanced than mLearning

- **SMART Learning**
  - Using smart devices
  - Focused on instructional strategies
“SMART” Learning

• Definitions

  – Human-centred learning paradigm with flexibility, creativity, and openness (Kim, 2010)

  – Learner-centred, intelligent, collaborative, personalized, communication skills, problem solving skills (Kwak, 2010)

  – Intelligent, personalized, self-directed instructional support system (Chang, 2010)

  – Sense of reality, immersive, informal learning, cognitive (learning) support system, creative thinking (Lee, 2010)
“SMART” Learning

• Instructional Strategies: Social Learning

Julian B. Rotter

• 1954, Social Learning and Clinical Psychology
“SMART” Learning

• Instructional Strategies: Social Learning

Albert Bandura

• 1977, Social Learning Theory
• observational learning
• attention, retention, reproduction, motivation
• vicarious learning
“SMART” Learning

• Instructional Strategies: Social Learning

Lev Vygotsky

• ZPD (Zone of Proximal Development)
• MKO (More Knowledgeable Other)
• Social Constructivism
“SMART” Learning

• Instructional Strategies: Social Learning

Jean Lave & Etienne Wenger

• Situated Learning

• CoP (Community of Practice)

• LPP (Legitimate of Peripheral Participation)
“SMART” Learning

• Instructional Strategies: Social Learning

  • Collaborative Learning Environments
  • Using SNSs or Web 2.0 Tools (e.g., Wikis)
  • Community of Practice
  • Informal Learning (Hidden Curriculum)
  • Collective Intelligence
SMART Learning Practices
SMART Education Policy

• SMART Education Policy: K12 innovation in Education by 2015 (Budget: $2 billion)

- Using Digital Textbooks
- Enhancing Online Classes
- Korean OCW w/ Creative Commons License
- Professional Development for Understanding New ICT Technologies
- Cloud Computing in Ed.
Connecting Government-School-Corporation

SMART Learning

Government

School

Corporation

Government-School
SMART Education Policy

Government-Corporation
Consultative Groups

School-Corporation
Educational-Industrial Collaboration
“SMART” Learning

Device Approach
- Smartphones
- Tablet PCs
- Smart TVs

Environmental Approach
- ubiquitous, pervasive, seamless
- RFID
- mobility

Theoretical Approach
- Constructivism
- Collective Intelligence
- Social Learning
SEE YOU ONLINE!

gklim01@konkuk.ac.kr
www.konkuk.ac.kr