e-learning Strategies in Lifelong Learning from Learning 2.0 to Learning 3.0

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Issues

Reasons to Change

Ways to Change

Discussions
Reasons to Change

- Society
- Knowledge
- Technology
- Education
Knowledge as Social Capital
- Knowing how: Procedural knowledge
- Usable knowledge: critical & creative thinking, problem solving

Cultural Diversity
- Ensure harmonious interactions among people and groups
- Equip with interpersonal skills: communication, collaboration, awareness of cultural differences and conflict-resolution

Myunghee Kang (2010)
Future Society
• Blocked and global economy: EU, APEC, e-ASEM
• Global community/collaboration/cooperation
• Multi-cultural and diverse society

• Technology-based society
• Knowledge-based society
• Boarders are meaningless

Myunghee Kang (2010)
Knowledge

- Shrinking half-life cycle of knowledge
- Knowledge doubles in every 18 months
- Knowledge is distributed and shared
- Consumer and producer of knowledge are the same one, ‘Prosumer’
Technology

- Wired/Wireless
- Multimedia
- Various platforms (phone, pad, netbook, pc, etc.)
- Networked
- Speed
- Transparent
- User-friendly
- Ubiquitous
- Smart ecological environment human nature
Emergence of Lifelong Learning

- Plan and assess their own learning process and products
- Be active in searching and organizing the information
- Learn in both formal as well as informal settings
- Learn from their peers, mentors, experts
- Be involved actively in socio-cultural exchanges
- Be able to harmonize learning with working

Myunghee Kang (2010)
Education

- Digital Natives, Generation–D (digital), Nintendo Kids, MTV Generation, NML, etc.
  
  • Grown up with an unprecedented access to and appetite for technology and new media
  
  • Perceive technology as their friend and rely on it to study, work, play, relax, and communicate

Myunghee Kang (2010)
N, M, U, S–Generation

- Power, Passion, Participation, Pure
  - Active vs Passive
  - Play vs Work
  - Payoff vs Patience
  - Fantasy vs Reality
  - Technology as Friend vs Technology as Foe
Power, Passion, Participation, Pure

- Twitch speed vs Conventional speed
- Parallel processing vs Linear processing
- Random thinking vs Linear thinking
- Graphics first vs Text first
- Connected vs Stand-alone
Education

- Learning Environment
  - Blending formal and informal learning
  - Commonizing lifelong learning
  - Teaching through the cyber-infrastructure
  - Communicating among learners
  - Learning in the borderless classrooms
Ways to Change: Four Aspects for Successful e-learning

1. Software side
2. Humanware side
3. Hardware side
4. Systemware side
Four Aspects for Successful e-learning

1. Software side

2. Humanware side
   - Learning contents (quality)
   - Teaching & learning support

3. Hardware side
   - Teaching & learning activities
   - Class management

4. Systemware side
Four Aspects for Successful e-Learning

- Aspects of learners
- Aspects of instructors
- Aspects of educational administrators
- Aspects of community leaders

Training
Four Aspects for Successful e-Learning

1. Software side
2. Humanware side
3. Hardware side
4. Systemware side
### Core capabilities required in u-era

<table>
<thead>
<tr>
<th>Letter</th>
<th>Capability</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>C</strong></td>
<td>Cognitive capability</td>
<td>problem solving ability and critical thinking ability</td>
</tr>
<tr>
<td><strong>R</strong></td>
<td>Relational capability</td>
<td>ability creating harmonious and reliable relationship</td>
</tr>
<tr>
<td><strong>E</strong></td>
<td>Emotional capability</td>
<td>ability to control his/her emotion wisely with an appreciative eye on technology and an aesthetic sense</td>
</tr>
<tr>
<td><strong>A</strong></td>
<td>Adaptability</td>
<td>ability to find information from fast search and critically evaluate and use them for his /her own purpose</td>
</tr>
<tr>
<td><strong>T</strong></td>
<td>Technology Literacy</td>
<td>upright understanding about characteristics and ranges of use of ubiquitous technology</td>
</tr>
<tr>
<td><strong>E</strong></td>
<td>Effective learning ability</td>
<td>self-directed learning ability which can be self-planning, self-monitoring, reflection and self-evaluation</td>
</tr>
</tbody>
</table>
Four Aspects for Successful e-learning

1. Software side
2. Humanware side
3. Hardware side
4. Systemware side

- Appropriateness of devices
- Speed of wireless network
- Appropriateness of server
- Speed of after service
Changes of Educational Devices

Desktop | Laptop | Netbook | PMP | Tablet | SMART

E-Learning | m-Learning | u-Learning

Jung Meehyun (2010)
Smart devices

- Paperless
- Customized LMS
- 1 to 1 learning
- Live Class
- Social learning
- Edutainment
- Interactive books
- Flash animation
Creative Learning Environment

- Interactions among peers and teachers through openness, sharing, and collaboration

Jung Meehyun (2010)
M-learning platforms of Blackboard

- Blackboard which provides e-learning platforms for university develops mobile platforms

- Iphone platform
- Ipad platform
- Android platform
Ways to Change: Four Aspects for Successful e-learning

1. Software side
2. Humanware side
3. Hardware side
4. Systemware side

- Aspects of security
- Aspects of support
- Web 2.0/Web 3.0 environment
  EDUNET
  NICE
  EBS EDRB
e–learning 1.0 to e–learning 3.0

- **e–learning 1.0**
  - Static
  - Course centric
  - Centrally controlled
  - Instructor–centered
  - One way comm.

- **e–learning 2.0**
  - Web 2.0 technologies and social Learning
  - Interactive learning
  - Collaborative learning
  - Learner–centered
  - User created contents

- **Personal Learning Environment**
  - Learners customize their own learning environment based on pedagogical and personal choices
  - Collaborative learning
  - Interactive learning
  - Learner–centered
  - User created contents

- **e–learning 3.0**
  - Continues throughout life in different contexts and settings
  - New information system by linking and integrating data sources
  - Supports informal learning by extending PLEs
  - Facilitates lifelong learning

Web 2.0/Web 3.0

- Participation
- Openness
- Sharing

- Sociocultural Psychology
- Social Cognition
- Sociocultural Constructivism
- Connectivism
e-learning 2.0/3.0

- Web 2.0
- Web 3.0—connecting and sharing human brain to brain

Social media is a type of a platform which
- Is based on Internet, communication, video and web
- Can create, produce and spread everything you want
- Is open to public and shares all the information
Social media is

Online tools and platforms people use to share their opinions, ideas, experiences, and perspectives expressed in various types such as text, image, audio, and video.
Emergence of Social Media:

1) Participation of Consumers
   : Consumers start to participate in providing ideas about marketing and producing digital contents

2) Sharing Information and Networking
   : Due to the development of web-based technology, information sharing and networking become possible

3) Promoting Community Culture
   : Changes of mass selling into personalized marketing and sales
   : Personalization supports creating community culture

Minjung Song (2010)
# Types of Social Media

<table>
<thead>
<tr>
<th>Service Type</th>
<th>International Websites</th>
<th>Korean Websites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blog</td>
<td>Blogger, LiveJournanl, Open Diary, TypePad, Wordpress, Vox, ExpressionEngine</td>
<td>Portal Blog, Egloos, T-story</td>
</tr>
<tr>
<td>Micro Blog</td>
<td>Twitter, Plurk, Jaiku</td>
<td>Metoday, Tosee, Playtalk</td>
</tr>
<tr>
<td>Social Networking</td>
<td>Bebo, Facebook, LinkedIn, Myspace, Orkut, Skyrock, Hi5, Elgg, FreindFeed</td>
<td>Cyworld, Iloveschool</td>
</tr>
<tr>
<td>Event Networking</td>
<td>Upcoming, Eventful, Meetup</td>
<td></td>
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</tbody>
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Minjae Choi (2009)
## Web.2.0 vs Web 3.0

<table>
<thead>
<tr>
<th></th>
<th>Web 2.0</th>
<th>Web 3.0</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Era</strong></td>
<td>2000~2010</td>
<td>2010~2020</td>
</tr>
<tr>
<td><strong>Interaction</strong></td>
<td>Read and write</td>
<td>Read, write and execute</td>
</tr>
<tr>
<td><strong>Keyword</strong></td>
<td>Participation, openness, and sharing</td>
<td>Context recognition</td>
</tr>
<tr>
<td><strong>Users of information</strong></td>
<td>Human</td>
<td>Human and machine</td>
</tr>
<tr>
<td><strong>Authority of Information</strong></td>
<td>Expansion and concentration</td>
<td>Selection of information</td>
</tr>
<tr>
<td><strong>How to use contents</strong></td>
<td>Users are in charge of producing, spreading, and consuming</td>
<td>Intelligent web provides the contents users want (personal customization)</td>
</tr>
<tr>
<td><strong>Search</strong></td>
<td>Open to resources on many websites</td>
<td>User customized search</td>
</tr>
<tr>
<td><strong>Technology</strong></td>
<td>Broadband, server management</td>
<td>Semantic web, context recognition, cloud computing</td>
</tr>
</tbody>
</table>

Park, Y. J. (2009)
Digital learning eco-system

K-12 Education
- Student
- Parent
- Teacher

Higher Education
- Student
- Professor

Lifelong/Vocational Education
- Worker

Knowledge & Information
- Networking/Sharing/Distribution

Needs Innovation

Human Resources

Technology
- Infrastructure (Hardware)
- Applied Technology
- Service
- Content
Participation
Sharing
Trust
Empathy
Discussion

For authentic communication
Not emotional but logical
Not logical but emotional
Discussion

- How should we communicate with learners?
- Should we incorporate emotional communication into teaching subjects?
- How should we improve teaching and learning?
- How should we solve major problems of e-learning?
A New Strategy: teaching and learning

- Active
- Intentional
- Authentic
- Constructive
- Cooperative Collaboration

Learning Environment (Technology Based)
How should we solve major problems of e-learning?

- **Deficiency in learning content**: The information may not inspire the users successfully.
- **Lack of personalization**: Different learning platforms are needed to meet a variety of learning demands.
- **Narrowness**: E-learning systems are applied by small and specific groups.

What we need to consider: e-learning strategies in lifelong learning

e-learning implementation and its evaluation must be accomplished in systematic approaches in order to successfully assist in establishing a lifelong education society while requiring comprehensive quality management at the same time.

Even though infrastructures and systems are recognized as the critical factors, its expert training programs are required to qualify the human resources.

It should be realized that to meet the needs of education means more than education methodology changes.
Active e-learning to build a learning community and achieve a national human resources development program.
What’s the Education?

Education is Love
Education is Touch
Education is Relationship
Education is Repetition
Education is Change
Education is Communication
“Technology matters, but good teachers and good teaching matter more.”
All things are difficult, before they are easy.

Thank you

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