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

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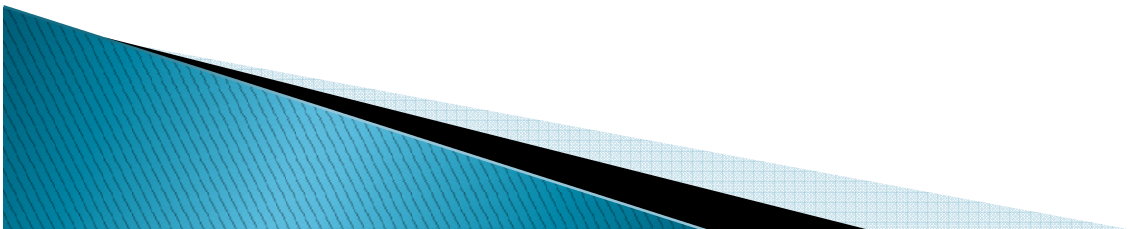
Yeonpyeong Island (2010,11.23)
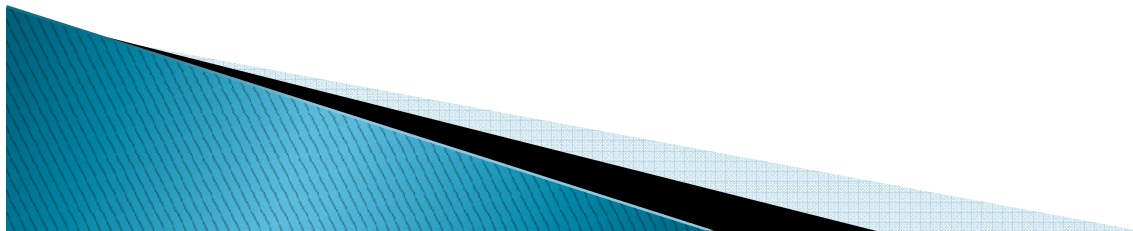
November in Korea

Issues

Reasons to Change

Ways to Change

Discussions

Reasons to Change

- Society

- Knowledge

- Technology

- Education

Society

- **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)

Society

▸ **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'

Myunghee Kang (2010)

Technology

- Wired/Wireless

- Multimedia

- Various platforms

  (phone, pad, netbook,

  pc, etc.)

- Networked
- Speed
- Transparent
- User-friendly
- Ubiquitous
- Smart
    ecological environment
    human nature

Education

▸ **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)

Education

▸ 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
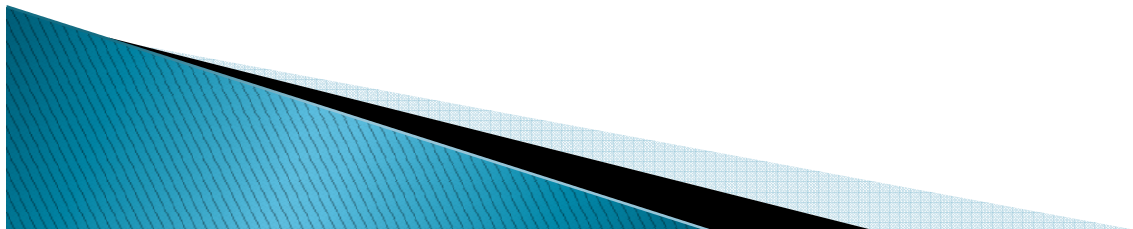
- **Power, Passion, Participation, Pure**

Twitch speed   vs   Conventional speed

Parallel processing   vs   Linear processing

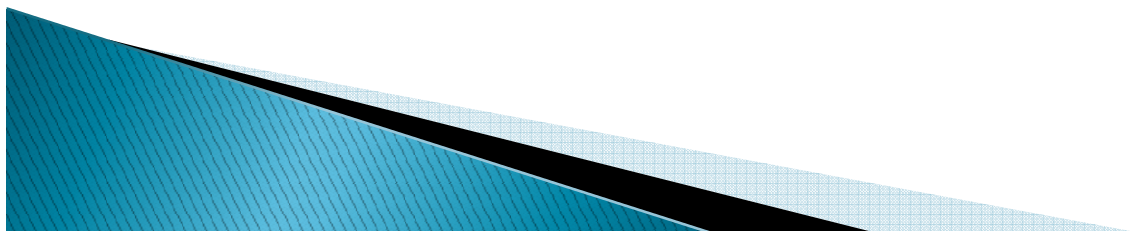Random thinking   vs   Linear thinking

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

1 Software side

2 Humanware side

3 Hardware side

4 Systemware side

- Learning contents (quality)

- Teaching & learning support

- Teaching & learning activities

- Class management

1 Software side

2 Humanware side

3 Hardware side

4 Systemware side

- Aspects of learners

- Aspects of instructors

- Aspects of educational administrators

- Aspects of community leaders

Training

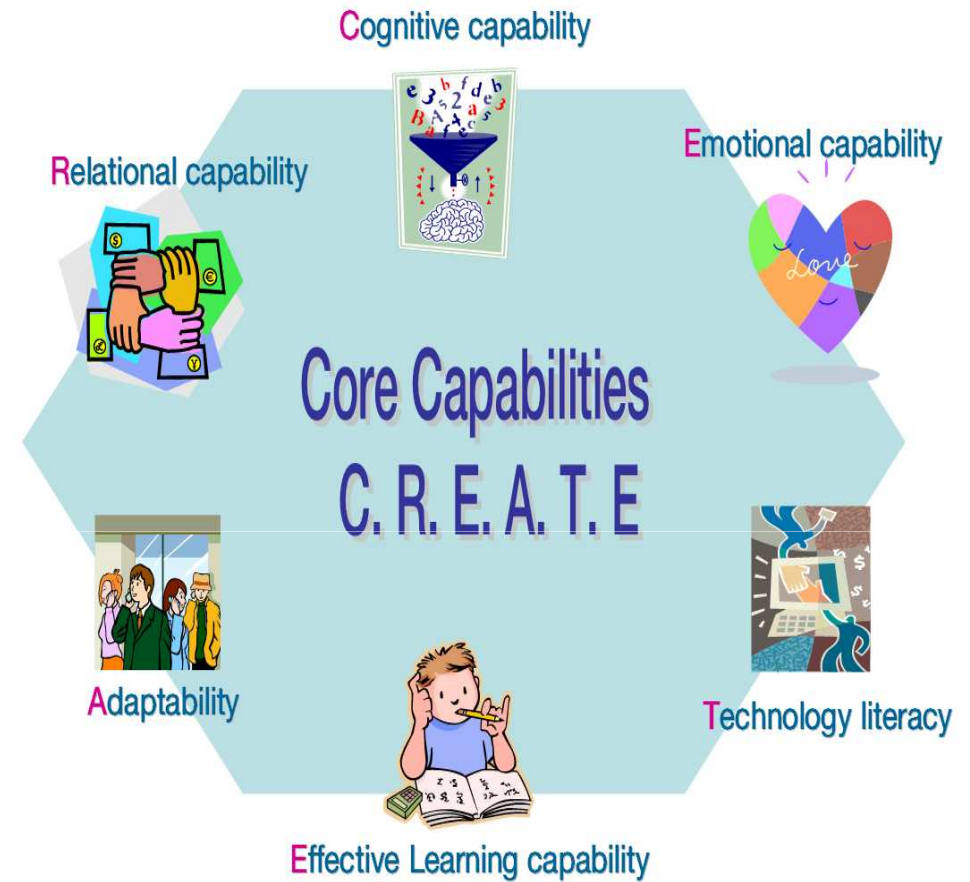**1** Software side

2 Humanware side

3 Hardware side

4 Systemware side

Cognitive capability

Emotional capability

Relational capability

Core Capabilities
C. R. E. A. T. E

Adaptability

Technology literacy

Effective Learning capability

Core capabilities required in u-era

C — **Cognitive capability**	problem solving ability and critical thinking ability
R — **Relational capability**	ability creating harmonious and reliable relationship
E — **Emotional capability**	ability to control his/her emotion wisely with an appreciative eye on technology and an aesthetic sense
A — **Adaptability**	ability to find information from fast search and critically evaluate and use them for his /her own purpose
T — **Technology Literacy**	upright understanding about characteristics and ranges of use of ubiquitous technology
E — **Effective learning ability**	self-directed learning ability which can be self-planning, self-monitoring, reflection and self-evaluation

1 Software side

2 Humanware side

3 **Hardware side**

- Appropriateness of devices

- Speed of wireless network

- Appropriateness of server

- Speed of after service

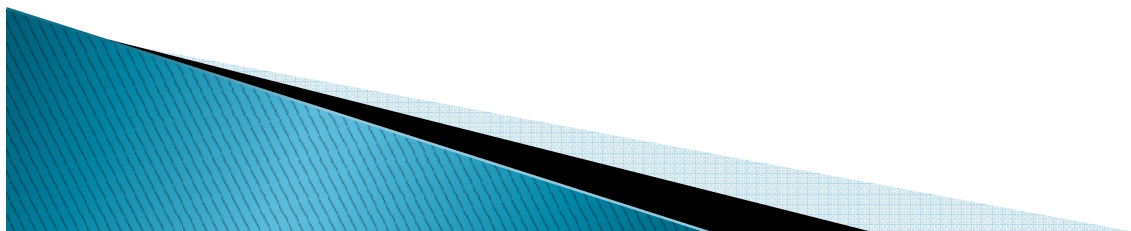4 Systemware side

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

Classroom   Home

Electronic Board

Tablet

Mobile Apps

Web
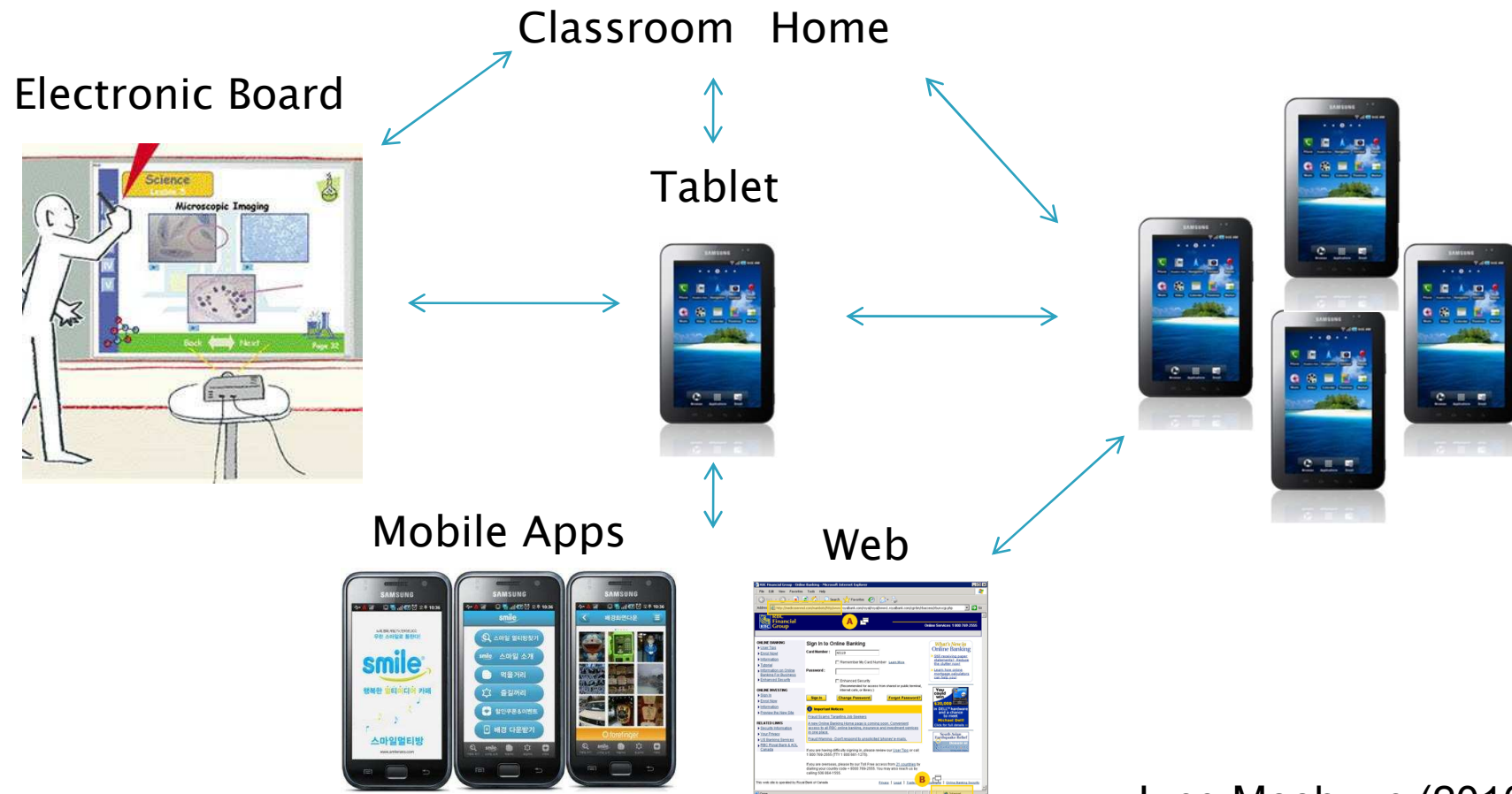
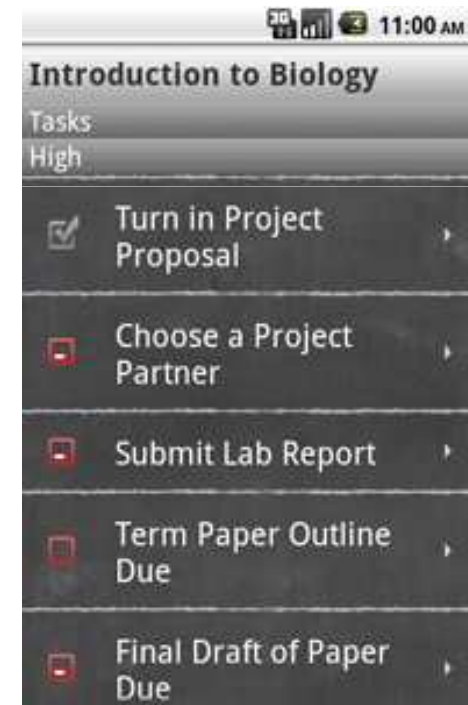Jung Meehyun (2010)

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:
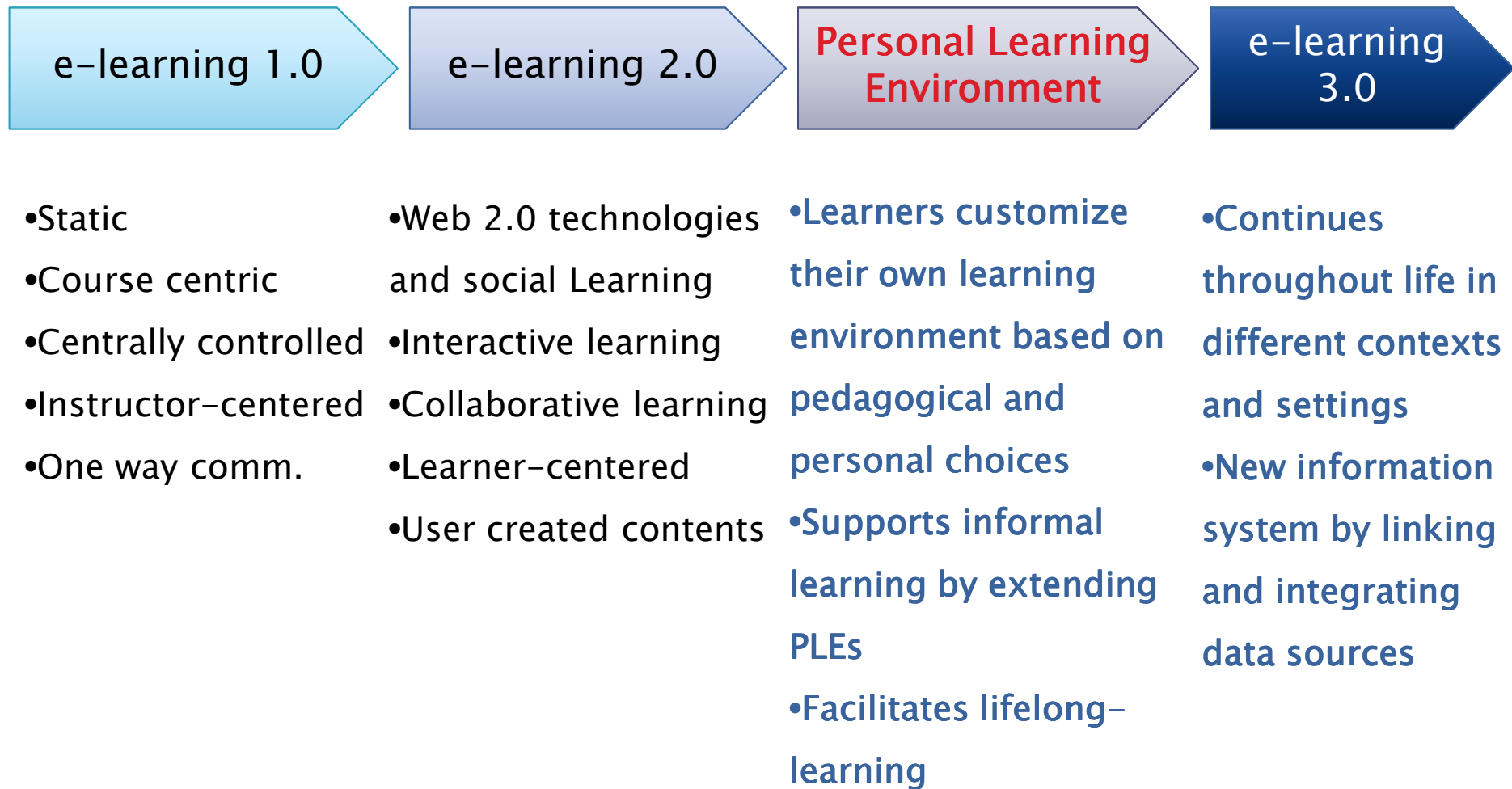## Four Aspects for Successful e-learning

1 Software side
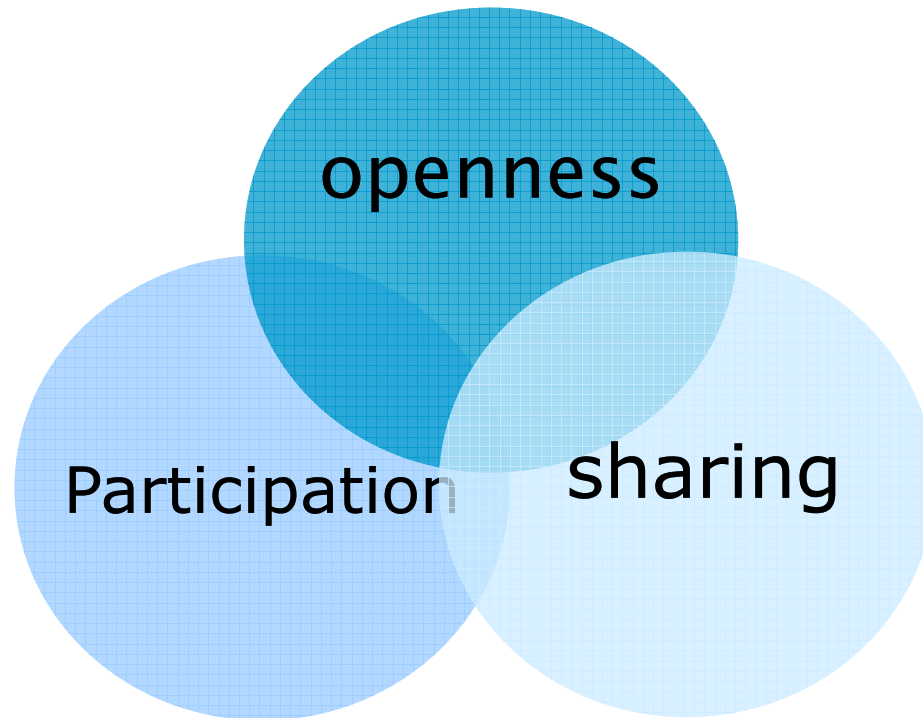
2 Humanware side

3 Hardware side

4 Systemware side

- Aspects of security

- Aspects of support

- Web 2.0/Web 3.0 environment

- Digital Learning eco-system
  EDUNET
  NICE
 EBS EDRB

e-learning 1.0 to e-learning 3.0

e-learning 1.0	e-learning 2.0	Personal Learning Environment	e-learning 3.0
•Static	•Web 2.0 technologies and social Learning	•Learners customize their own learning environment based on pedagogical and personal choices	•Continues throughout life in different contexts and settings
•Course centric	•Interactive learning	•Supports informal learning by extending PLEs	•New information system by linking and integrating data sources
•Centrally controlled	•Collaborative learning	•Facilitates lifelong-learning	
•Instructor-centered	•Learner-centered		
•One way comm.	•User created contents		

Alotaibi, S. (2010)

Web 2.0/Web 3.0

openness

Participation

sharing

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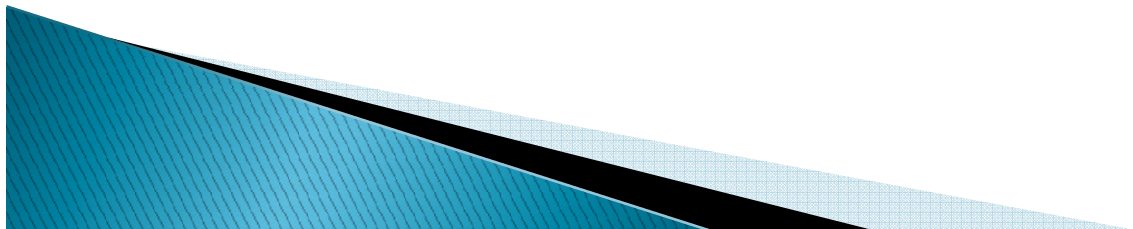- Social Cognition
- Sociocultural Constructivism
- Connectivism
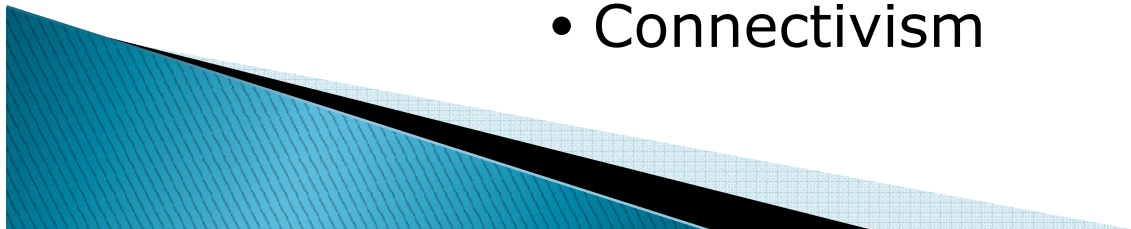
e-learning 2.0/3.0

▸ 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.
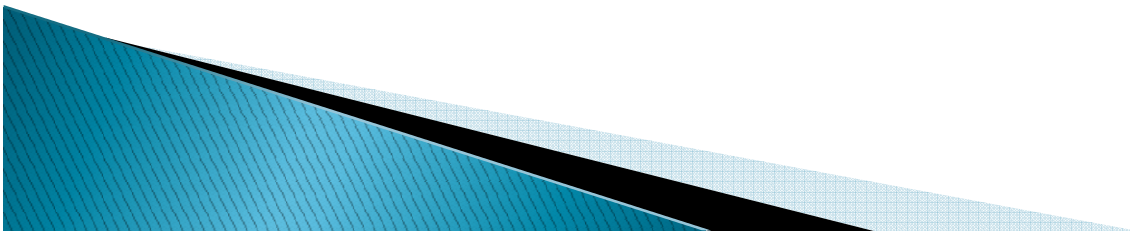
Emergence of Social Media :

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

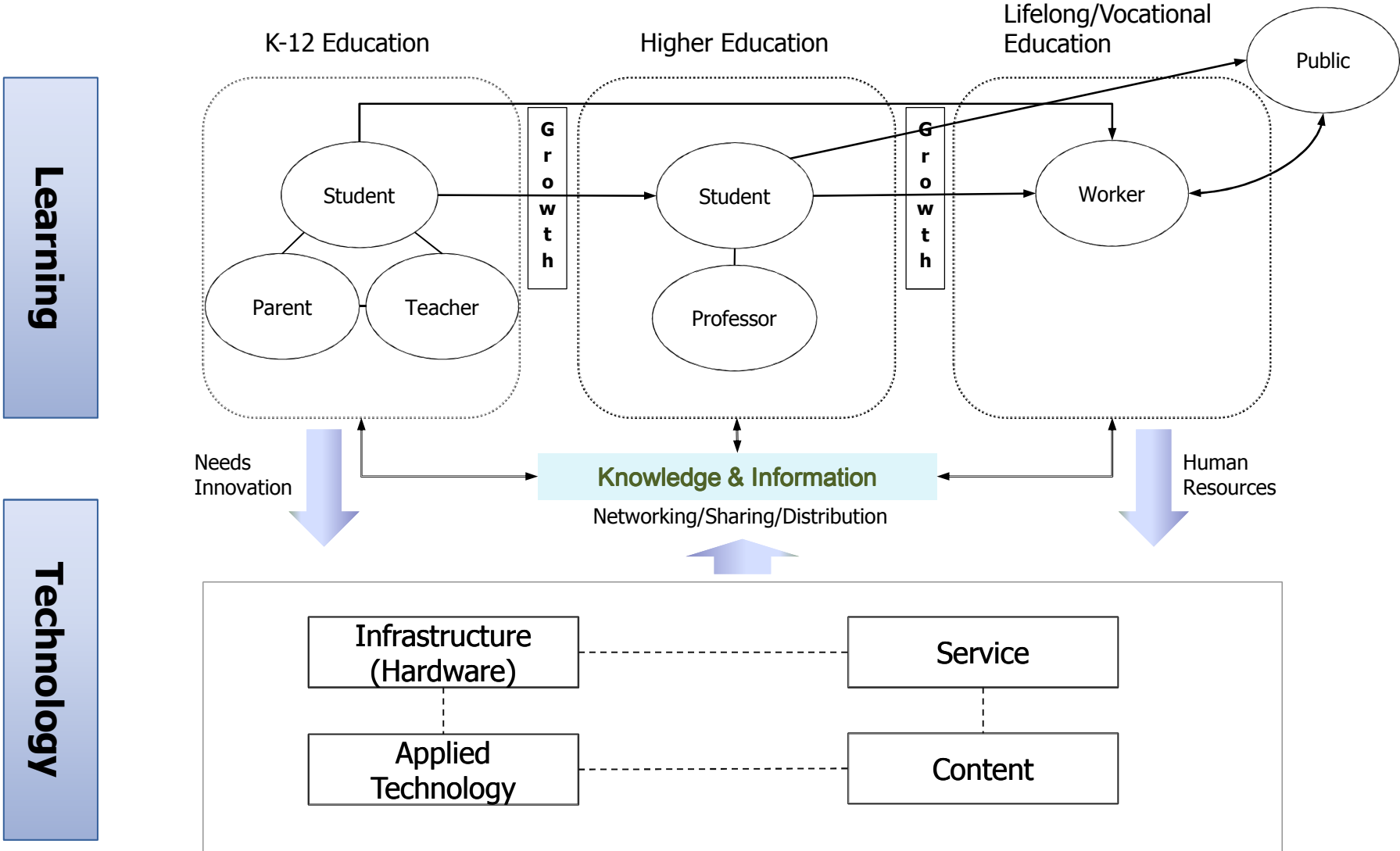| Service Type	International Websites	Korean Websites
Blog	Blogger, LiveJournanl, Open Diary, TypePad, Wordpress, Vox, ExpressionEngine	Portal Blog, Egloos, T-story
Micro Blog	Twitter, Plurk, Jaiku	Metoday, Tosee, Playtalk
Social Networking	Bebo, Facebook, LinkedIn, Myspace, Orkut, Skyrock, Hi5, Elgg, FreindFeed	Cyworld, Iloveschool
Event Networking	Upcoming, Eventful, Meetup	

Minjae Choi (2009)

Web.2.0 vs Web 3.0

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

Park, Y. J. (2009)

Digital learning eco–system

Learning

Technology

K-12 Education

Higher Education

Lifelong/Vocational Education

Public

Student

Parent

Teacher

Growth

Student

Professor

Growth

Worker

Needs Innovation

Knowledge & Information

Networking/Sharing/Distribution

Human Resources

Infrastructure (Hardware)

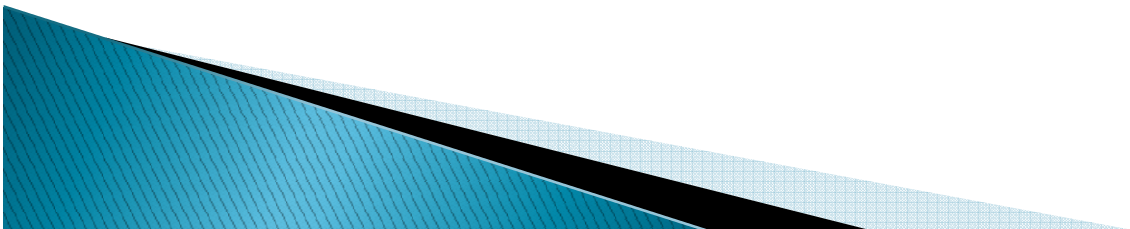Service

Applied Technology

Content

Participation

Sharing

Trust

Empathy

Discussion
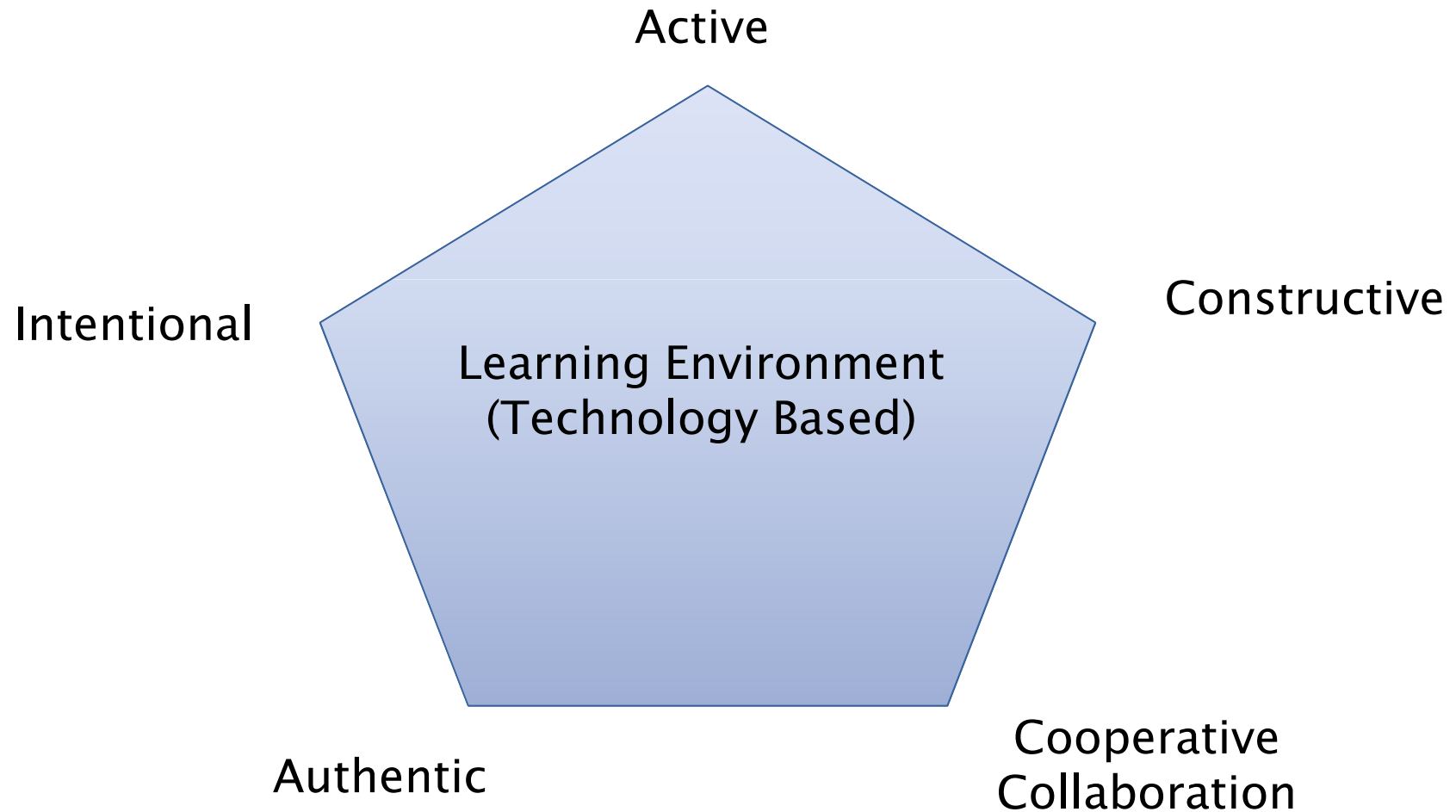
For authentic communication

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?

Discussion

▸ A New Strategy: teaching and learning

Active

Constructive

Intentional

Learning Environment
(Technology Based)

Authentic

Cooperative
Collaboration

Discussion

▸ **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

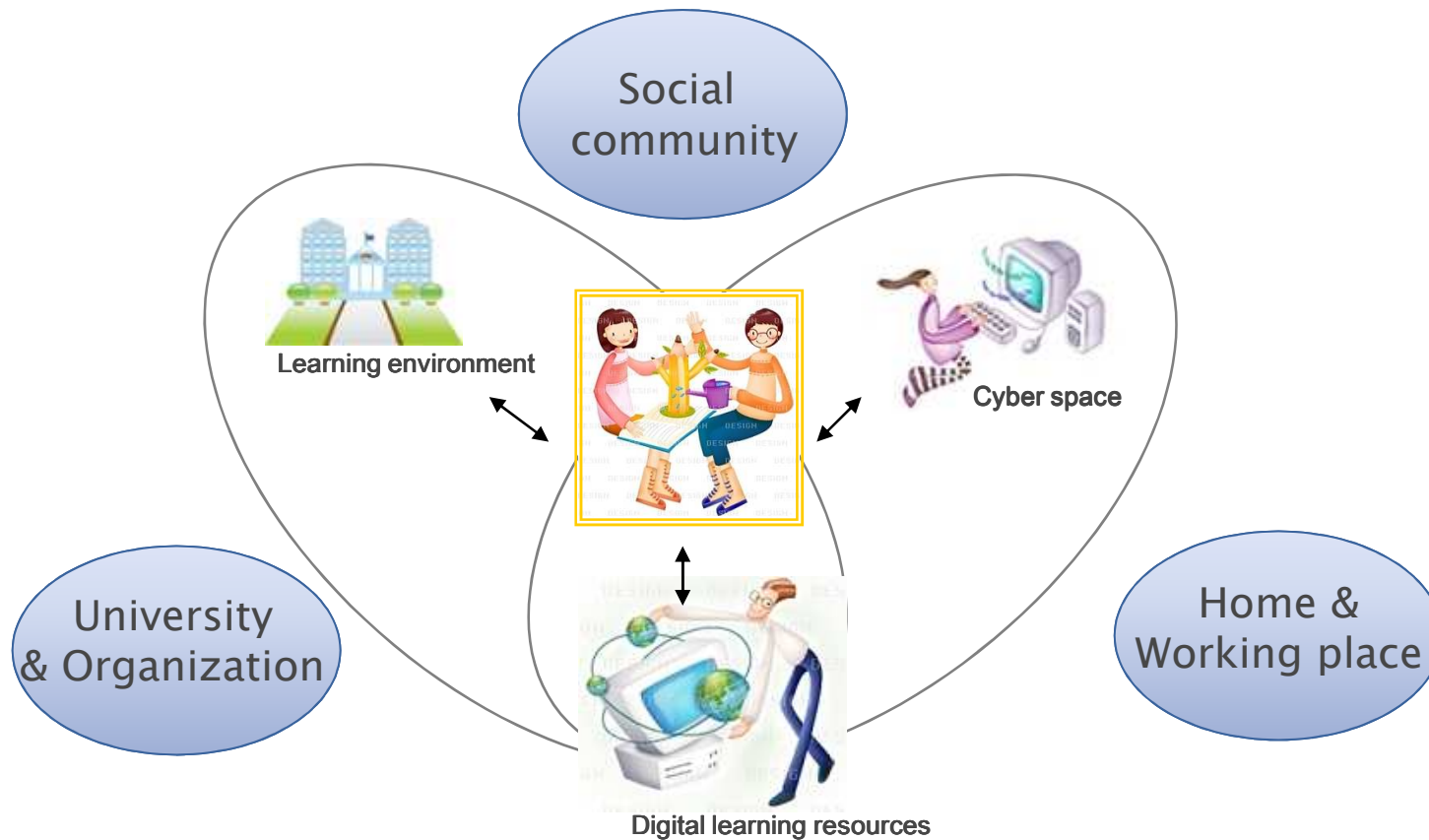- **Narrowness**: E-learning systems are applied by small and specific groups

Dhotre & Patil. (2010)

▸ **What we need to consider**
  : e-learning strategies in life long 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

Social community

University & Organization

Home & Working place

Learning environment

Cyber space

Digital learning resources

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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