The Organizational Knowledge Circulated Management System on e-Learning Practices & Human Development

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Knowledge Society and Next Society

- By network technology, we need the total management system for knowledge producers, providers and consumers
- From structured knowledge to ill-structured knowledge
- Methodology change ... classroom lecturing to modern apprenticeship
- Change of employment systems
Technological Issues

- Sharing/Re-using the distributed learning resources
- Distributing computational load
- Seamless access
- Stock of learning experiences
Entity of CL

Collaborative tools

CW profile (design description)

Data-log of Learning process

Share window & Operation from Multi sites

Descriptive model

Social computing
Why we need e-pedagogy?

- Changing teachers/instructors’ roles?
- Changing teaching/learning styles?
- Changing teaching/learning resources?
- Changing methodologies of teaching/learning?
- Changing peoples’ thinking ways, mentality?
- Changing social/industry/business infrastructure?
What is e-Pedagogy for Knowledge Building?

- Independent
- Self-development
- Collaboration/Align
- Self-responsibility
- Learner centric
- Evaluation (digital portfolio & e-Carte)
- Practices based on situated context in real world
The principles of e-Pedagogy from Social computing

emand Driven

elf-Identity through social activity

ne Top Access to Real World and Data

onstructional Conjunction for Semantics and Concept by Interactive activity
**Dimensions (parameters) of Learning Design**

<table>
<thead>
<tr>
<th>Highly structured</th>
<th>Structure</th>
<th>No structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>high</td>
<td>Teacher control</td>
<td>low</td>
</tr>
<tr>
<td>external</td>
<td>Moderation of learning</td>
<td>internal</td>
</tr>
<tr>
<td>external</td>
<td>Learner motivation</td>
<td>internal</td>
</tr>
<tr>
<td>Curriculum based</td>
<td>Learning content</td>
<td>Learner based</td>
</tr>
<tr>
<td>Unilateral by teacher</td>
<td>Assessment</td>
<td>Unilateral by learner</td>
</tr>
</tbody>
</table>

*As design & operational factors* |
*Changing Pedagogics*
Learning Organization & Knowledge Management

- Instructional / Learning design
- Monitoring / Mentoring / Coaching
- Evaluating / Revising
- Collaborative environment
- Knowledge sharing, reusing and delivering
- Seamless linkage among faculties, administrative offices and computer center
The Structured Database of Learning Resources in Webclass-RAPSODY

Relational & Logical information of course

Repository of Learning materials
Organizational Knowledge Circulating Management System

Teacher

Reusing

Instructional Knowledge

Extracting

LMS

Frame-Construction

Frame-Sequence

Matching

Analysis-system

Contents DB

Saving

Log-Data DB

Daily e-Learning practices

Creator / Teacher

Practice

Relational DB

ATI Knowledge

Extracting

Saving

Circulating Management System

Extracting

Contents DB

Saving
The Specified System Configuration for Authoring and Learning Supports
E-Karte

- Immediate feedback for learning progress
- Mentoring & monitoring
- Revise e-contents
- Management improvement
Architecture of mentoring system
Center for Research and Developing e-Learning
- Running integrated LMS
- Support for planning and developing contents
- Faculty development
- Copyright management
- Support for mentoring and coaching

Center for International Program and Exchange
- Support for international students

Center for Higher Education Development and Research
- Planning educational program
- Evaluating educational program

Information Processing Center
- Network maintenance for e-Learning
- Account management

Faculty of Electro-Communications
Graduate School of Electro-Communications
Graduate School of Information Systems
- e-Learning practice in special/basic course
- e-Learning practice in English
- Mentoring and coaching

Organizational collaboration in UEC
Knowledge Management in the Learning Organisation

- Coordinating and calibrating three sources of competence
  - Hiring and Firing
    - Labour market and education environment
  - Internal Competence Building
    - R&D, in house-training and building a learning organisation
  - Networking and Alliances
    - Customers, suppliers, knowledge institutions, partners and competitors
Open Learning Environment and Executing Strategies for Human Development

- Curriculum and subjects (basic/up-to-date)
- Quality of courses
- Competency assurance -> national certification and qualification -> authorization
- Cost burden
- Sustainable supports (pedagogical and physical)
- Linkage with real workshops
# A Psychological View on Cognition from Human Development

<table>
<thead>
<tr>
<th>side effect of</th>
<th>remembering &amp; forgetting</th>
<th>knowledge acquisition</th>
<th>skill acquisition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>store/memory</strong></td>
<td>perceiving</td>
<td>understanding</td>
<td>(repetitive) performing</td>
</tr>
<tr>
<td><strong>information type</strong></td>
<td>episodic</td>
<td>semantic</td>
<td>associative</td>
</tr>
<tr>
<td><strong>acquisition mode</strong></td>
<td>events &amp; situations</td>
<td>concept(ual structure)s</td>
<td>associative patterns</td>
</tr>
<tr>
<td></td>
<td>recording &amp; fading</td>
<td>constructing &amp; accumulating</td>
<td>relative strengthening of associations</td>
</tr>
</tbody>
</table>
Conclusions

- Sustainable organizational managing scheme for human development
- Sustainable growing services for people
- Technological & pedagogical environments for collaboration and autonomous individual learning
- Commitments, contributions and self-responsibility including money bearing