

# An Exploratory Research of Developing a "Learner-centered" OCW framework in perspectives of OER

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#### **Outline of Presentation**

- Development and new trend in higher education
  - from OCW to OER (Open Educational Resources)
- Fu Jen OCW
- Conceptual framework of Problem-initiated OER
- Challenges & Opportunities



## OCW Advanced Global Higher Education

- In 2001, MIT launched its OCW Initiative.
- In 2004, Taiwanese Lucifer Chu launched OOPS project gathering volunteers to translate
   MIT OCW materials
- OCW movement has drawn international attention and reached several accomplishments in Higher Education.

into Chinese.



Steve Carson (2007). MIT marks OpenCourseWare milestone

#### Trend from OCW to OER

## **OCW** initiated Open Education movement, and OER extend it...

	Occasion	Achievement	
UNESCO 2002	Forum on the Impact of OCW for Higher Education in Developing Countries	Initiative of "Open Educational Resources" (OER)	
UNESCO 2004	ESCO Second Global Forum	<ul> <li>Stated "Open Educational Resources champions the sharing of knowledge worldwide to increase human intellectual capacity."</li> <li>Definitions of OER are:         <ul> <li>Learning resources</li> <li>Resources to support teachers</li> <li>Resources to assure the quality of education and educational practices.</li> </ul> </li> </ul>	

## Fu Jen Catholic University History and background



- Founded in Beijing in 1925 by the Benedictines of St. Vincent Archabbey (Roman Catholic Church) and re-established in 1961 in Taipei (3 religious orders).
- Has been growing from a liberal arts college into a comprehensive university.
  - with 26,000 students and 700 full time faculty.
  - have 11 colleges, including, a medical school, a law school, a liberal arts college.
- Launched OCW in 2008
  - Supported by Teaching Excellence Initiative by Ministry of Education.

### Fu Jen Mission & Purpose

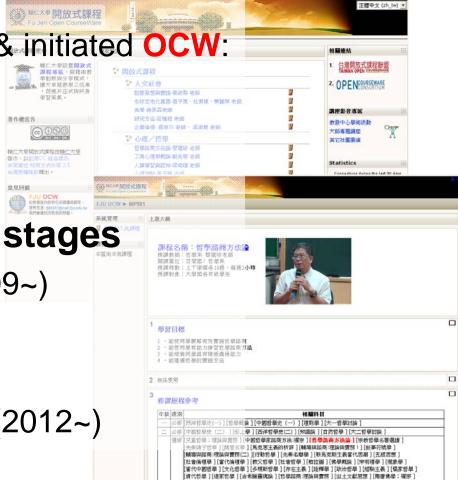
History

- Fu-Jen joined TOCWC & initiated OCW:
November, 2008

□ November, 2008

□ November → November →

- Initiative goal
  - Academic sharing
- Three developmental stages
  - Academic Sharing (2009~)
  - To Attract international learners (2011~)
  - Reputation promotion (2012~)



#### **Current Situation in Fu Jen OCW**

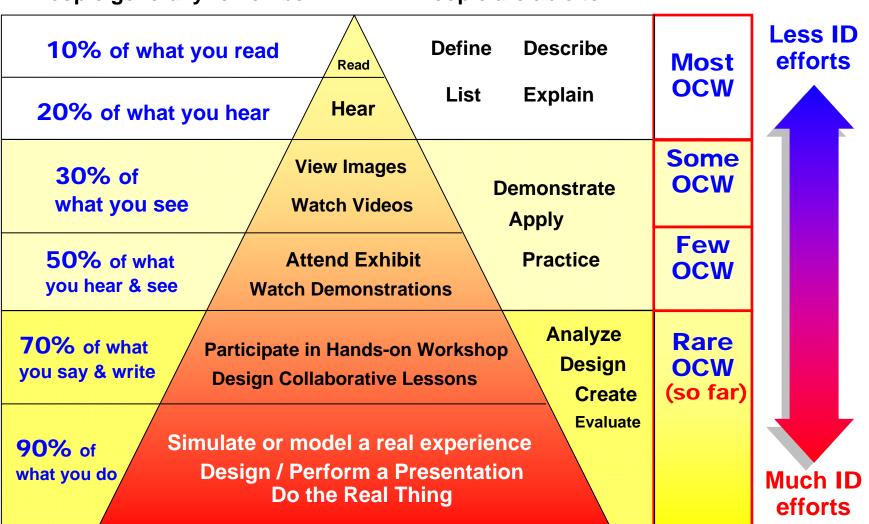
- Platform: Moodle
- Types of instructors: administrators or OTA teachers
- Types of Courses:

2008-2009: 10 courses	2009-2010: 7-10 courses
<ul> <li>Business Ethic</li> <li>Methodology &amp; Philosophical Counseling</li> <li>Cognitive Psychology</li> <li>Web found</li> <li>Economic</li> <li>English literature</li> <li>I/O Psychology, etc.</li> </ul>	<ul> <li>Research Methodology</li> <li>Multivariate statistical analysis</li> <li>Theories of mandarin instruction</li> <li>Children &amp; Family</li> <li>Culture</li> <li>Aesthetics</li> <li>Law,etc.</li> </ul> 22 courses available (in Chinese)

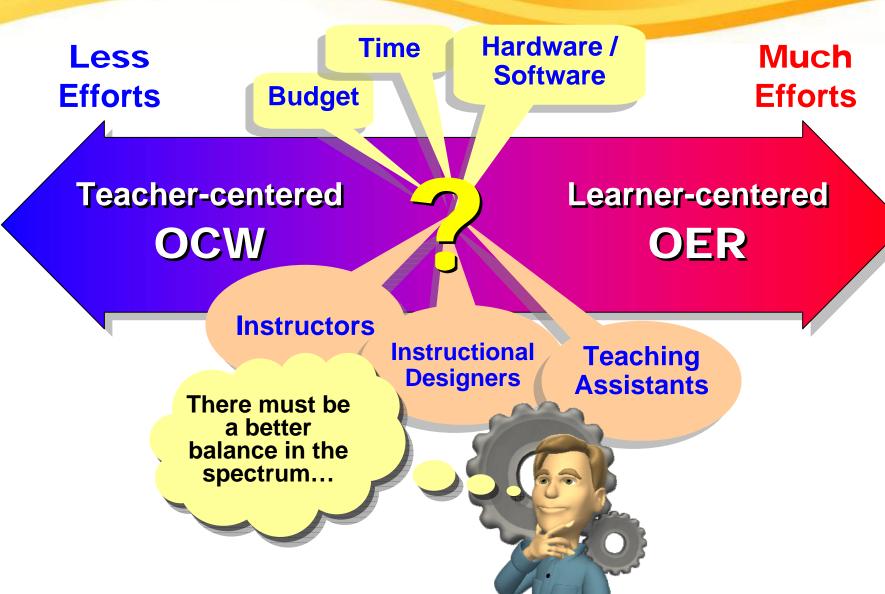
## OCW in Cone of Experience perspective

People generally remember...

People are able to...



## Instructional design efforts tradeoff in OCW/OER implementation



### e-Learning Trends

	e-Learning 1.0	e-Learning 1.3	e-Learning 2.0
Main Components	Courseware, LMS, authoring tool	Reference hybrids, LCMS, Discussion groups	Wiki, Social Networking & Bookmarking, Add- ins, Mash-ups
Ownership	Top-down, One-way	Top-down, collaborative	Bottom-up, learning-driven, Peer learning
Development Time	Long  Just in	Rapid	None
Content Size	Short & eff	1 minute	
Access Time	Online res	During work	
Delivery	At One Time	In many pieces	When You need it
Content Access	LMS	e-Mail	Search, RSS feed
Driver	Instructional Designer	Learner	Worker
Content Creator	Instructional Designer	SME (Subject Mater Expert)	User
Training's Role	Gourmet Chef	Short-order Cook	Food critic

Source: Tony Karrer(2006), e-Learning 1.0 vs. 2.0 – Help Needed: e-Learning Technology

## How can the OCW learners being Motivated & learning MORE?

- Teacher profile
- Course description
- Syllabi
- Teaching notes
- Lecture audios
- Lecture videos
- Subject matter references
- Domain-critical problems raised!

### ID Perspectives of Problem-initiated teaching

- Paradigm shift from teaching to learning in undergraduate education
  - Robert Barr, 1995
- Resource-based learning
  - Hambleton, 1992
- Anchored instruction
  - Cognition & Technology Group at Vanderbilt, 1990
- Problem / Project-based learning
  - Howard Barrows, 1986
- Discovery instruction
  - Jerome Bruner, 1961
- Problem solving thinking
  - John Dewey, 1933
- → Problem-initiated OER

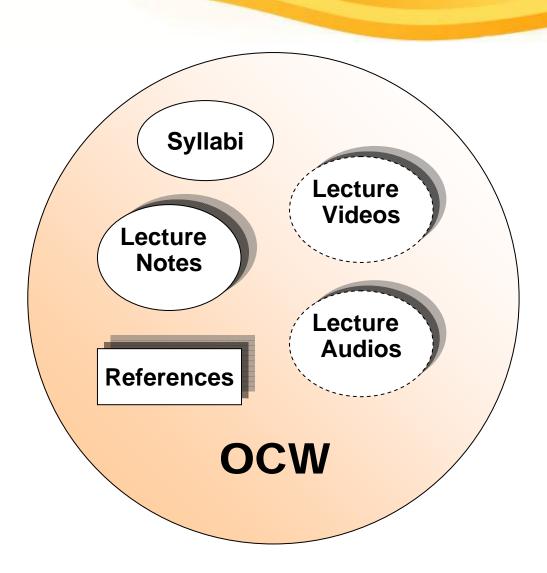


#### **Problem-initiated OER**

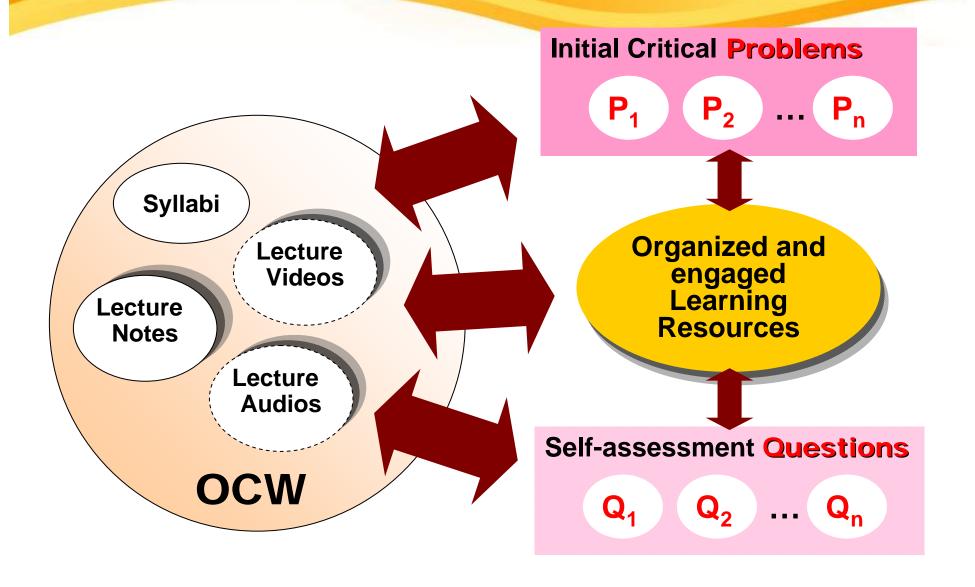
- Engaging self-regulated learners in solving problems and questions, as to perform a motivated learning.
- Initiated "P's" → practical domain problems
  - Connect to learning objectives
  - Clarify Misconception
  - Engage domain knowledge with practical problem solving
- Formative & summative "Q's"
  - → self-assessment questions
  - Reemphasize critical issues
  - Verify self-regulated learning performance.

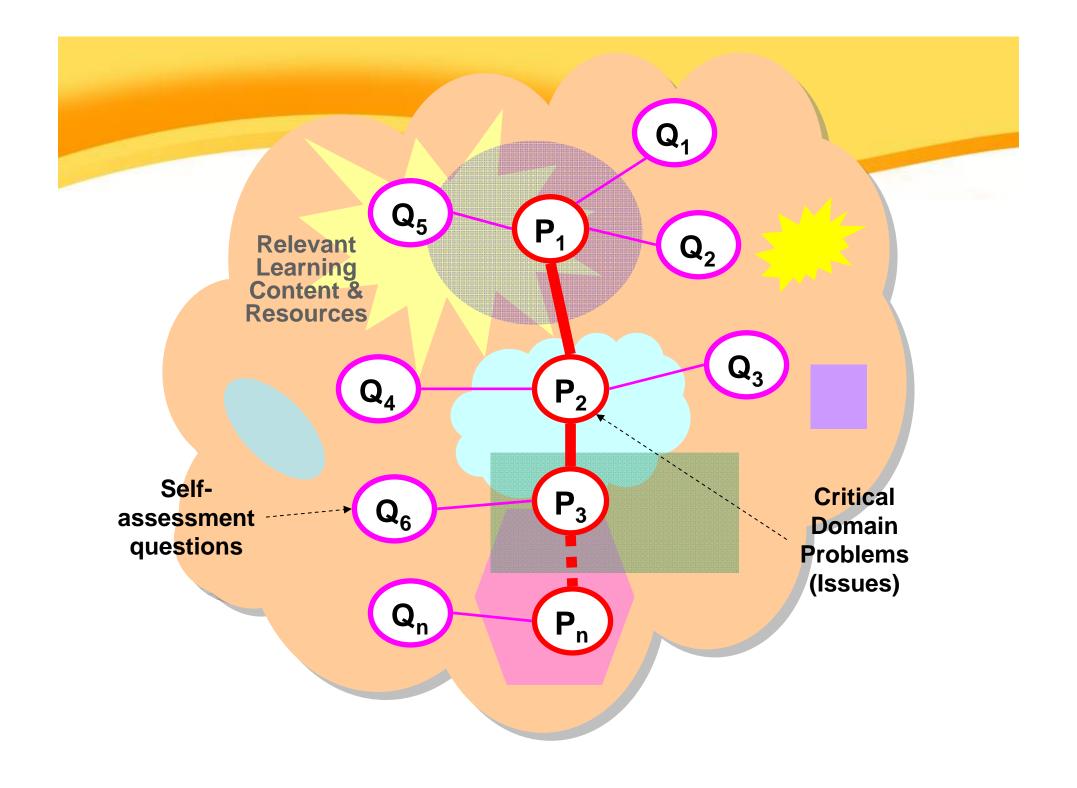


### **General OCW**



#### **Problem-initiated OER**





### **Template shift**

#### **Current OCW Framework**

**Course Description** 

Objectives

Concept Map

Disciplinary Courses framework

Competencies Fostered

**Grading Plan** 

Reference Reading Lists (Books)

Lecture Notes / Audios / Videos

#### P/Q-initiated OER Framework

**Course Description** 

**Objectives** 

Concept Map



Disciplinary Courses framework

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#### ★ Initiated **Problems**

Lecture Notes / Audios / Videos

- ★ Self assessment Questions
- ★ Heuristic online Resources



★ : New added components

#### **Subject: About Global Warming** Q: which of the next individual behaviors will do the most contribution to reduce the P: impact of global warming? What will be the impacts A. Utilizing public transportation B. Fix the air conditioner temperature at 28 if global average temperature increase one degree? C. Becoming a vegetarian. D. Remove the plugs from sockets while not using the electronic appliance. Wrong Correct or Wrong **Correct** Indicate Indicate **Problem issues** advanced or related related topics and topics and resources resources to reconstruct to proceed learning comprehension

#### **Authoring tools utilization**

- Potential authoring tools for composing attractive P's, Q's and content
  - Powerpoint (basis)
  - Hot potatoes (freeware)
  - Wink (freeware)
  - Xmind (freeware version)
  - Adobe Captivate
  - Articulate QuizeMaker
  - and more...













#### **Rich Online Heuristic Resources**















CosmoLearning



and more...

#### **Challenges & Opportunities**

#### **Challenges**

- Faculty efforts
  - Instructors and Instructional designers
  - Teaching assistants
- Instructional design efforts
  - Critical problems identification
  - Effective questions design
  - Context to cohere problem, questions and content knowledge.
- Domain learning resources aggregation and alignment.

#### **Opportunities**

- Much instructional design realized in OER.
- Better performances for self-regulated learners.





## Thanks for listening

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