Designing new applications enabled by DOI

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About Airiti

DOI registration Service: <u>doi.airiti.com</u> E-journal Service: <u>www.airitilibrary.com</u> Academic Citation Index: <u>www.airiti.com/ACI/</u> E-book Service: <u>www.airitibooks.com</u> Online Bookstore: <u>www.iread.com.tw</u> Airiti Press: <u>www.airitipress.com/</u>



Taiwan, Taipei



DOI in the academic sector

What can be identified by a DOI name?

- the concept underlying a work vs. manifestations
- Journal articles, e-books, proceedings, data sets...

How are DOIs useful?

- Persistent linking
- Citation metrics
- Multiple resolution



How can DOI be used in online educational contexts?

• DOI for online courses

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• DOI for educational materials



Case 1. Identifiers for Online Courses

• Case study:

- Taiwan Open Course Ware Consortium (TOCWC)
- Offers university course lessons to the public via the internet
- Courses are created by university professors
- An online course may include several lessons or sessions
- An online course may consist of presentation slides, video recordings of the class, and other course materials

Central platform of discovery

- 1. Each university maintains its own online course website
- 2. Course metadata are submitted to TOCWC
- 3. TOCWC keeps all course information in a central database
- Users may browse or search for courses across different universities



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- Persistent discovery of course information
- Central administration of course metadata
- Be able to track course performances and to use the data to enhance the quality of education
- Include teaching activity in evaluating the professor's scholarly performance
- Make educational resources and knowledge more accessible to the world



What are identified by DOIs?

- TOCWC DOIs are assigned to both the course and lesson levels
- TOCWC DOIs identifies the courses or lessons, but not the videos of the lessons nor the class material





TOCWC : How are DOIs registered



Expected benefits of assigning DOIs to original poly of the second secon

Common identifier across different universities

Persistent linking to course information

Identify relationships between academic contents

Future possibilities

- Create altmetrics report applications based on DOIs
- Rights management



Case 2. Resolution service for educational material

• Case study:

- Taiwan MOOCs (Massive Open Online Courses)
- Students enroll in MOOCs program for free or for a tuition fee to participate in the class actively
- MOOC may include video lectures and also a wide range of material such as readings, tests, and interactive user forums
- Some MOOCs will give credits or certifications to students upon completion of the course





Analysis of requirements

- Easier access for students to get assigned class material
- Help teachers find class material and clear copyrights problem





DOI Solution

(Reference)

1. Camerer (2003), Behavioral Game Theory, Ch.1-5. (BGT)

2. Holt (2007), Markets, Games and Strategic Behavior, Addison-Wesley. (MGS)

3. Crawford, Costa-Gomes and Iriberri (2013), Structural Models of Nonequilibrium Strategic Thinking: Theory, Evidence, and Applications, Journal of Economic Literature, 51:1, 5–62. 10.1257/jel.51.1. DOI 王道一 Tao-yi Wang 國立台灣大學



授課教師

經濟和金融



DOI can be redirected to multiple locations and provide accessible full-text articles for students. (Only for universities and institutions collaborating with Airiti and MOOCs)





Airiti's integration service

• Airiti's strength:

- Content rights management
- Digitization workflow support
- Online content platforms with access control
- Online bookstore
- MOOCs DOI solution:
 - DOIs are assigned to course material
 - Licensing information is included in DOI metadata
 - Reading list for a MOOCs course is compared with Airiti's DOI database

Expected benefits of assigning DOIs to course material

Find and get course material

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Enhance MOOCs services

Improve usage and visibility of the contents

An example of contextual multiple resolution



DOI is the key to enhanced services!







Thank you!!

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