

Russell Walker  
DeVry University

## Abstract

With thousands of open educational resources (OERs) freely available on the Web, the primary challenges in using digital learning materials in course design have become discovery and evaluation rather than availability. This poster describes a systematic process for finding and assessing digital content for a course. An automated tool searches for candidate OERs in online repositories using keywords extracted from the course learning objectives. OERs found are rated by faculty Subject Matter Experts on criteria of relevance, quality, licensing terms, and suitability. The end product is a pool of qualified resources from which the course design team, or individual faculty members teaching the course, can make their final selections. The results of applying this process to several courses in the business and information science programs at a large national university system will be presented.

## About OERs

- Digital materials for teaching and learning that are freely available online for adaption, repurposing, and reuse (Geser, 2012)
- Potential to reduce costs and improve quality of course development through reuse
- Issues encountered (Richards, Marshall, & Ives, 2010):
  - Availability
  - Discoverability
  - Quality
  - Suitability for specific applications
- An OER recommender system based on key phrases extracted from course syllabi via machine learning algorithms delivered promising results (Walker, 2012)

## Objective of Current Study

- Explore feasibility of a semi-automated process for finding and cataloging OERs based on course learning objectives

## References

Geser, G. (Ed.) (2012). *Open educational practices and resources: OLCOS roadmap 2012*. Open e-Learning Content Observatory Services. Retrieved from <http://www.olcos.org/english/roadmap/>

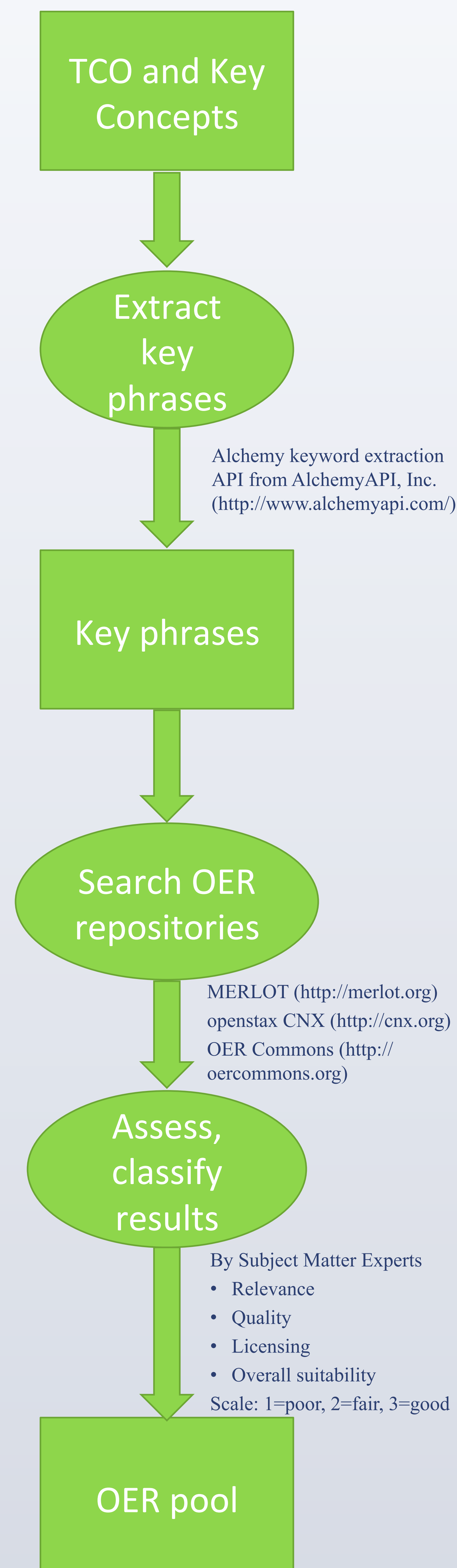
Richards, G., Marshall, S., & Ives, C. (2010). The pragmatics of open: Developing university courses with OERs. In *Proceedings of World Conference on Educational Multimedia, Hypermedia and Telecommunications 2010* (pp. 1069-1073). Chesapeake, VA: Association for the Advancement of Computing in Education. Retrieved from <http://www.editlib.org/p/34765>

Walker, R. (2012). *Comparing information retrieval effectiveness of learning object recommendation strategies for course developers* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3529672)

## Contact

Russell Walker, PhD  
DeVry University, 3880 Kilroy Airport Way, Long Beach, CA 90806  
p: 562.997.5331 e: [rwalker2@devry.edu](mailto:rwalker2@devry.edu)

## OER Discovery and Assessment Process



## Example: Principles of Management

### MGMT303 (Principles of Management), TCO 1:

Given a description of a specific business enterprise, write a management job description that incorporates the basic activities that comprise the management process and the job of a manager.

- Identify and explain the four basic management functions in organizations.
- Identify the basic roles managers play and the skills that they need to be successful within those roles.
- Analyze the changing role of a manager and the skills required in a competitive environment.
- Assess your ability to apply basic managerial principles to your daily work requirements.

### Key phrases:

1. "basic management functions"
2. "specific business enterprise"
3. "competitive environment"
4. "management process"
5. "daily work requirements"
6. "basic managerial principles"
7. "management job description"
8. "basic roles managers"

### Search options:

#### MERLOT:

- Category: Business
- Subcategory: Management
- Language: English
- Audience: College Upper Division

#### openstax CNX:

- Subject: Business

#### OER Commons:

- Subject Area: Business
- Education Level: College Upper Division

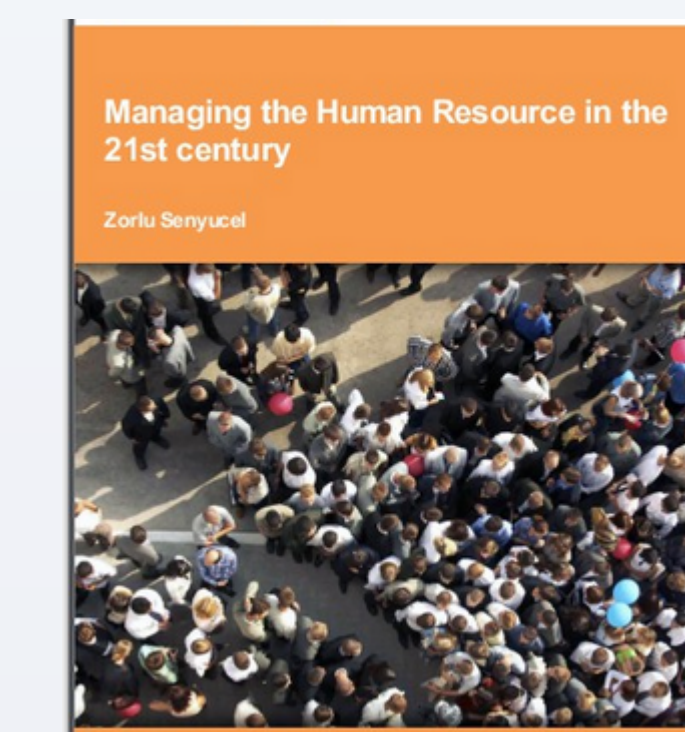
### Results Summary:

Key phrase	MERLOT	openstax CNX	OER Commons	Total
#1	1	0	0	1
#2	1	0	1	2
#3	8	63	2	73
#4	35	0	8	43
#5	0	0	0	0
#6	0	0	0	0
#7	1	0	1	2
#8	0	0	0	0
Total	46	63	12	121

## Sample OERs For Principles of Management

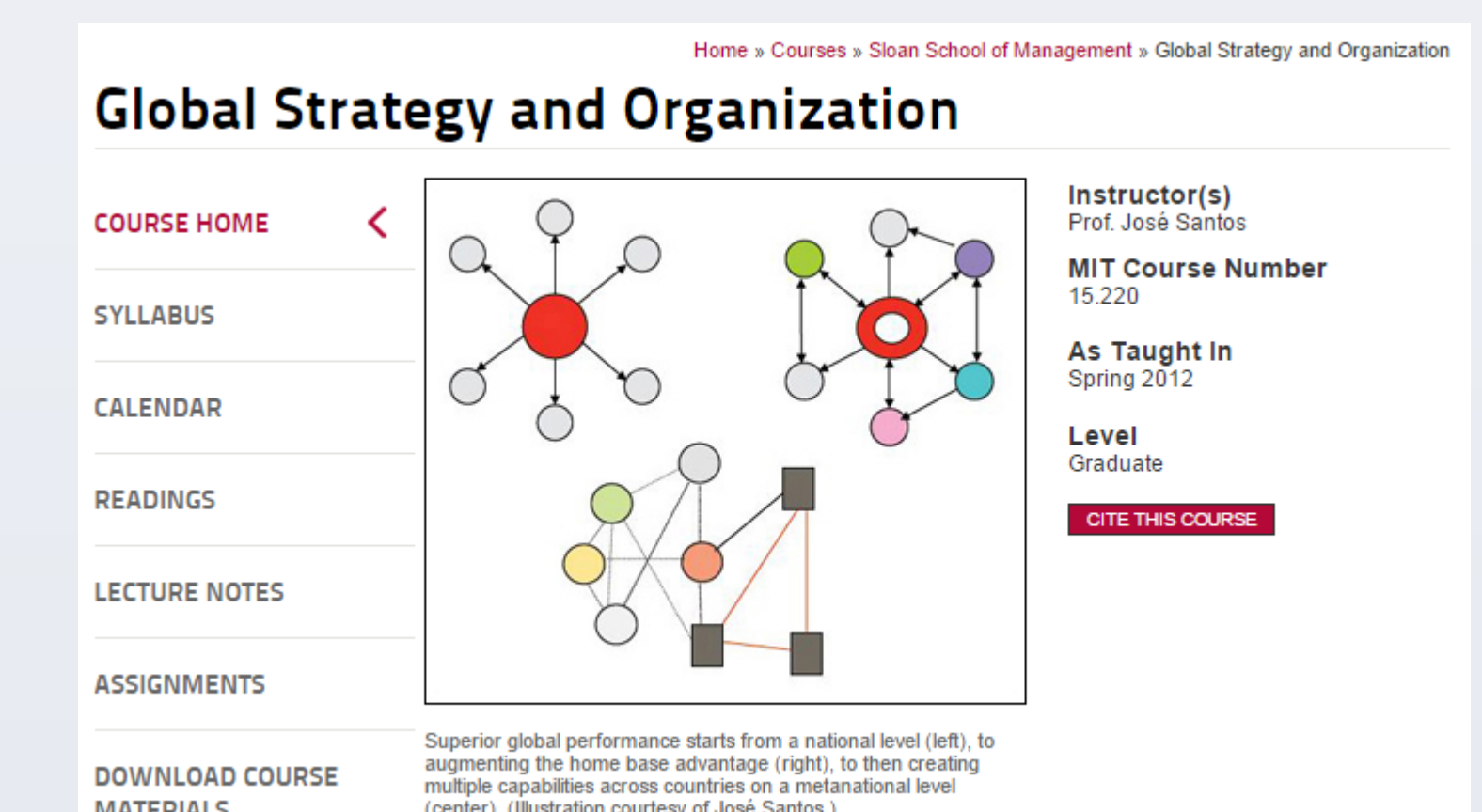
### Managing the Human Resource in the 21<sup>st</sup> Century

Open Textbook  
Author: Z. Senyucel



### Global Strategy and Organization, Spring 2012

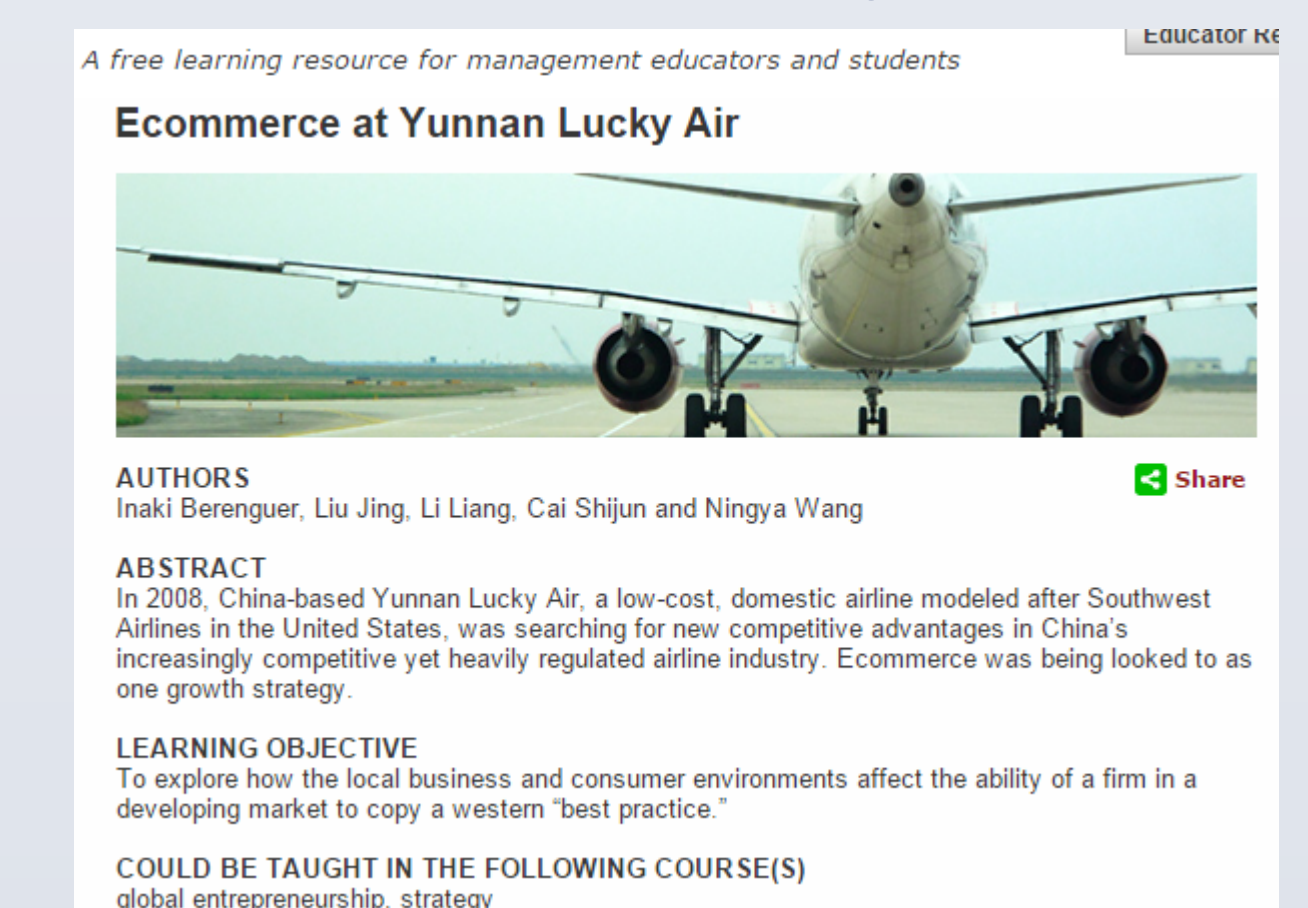
Full Course  
Author: J Santos



### Ecommerce at Yunnan Air

Case Study

Author: I. Berenguer



### Integrated Functional Systems Student Guide

Reference Material

Authors: R. Eliason & C. Hamilton



FALL 2014