

## LEARNING OBJECT REPOSITORIES

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A learning object repository (LOR) is an electronic database that accommodates a collection of small units of educational information or activities that can be accessed for retrieval and use. Learning object repositories enable the organization of learning objects, improve efficiencies, enhance learning object reuse and collaboration, and support learning opportunities. Repositories can consist of one database or several databases tied together by a common search engine. Organizations that operate digital repositories take on responsibility for the long-term maintenance of these digital resources, as well as for making the repositories available to communities agreed on by the depositor and the repository (Lehman, 2007). A learning object is anything that has an educational purpose.

### Usefulness of Learning object repositories

- Useful to a new teacher as it can show different approaches that other teachers have taken in teaching the subject, the depth of the subject covered, amount of material covered in the certain amount of time, types of activities used to enhanced learning and evaluation methods
- Course development time is reduced when learning objects are re-used, after customizing them to the local context and the instructor's personal preferences and style.
- Useful to instructor to search for supplementary materials e.g. diagrams, illustrations, exercises/tutorials and class activities.
- For students, the repository can provide supplementary readings, tutorials and practice exam questions to enhance learning
- For researcher, the repository can provide raw data for research on LIS curriculum across, teaching styles and methods, and national and cultural differences;
- Detailed and comprehensive learning objects can be used for online e-learning.
- The repository can be most useful in new and emerging subject areas to facilitate "pollination". A new subject developed in one school can help other schools to start courses in the same subject. It can also serve to identify experts in new areas who can be engaged as consultants or invited as resource persons. (Hirwade & Hirwade, 2006)

**The development and maintenance of LOR present unique challenges in three areas:**

**i) Content Creation and Development:**

It is expected to include course outlines and syllabi, lesson plans, presentation slides, lecture notes, students activities (Tutorial/lab material, exercises, discussion question), bibliographies and readings, exam questions and test bank, and other evaluation tools. Such learning objects can be obtained from four sources such as licensed from publishers, commissioned and created especially for the repository, harvested from Web sites of LIS programs, contributed by LIS instructors.

**ii) Content Management and Organization.**

It includes setting up content management policies and guidelines as well as rights management policies and procedures (ownership, access and copyright). Guidelines, procedures and systems have to be developed for indexing, meta-tagging, storing and providing access to the resource. Physical integrity and correctness, metadata, translations if required, copyright, cross linkages, preservation and archiving, classification for easy navigation are few issues need to be considered.

**iii) Repository System**

A learning object (LO) is a chunk of digital learning resources used for learning and instruction; the LO aims to provide self-descriptive learning material. Five context of LO would be Learning Topic, Structure, Aggregation Level, Interactivity Type and Learning Resource Type. Three kind of LO relationship that were 1) Association between learning topics 2) Sequential relation between learning topics 3) Multiple association between topic and other contexts. These context would help discovered the usage pattern in accessing various LOs which can then be used to course development. (Ouyang & Zhu, 2008)

The design and usability of the repository system should be such that there will be ease of depositing learning objects, ease of browsing and searching, fast retriever and display, support for metadata creation, facility to convert a learning object into a format that the user can handle. (Hirwade & Hirwade, 2006)

**Types of LOR**

General Repositories: These are open to the world for sharing knowledge and its reuse.

CLOE: Cooperative Learning Object Exchange, <http://cloe.on.ca/> and the European Knowledge Pool System (ARIADNE), <http://www.ariadne-eu.org/> are good example of such repositories.

Discipline-Specific Learning Object Repositories: These are devoted to a particular subject. These may have restricted access. Some of the examples are:

- A web portal for LIS Education in Asia (LISEA) was initiated in the year 2005 ([www.ntu.edu.sg/sci/lisea](http://www.ntu.edu.sg/sci/lisea)). The portal aimed to serve as a gateway to LIS education programs. It is a collaborative project of the School of Communication and Information at the Nanyang Technological University (Singapore) and the Faculty of Computer Science and Information Technology at the University of Malaya. The scope of LISEA includes repository of learning objects and teaching materials that can be consulted and re-used by the faculty of LIS schools in Asia. It has course outline and syllabi, lesson plans, presentation slides, lecture notes, students' activities, bibliographies and reading, exam questions and test bank and other evaluation tools. It can alert instructor to new developments and emerging topics. It can be useful to start a new course by referring already established courses. Experts in the field of LIS can be identified to engage as consultants or to invite for workshop. (Chaudhry, 2007)
- Global Education Online Depository and Exchange (GEODE), <http://www.uw-igs.org/>. This repository provides networking, funding, and developmental opportunities to University of Wisconsin campuses interested in increasing interdisciplinary cooperation and scholarship around global issues. It was created in 1999 in response to the commissioned Wisconsin International Trade Council's Report that identified a need for greater international literacy among members of the Wisconsin workforce. The repository is maintained by the University of Wisconsin System's Institute for Global Studies and permits queries by country, region, file format, language, or keyword. No registration is required for this repository.
- Health Education Assets Library (HEAL), <http://www.healcentral.org>. This repository provides building-block multimedia items (images, videos, and animations), as well as textual materials like case studies and quizzes which contains resources useful to medical students and medical professionals.
- American Sign Language, <http://www.uwex.edu/ics/learningobjects/>. This customized repository is password-protected, along with the need to e-mail the owners for purposes of tracking. The repository is part of a University of Wisconsin-Milwaukee and University of Wisconsin-Extension American Sign Language (ASL) Learning Objects Project. This repository contains video-based ASL learning objects, in individual words and phrases, performed by a native ASL speaker. It is recommended that these ASL video-based learning objects be used as an instructional aid in combination with an ASL program or course.

Commercial/Hybrid: These works on commercial basis e/g/ XanEdu, <http://xanedu.com/>. XanEdu provides faculty with the resources necessary for gathering and delivering information and provides instructors and instructional designers (Lehman, 2007).

As the technology keep offering new way of learning, more and more educators and learner would opt such changes to widen the knowledge and provide access to information. The achieve material of Learning Object Repositories will also trace the development in the field of knowledge. Learning Object Repositories will enhance teaching and learning.

### References

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