

APPLICATION OF MOODLE IN LIBRARY & INFORMATION SCIENCE EDUCATION: AN EXPERIENCE

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Abstract *This article reveals about American Library Association online learning portal. It is created on Moodle learning management software. Association for Library Collections & Technical Services (ALCTS) course category has been taken for the study. This course category is further divided into ten sub categories. Hence only Fundamentals of Acquisitions (FOA)-2012 web course is taken to evaluate the attributes of this software. Moodle module of forums, quiz, grades, participants, assignments, and chat rooms are very interactive and user's friendly. The aim of this course is to create an online learning community amongst library professionals. It helps both teachers and participants/students to have a virtual space where all can share knowledge through different kinds of supervised activities, chats and forums.*

Keywords: Moodle, ALA, ALCTS, FOA, Chat, Forum

1. INTRODUCTION

Effective and efficient access to learning materials, the concepts and methodologies of technology-based learning are gaining importance with e-learning becoming a crucial resource for institutions. The advantages of e-learning as opposed to traditional learning are instantly evident with e-learning making education independent of time and location (Argyris and Schon 1978). Technology facilitates learning and knowledge sharing in a big way. The Learning Management System (LMS) is a tool that handles all aspects of the learning process. Other tools that enable the knowledge sharing are 'blogs' and 'wikis'. Wikis are socially mediated tools that are rich in potential for communication, information sharing and collaborative endeavour. Blogs and Wikis-user edited, collaborative websites-have provided a democratic accessible community of users responsible for its own content, supported by an open model of knowledge creation and communication (Ramos and Piper 2006).

The use of web-based education systems has grown exponentially in the last few years, spurred by the fact that neither students nor teachers are bound to a specific location and that this form of computer-based education is virtually independent of any specific hardware platforms (Brusilovsky and Peylo, 2003). Specifically, collaborative and communication tools are also becoming widely used

in educational contexts so, as a result, Virtual Learning Environments (VLE) are installed more and more by universities, community colleges, schools, businesses, and even individual instructors in order to add web technology to their courses and to supplement traditional face-to-face courses (Cole, 2005). Such e-learning systems are sometimes also known as a Learning Management System (LMS), Course Management System (CMS), Learning Content Management System (LCMS), Managed Learning Environment (MLE), Learning Support System (LSS) or Learning Platform (LP)

These systems can offer a great variety of channels and workspaces to facilitate information sharing and communication between participants in a course, to let educators distribute information to students, produce content material, prepare assignments and tests, engage in discussions, manage distance classes and enable collaborative learning with forums, chats, file storage areas, news services, etc. Some examples of commercial systems are Blackboard, WebCT, TopClass, etc. and some examples of free systems are Moodle, Ilias, Claroline, etc. Nowadays, one of the most commonly used is Moodle (Modular Object Oriented Developmental Learning Environment) which is a free learning management system that enables the creation of powerful, flexible and engaging online courses and experiences (Rice, 2006).

2. LEARNING MANAGEMENT SYSTEMS (LMS)

LMS is the main software for elearning solutions. It is software that automates the administration of training events. All LM systems manage the log-in of registered users, manage course catalogs, track learner activities & results, and provide reports to management. An LMS may or may not include additional functions such as: Authoring of contents, Management of classroom training, instructors and resources...Learner collaboration tools -chat, discussion group, etc. (Brandon-Hall 2012).

Some experts use additional terms to LMS, e.g. Portal learning, which some experts consider it as another name of LMS; while other consider it as broader in functionality than an LMS. (Elearnity 2012).

The key functions of LMS are (Anta, 2002):

- Mange course and programs;
- Provide administer course registration;
- Track student registration, access and progress;
- Manage learning administration and reporting;
- Enable financial tracking and control of learning; and
- Provide course scheduling and administration

2.1 Moodle: Learning Management System

Moodle is an Open Source Course Management System (CMS), also known as a Learning Management System (LMS) or a Virtual Learning Environment (VLE). It has become very popular among educators around the world as a tool for creating online dynamic web sites for their students. To work, it needs to be installed on a web server somewhere, either on one of your own computers or one at a web hosting company. (Moodle, 2012)

The focus of the Moodle project is always on giving educators the best tools to manage and promote learning, but there are many ways to use Moodle:

- Moodle has features that allow it to scale to very large deployments and hundreds of thousands of students, yet it can also be used for a primary school or an education hobbyist.
- Many institutions use it as their platform to conduct fully online courses, while some use it simply to augment face-to-face courses (known as blended learning).
- Many of our users love to use the activity modules (such as forums, databases and wikis) to build richly collaborative communities of learning around their subject matter (in the social constructionist tradition), while others prefer to use Moodle as a way to deliver

content to students (such as standard SCORM packages) and assess learning using assignments or quizzes.

2.2. Moodle Statistics

More than two hundred countries using this site and sixty thousand have been registered in it. USA, Spain and Brazil are using this software for their learning management system and they are top three countries respectively in this field. The given table shows the whole picture of Moodle:

Registered sites	68,097
Countries	220
Courses	6,577,481
Users	60,091,271
Teachers	1,298,819
Enrolments	40,624,752
Forum posts	106,581,907
Resources	58,268,028
Quiz questions	122,300,777

Source: moodle.org

Top 10 Countries by Registrations

USA	Spain	Brazil	United Kingdom	Germany	Mexico	Portugal	Colombia	Australia	Italy
11,286	5,860	4,985	3,881	2,907	2,739	2,096	1,814	1,700	1,623

Source: moodle.org

3. AMERICAN LIBRARY ASSOCIATION

Founded on October 6, 1876 during the Centennial Exposition in Philadelphia, the American Library Association was created to provide leadership for the development, promotion, and improvement of library and information services and the profession of librarianship in order to enhance learning and ensure access to information for all. Our current strategic plan, ALA Ahead to 2015, calls for continued work in the areas of Advocacy for Libraries and the Profession, Diversity, Education and Lifelong Learning, Equitable Access to Information and Library Services, Intellectual Freedom, Literacy, Organizational Excellence and Transforming Libraries. (ALA, 2012).

3.1 American Library Association (ALA): Online Learning and Moodle

ALA's wide range of library related online learning includes fundamentals, advances, trends, and hot topics at ALA Online

Source: <http://www.classes.ala.org/>

Learning. Education is delivered via a computer, using the internet via a web-browser, and software for coursework, video or audio files. It may occur once or at regular intervals over several weeks, and it can be downloadable anytime, or sometimes it requires a reservation to participate. The many options for online education are available throughout ALA Online Learning.

When you select a topic, you will see a list of titles that may be available as e-forums, webinars, courses, or recorded webcasts. Clicking on the title will take you to details about the online learning opportunity, such as date, time, instructor, and fees. New ALA Online Learning offerings are being developed all the time, so if you do not see what you need, or if you have questions about this page or ALA Online Learning, please refer to online-learning@ala.org. The home page of ALA online learning Moodle site provides links about course categories.

The details of the course category are given as below:

Course Category	Course Registered
AASL - American Association of School Librarians	6
ACRL - Association of College & Research Libraries	38
ALCTS - Association for Library Collections & Technical Services	10
ALSC - Association for Library Service to Children	4
ASCLA - Association of Specialized & Cooperative Library Agencies	3

LITA - Library & Information Technology Association	3
PLA - Public Library Association	18
Certified Public Library Administrator (CPLA) Courses	3
Instructor-led Online Courses	1
2011 Virtual Spring Symposium	1
RUSA - Reference & User Services Association	9
YALSA - Young Adult Library Services Association	15
Faculty and Program Officers	1

Source: [classes.ala](http://classes.ala.org)

There are thirteen course categories and it is not possible for us to discuss all these with Moodle. Association for Library Collections & Technical Services (ALCTS) course category is being taken for the study. This course category is further divided into ten sub categories. Hence only Fundamentals of Acquisitions (FOA)-2012 web course is taken to evaluate the attributes of Moodle learning management software. The details of sub course categories are given as below

Course Category- Library Collections & Technical Services (ALCTS)	
Sub course Category	Objectives
Fundamentals of Preservation 2012	It is an introduction to the principles, policies, and practices of preservation in libraries and archives.

Fundamentals of Collection Development and Management 2012	The Fundamentals of Collection Development and Management address the basic components of these important areas of responsibility in libraries.
Fundamentals of Electronic Resources Acquisitions 2012	This web course will provide an overview of acquiring, providing access to, administering, supporting, and monitoring access to electronic resources.
Fundamentals of Acquisitions 2012	This web course focuses on the basics of acquiring monographs and serials: goals and methods, financial management of library collections budgets, and relationships among acquisitions librarians, library booksellers, subscription agents, and publishers.
Fundamentals of Collection Assessment 2012	The goal of this online course is to introduce the fundamental aspects of collection assessment in libraries.
ALCTS Web Course Test Site	This is a special session designed to test various features of the Moodle course environment.
FERA Special Session	This is a special session for the ALCTS CRS Education Committee.
Fundamentals of Preservation Trial copy 1	This web course is an introduction to the principles, policies and practices of preservation in libraries and archives.
Fundamentals of Preservation Trial copy 2	This web course is an introduction to the principles, policies and practices of preservation in libraries and archives.

Fundamentals of Electronic Resources Acquisitions (August 16 - September 10, 2010)	This web course will provide an overview of acquiring, providing access to, administering, supporting, and monitoring access to electronic resources.
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Source: ala.org (<http://www.classes.ala.org/course/category.php?id=3>)

3.2 Attributes of Moodle Based LMS with Web Course Fundamentals of Assignments (FOA) Assignments

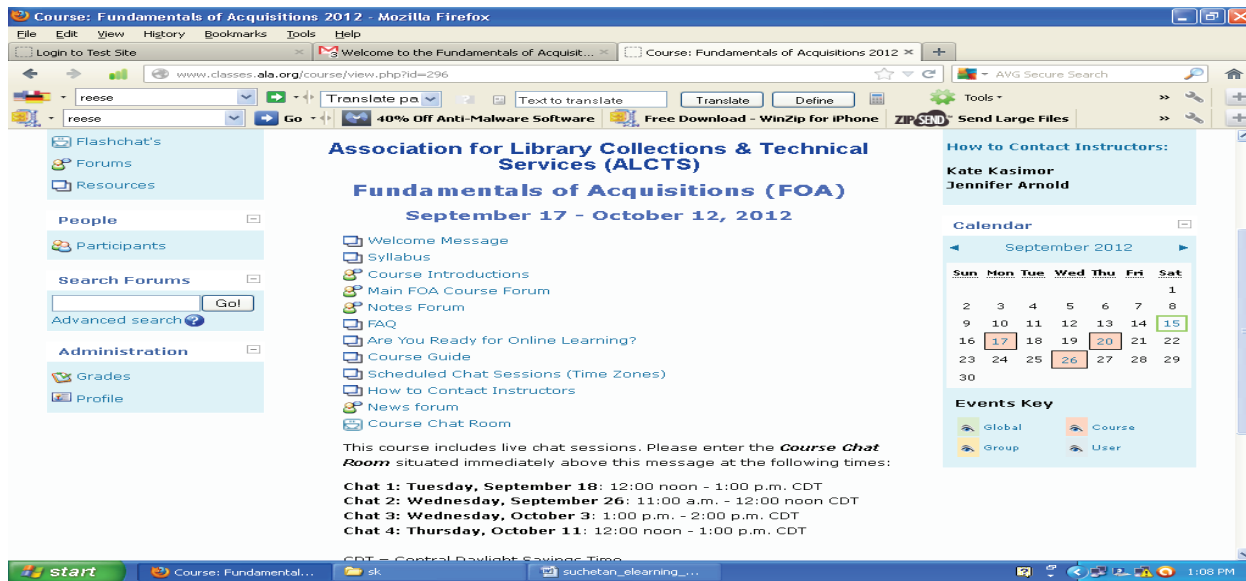
Students can upload assignments for teachers to mark. Teachers get an automatic alert when a new assignment arrives. All marks can be stored in the Moodle grade book. Learners can submit tasks in any file format—MS-Office, PDF, JPEG, etc.

3.3 Calander of FOA, 2012

The calendar contains suggested start dates and deadlines for keeping up with the course content. Students can take the course at their own speed. Keeping a calendar of events is important to both the learner and course instructor. Events can be created for different categories and each link is given. The calendar is located on the right-hand column of the home page. ACLTS dates highlighted in orange mean there is an assignment for that day. View the instructions by either hovering over the date with your cursor or by simply clicking the date. Use the blue arrows located next to the month and year to move to the desired month. Text in blue will link learner to their related content. It includes:

- Course begins dates

Source: <http://www.classes.ala.org/course/view.php?id=296>



Source: <http://www.classes.ala.org/grade/report/user/index.php?id=296>

- Course events set by the instructor
- User events
- Global events are shown
- Course event are shown

3.4 FORUM: FOA

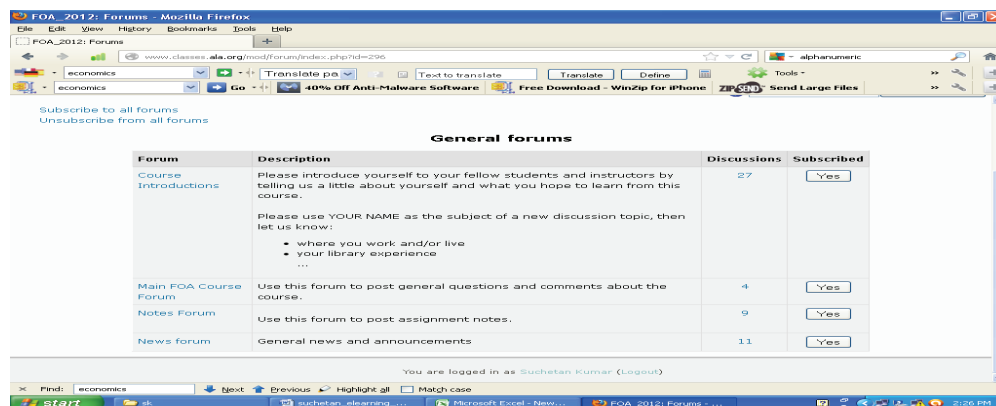
Forums are used for some exercises as well as messages from the instructors. They not only provide an opportunity for learners to share experiences with fellow students and instructors but also get to know one another. Therefore, students are encouraged to regularly participate and read posts. This activity is most important in terms of helping learners construct new knowledge. Discussion takes place among the participants and teachers. Forums can be constructed in different ways and can include peer rating of each posting. The postings can be viewed in a variety of formats and can include attachments. By subscribing to a

forum, participant will receive copies of each new posting in their mail. A teacher can impose subscription on everyone if they want. Fundamentals of Acquisitions (FOA-2012) forum is divided into different categories, they are as below:

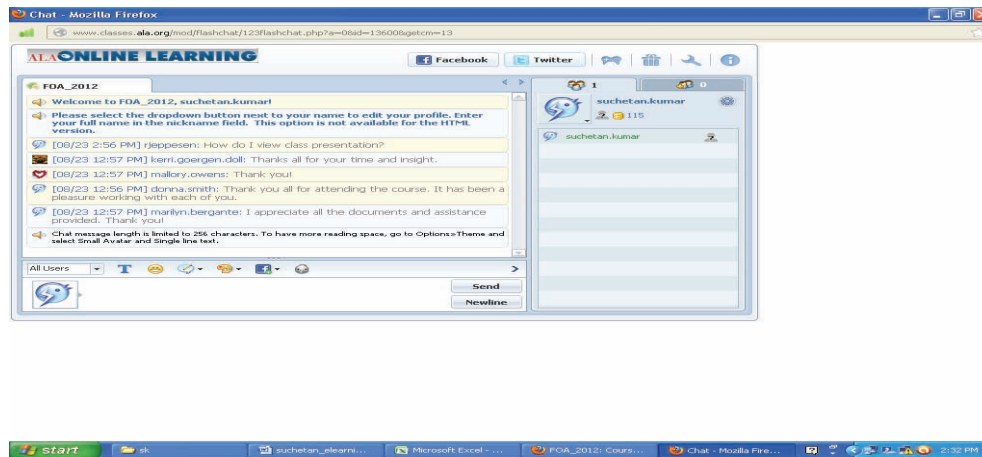
- Course Introduction
- Main FOA course Forum
- Notes Forum
- News Forum

3.4.1 Instructions for Using Forum in Actls-Foa

- Go to Forums page by clicking on “Forums” under the Activities block on the left-hand column of the home page.
- Click on the forum topic (e.g., “Course Introductions”) to read or contribute to a topic.
- To read a message, click on the discussion topic.



Source: classes.ala (<http://www.classes.ala.org/mod/forum/index.php?id=296>)



Source: (<http://www.classes.ala.org/mod/flashchat/123flashchat.php?a=0&id=13600&getcm=13>)

- To compose a message, click on the “Add a new discussion topic” button. This will open a separate window. Double-check the topic, enter your subject line and then type in your message in the text box. Once you are done, click the “post to forum” button.
- You will have 30 minutes to edit your message before it is posted to the forum discussion.

3.5 Chat Rooms: FOA

The Chat module allows participants to have a real time synchronous discussion via web. This is useful way to get a different understanding of each other and the topic being discussed. Instructor has provided the chat schedule in News Forum and in the mail address of learner. According to that time, a learner can log-on their computer to discussion course

related topic with their teachers. The learning experience is fun filled in the module in Moodle.

3.6 QUIZ AND GRADE: FOA

Quiz module allows the teacher to design and set quiz tests, consisting of multiple choices, true/false, short answer questions etc. These questions are kept in a categorized database and can be re-used within multiple attempts. Each attempt is automatically marked and the teacher can choose whether to give feedback or to show correct answers. Quiz module includes grading facilities.

Instructions for using Quiz in FOA:

- Each section ends in a quiz. You must pass all quizzes and tests to receive a certificate of completion from the ALCTS office.

Grade item	Grade	Range	Percentage	Feedback
Fundamentals of Acquisitions 2012				
uncategorised				
Category total				
		-	0.00 %	-100.00 %
CLICK HERE FOR GRADES				
Section 1 Self-Test	50.00	0.00-50.00	100.00 %	
Section 2 Exercise 1: Definitions Review Quiz	50.00	0.00-50.00	100.00 %	
Section 2 Self-Test	55.00	0.00-55.00	100.00 %	
Section 3 Exercise 1: Vendor Assignment *Quiz*	60.00	0.00-60.00	100.00 %	
Section 3 Self-Test	10.00	0.00-10.00	100.00 %	
Section 4 Exercise 1: Monitoring Spending Patterns *Quiz*	80.00	0.00-80.00	100.00 %	
Section 4 Exercise 2: Budget Structures *Quiz*	20.00	0.00-20.00	100.00 %	
Section 4 Self-Test	60.00	0.00-60.00	100.00 %	
Section 5 Self-Test	20.00	0.00-20.00	100.00 %	
Category total		100.00 %	0.00 %	-100.00 %
Course total		100.00 %	0.00 %	-100.00 %

Source: <http://www.classes.ala.org/grade/report/user/index.php?id=296>

- When you click a quiz link, a preview will open. Click the “Attempt quiz now” button to start the quiz.
- After selecting each answer you must click the “submit now” button to save your answer. When you are finished and ready to turn in your quiz click the “Submit all and finish” button.
- You can also elect to “save without submitting” the quiz to come back to it at another time. An example of FOA-Definition is given as below.

3.6.1 INSTRUCTIONS FOR USING ACTS-FOA GRADES

At any point in the course, you can review all your grades.

- Click on “Grades” in the Administration block on the left-hand column of the main page.

PREVIEW DEFINITIONS

Quiz: Section 2. Exercise 1: Definitions Review Quiz

Top of Form

Question 1

Marks: --/50

Match the following definitions to their correct types of acquisition method. (Caveat: the order of the types of acquisition method below changes every time you access this quiz.)

- | | |
|--|--|
| 1. Acquisition of multiple titles within a single series, received as published over time. | <input type="text" value="Standing orders"/> |
| 2. Acquisition of titles and/or pieces over time as a result of institutional fees for membership. | <input type="text" value="Memberships"/> |
| 3. Acquisition at no cost as a result of contribution by the publisher; publishers hope the title will be purchased in volume by the library or the faculty for classroom use. | <input type="text" value="Inspection copies"/> |
| 4. Acquisition of multiple titles preselected for the library by the vendor, at a large discount, with the commitment to return only a limited number of them to the vendor. | <input type="text" value="Approvals"/> |
| 5. Acquisition of multiple titles preselected for the library by the vendor, at a large discount, by review and selection of notification slips sent to the library in lieu of the actual item itself. | <input type="text" value="Slips"/> |
| 6. Acquisition at no cost either as a result of an order, or unexplainable receipt. | <input type="text" value="Free materials"/> |
| 7. Acquisition by trading for another item. | <input type="text" value="Exchanges"/> |
| 8. Acquisition at no cost as a result of donation. | <input type="text" value="Gifts"/> |
| 9. Acquisition of multiple pieces of a single title, received over time. | <input type="text" value="Subscription"/> |
| 10. Acquisition of multiple titles published over time by a specific publisher. | <input type="text" value="Blanket orders"/> |

3.7 Participants' Profile

Moodle is very helpful for creating participant or student profile. In it they can write their affiliation, working experience, or other personal details.

4. CONCLUSION

American Library Association online learning portal has been developed in Moodle open access software. The modules are very interactive and very easy to handle in real

time. It receives participants' opinions and suggestions and provides a global platform for knowledge sharing. Through Moodle whole World is transforming into knowledge learning community. In ALCTS, students make it possible to share their knowledge and difficulties. Meanwhile teachers also help them in making their topics more comfortable via forums and chats. Most important part of this course is quiz and a forum viz. notes, news, etc. Participants can easily give their answers in objective way and assignments can be uploaded in any format. Moodle is really helpful in boosting learning process especially to library & information professionals and shaping their academic career more effectively.

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