

DESIRE TO LEARN (D2L) PROTOTYPE PROJECT PLAN

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WBT Team Members and Roles:

Wayne Hodges – Project Lead, Instructional Design & Development
Cheryl McCraw – LSC/Instructor
Nicole Lang -Thervil – Software Testing/QA group
David Booker (Website Team) – Web integration & delivery review, graphics
Linda McCarthy – Asst. Dir. Library Services, Training Coordinator, FA

Other Resources:

John Ridgway – Server maintenance & network integration
Mark Adams – Communications group (editorial)
Ralph Prieto – Systems integration
Sharon Moskowitz – Demonstration narrations
Heather Thuotte-Pierson – Webhound (Webstats team rep)

I. Executive Summary

This project will serve as a proof of concept for delivering all future Web-Based Training (WBT) courses or tutorials to our LINCC community on a new platform. A major evaluation milestone will be established in this project to determine adoption of the D2L platform. As early as possible the project will test the viability of a full migration of our current Blackboard courses. This milestone will test several desired outcomes and “explore” the potential advantages of using D2L versus Blackboard.

A newly developed tutorial will also be deployed with this new Course Management System (CMS). This tutorial is a needed training resource for the current LMS, and provides a vehicle to test the D2L system capabilities for its authoring tools.

II. Product Definition

As presented in the *Aleph WBT Phase 1 Project Plan Summary*, Blackboard’s Basic Learning System that CCLA currently uses has many undesirable deficiencies.

- Our Blackboard system does not provide enough specific useful or needed statistics without some manual processing and interpolation.
- The Blackboard system has required a lot of attention keeping up to date with all vendor maintenance patches and updates. Applying these updates have been exceedingly numerous and are required to maintain or improve system stability, functionality, and assure less work or complications for future system migrations.
- Our Blackboard product does not have the ability to integrate with CCLA’s LINCCLearn Online Registration System.
- The Blackboard system has a limited authoring environment and tool set for optimizing or customizing WBT presentations specific to CCLA’s requirements.
- The Blackboard system cost has risen.

As we move forward in instructional development at CCLA we need to explore other systems and technology to advance our LINCCLearn services to the community colleges. Upgrades for CCLA LINCCLearn development and delivery need to be constantly evaluated as the technology markets and standards evolve.

This project will present to the CCLA Implementation Team a study and a proof of concept prototype WBT product using the Desire to Learn (D2L) platform. The D2L prototype project is an exploratory effort and demonstration to deliver web-based training for CCLA's unique requirements in a more enhanced manner.

Our strategic partner, Florida Distance Learning Consortium (FDLC), hosts the D2L course management system. D2L is an enterprise CMS that promises a lot more bang for the buck as compared to what our present "basic" Blackboard system is capable of. It looks very inviting and sensible to explore the resources and economies of using FDLC as an agent for enhancing CCLA's LINCCLearn services.

The indicators of success will be obtained by evaluation feedback and reporting throughout the internal project review phases. Using the Instructional Systems Design (ISD) methods and Quality Assurance testing techniques employed with this project, the D2L system and byproducts will be thoroughly examined internally before the system is released to our LINCC clients.

The primary goal (milestone) of this project is to select an existing Blackboard course to serve as a test article for a migration demonstration to the D2L system. Once this migration is accomplished the project team will further explore applying the potential enhancements of D2L.

The success indicators should be based on the measurement of increased benefits and gains made against stated deficiencies of our Blackboard system. The following specific enhancements and benefits are envisioned to be realized during this project.

- Once released, LINCC Library staff learners will have the ability to more easily access LINCCLearn training with increased tracking and feedback of performance and lesson completions.
- D2L would make it possible to have better CMS integration with our LINCCLearn Online Registration System.
- More flexible and powerful administration management. Improved design environment with better authoring tools.
- Better statistical reporting. More comprehensive user data without much manual interpolation. Integration with other CCLA statistical systems.
- The ability to develop and use reusable/sharable-learning objects and have a repository for them.
- Lower maintenance concerns. Because it is a third party hosted system, there is great cost savings in not having to do hardware refreshes.
- All the above benefits will come at a lower cost as compared to any Blackboard system.

Although the focus of this project is on the new delivery system performance, a very useful training byproduct will also be realized. As the result of CCLA's recent Training Assessment survey completion from our LINCC clients, it was confirmed that a Serials Check-in tutorial was the most needed instruction product development to add to our LINCCLearn service. This tutorial will be developed in a concurrent parallel timeline with the Blackboard course migration effort. The basic design of this tutorial is comprised of five components presented to the trainee:

1. Static pages, with text and LMS screen shots or some graphical support that present the lesson in a conceptual form.
2. A demonstration of all associated lesson tasks, delivered via sets of animated slides containing a detailed series of LMS screen shots with an audio voice-over.
3. Guided practice exercises in a LMS "simulation" setting to compliment most lesson demonstrations. This instructional method provides instant performance feedback with guidance to correctly respond to required interactivity and reports completions to the CMS.
4. A final practice session using an Aleph "training" database, where the trainee is supplied a script to duplicate the lesson tasks that were previously demonstrated.
5. Formative and summative evaluations.

III. Method of Delivery

The D2L course management system will be configured to CCLA's requirements to be used as host WBT tutorials. This is an Internet browser accessed system. The associated lesson demonstrations and guided practice exercises are also delivered within the CMS environment via the Macromedia Flash plug-in for the Web browser. The use of "standard" plug-ins such as Flash/Shockwave is already common practice on our user's workstations.

Initially a batch file of LINCC usernames will be created to populate the D2L CMS user database. The appointed SysAdmin or Service Desk personnel will manually maintain user authentication and system access when D2L is officially implemented and released to the LINCC community.

Efforts will be made to utilize the new Online Registration System as the gateway to register for D2L (WBT) courses. The WBT courses are made available from within the LINCCLearn page on the CCLA corporate site. It is anticipated that the D2L delivery of WBT will be practically transparent to the end user. In order to manage prerequisites situations, an inter-systems communications method will be explored and possibly developed to update the registration system with the trainee progress and completion of lessons and/or courses.

Discussions and information regarding the user authentication components of this project will be addressed. Efforts will be made to integrate user authentication with CCLA's current Access Management system.

As a "proof of concept" project, efforts will be made to avoid using existing systems production servers during this project. The project team will not risk failure of any production server while trying out inter-system communications methods.

D2L uses different computer server architecture than CCLA's server model. All operating systems are Win2k and the RDBMS is SQL 2000 Enterprise. There is one test front-end server (www/app) and two production front-end servers (for load balancing and fail over). The SQL server will soon also be clustered for fail over. Details for moving from the test server to production will be further explored within this project time period.

IV. Assumptions and Prerequisites

We assume that the necessary hardware, software and staff resources will be available as requested in this project plan. Based on previous projects, we assume that CCLA and community colleges have network bandwidth capacity that can be used to deliver WBT to our LINCClearn clients. We assume that it will be possible to test course delivery across varying network configurations using the model site.

Because CCLA has limited experience with D2L, this should be considered an exploratory project. Efforts were made to predict a realistic timeline and required resources. But at the same time, flexibility will still be an important factor because of several unknowns, and most team members are multi-tasking their availability for this project. The project team proceeds with a very high level of confidence in the D2L capability to enhance CCLA's LINCClearn service. D2L is already widely adopted in our community colleges and used in several other states with a proven track record.

V. Budget

No CCLA Website development budget is needed for the "test" license subscription of the D2L System. However, a budget should be established for the fiscal year '04 -'05 when it is anticipated that CCLA will need to procure a "production" license. The exact production license cost is yet to be determined; it would be about \$4000/yr. Most likely no other development software licenses or upgrades are required for this WBT project period. But for software contingencies, a reserve of \$500 should be established.

VI. Service/Product Development Process

A traditional Instructional Systems Design (ISD) model is employed using a typical project phase breakdown. A WBT team is assembled, drawing from several subject content and technical experts to guide the overall project development process. The development phases are; Analysis, Design, Development, Integration, Evaluation (QA & software testing), Implementation (final product approval and release).

The Subject Matter Expert (SME) LSC uses MS Word files containing the core training as the primary authoring vehicle. This makes it easy to revise course content in a CCLA review cycle. The SME content authoring is circulated to designated CCLA internal personnel on a scheduled basis to achieve collective insights and corrections. This approach is compatible with the existing extensive CCLA review and testing environment. These files will be then converted to D2L. If a determination is made not to proceed with the D2L platform, the new tutorial content can easily be put into the Blackboard platform.

When major milestones are met, team meetings are convened to review progress and deal with any problems or concerns. Meetings are comprised of the appropriate membership. Weekly status reports are provided in association with each of the courses under development.

At the conclusion of course integration development, an Evaluation phase begins to conduct product Quality Assurance (QA). This includes courseware flow and functionality, platform and software performance under stress, and general system usability performance. CCLA's Software Test group conducts the WBT course performance testing. An approved CCLA test plan for WBT courses has been developed and will be utilized during the Evaluation phase of the project. The CCLA Website team is also overseeing WBT product design.

The Evaluation phase would be compared to a traditional Alpha and Beta product release testing. Following this period of evaluation an additional CCLA staff viewing would be made available. Final comments and corrections are applied before the final course product is presented to CCLA management for approved public release.

D2L system software as well as all servers are hosted and maintained by FDLC. During the development of courses, the project team utilizes a “toolbox” of WBT course development software, including;

- Adobe Photoshop 7
- Adobe Illustrator 10
- TechSmith Snagit Studio 7.0
- Microsoft Word
- Macromedia RoboDemo 5
- Sony SoundForge 5.0
- Macromedia Studio MX 2004 pro
- Carbon ViewletBuilder 4.2
- Desire to Learn (D2L)
- Macromedia AuthorWare

VII. Training Requirements

The project leader has had D2L training using the authoring and presentation tools, and system administration functions. Some other WBT team members and CCLA staff will need orientation in this new application. The project leader will provide informal training and on going coaching during product development as needed.

The end user training product utilizes a familiar (in concept) distance learning software platform that uses common web-based interfaces and technology. Our community college library staff should not require additional training to utilize our WBT products.

VIII. Documentation

There are companion documents associated with this project that supply much detail for WBT development processes and procedures. These documents are located on the drive O:\Projects\Web-based Training\Aleph courses. They will be continually updated as the project proceeds.

- D2L Prototype master schedule (MS Project file)
- WBT Course Development Guide_r1.doc (processes & procedures, software)
- Each course outline and design plan (storyboard)
- All development files (textual, graphics, demonstrations, guided practices, Final practice script)

D2L server installation, upgrades, and maintenance unique to CCLA’s implementation during this project will be documented and kept on file. A final report will be generated at the end of this project period to reveal lessons learned and recommendations for future improvements or changes needed for other WBT projects.

IX. User Support

The CCLA service desk will continue to be the primary point of contact for support of our client user base in regards to WBT courseware problems. The Service Desk is assisted by the SME (LSC). It is highly recommended that a knowledgebase for each training course and associated WBT be established in the HEAT system. It is expected that the HEAT system would have categories supporting this WBT project. A Problem Resolution / Decision Matrix should be developed or similar existing system deployed in managing future LINCCLearn user support.

X. Statistics

A variety of course-utilization statistics are available through D2L. This project will explore the full capability of statistical information available from D2L. At minimum we expect that the CMS would track and record all users activity and performance who have enrolled in any WBT course. Available statistics will be compiled on a determined periodic basis of WBT activity and provided to management and the LSC's.

An investigation will be done to determine how D2L user statistics can be automatically transferred to the Online Registration System and /or the new Webhound system to soon be deployed at CCLA. The Webstats Team will investigate the D2L system for accessing log files to extract user activity. The project team working with the WebStats team will determine the best process for acquiring data for management reports.

XI. Communication and Publications

Announcements (pre and post), electronic and print should continue to be used to announce and promote WBT offerings from CCLA.

XII. Resource Projections

Wayne Hodges	600 hrs.
Cheryl McCraw	160 hrs.
Nicole Lang -Thervil	38 hrs.
John Ridgway	24 hrs.
Website Team members review	8x3=24 hrs.
Mark Adams	8 hrs.
D. Booker (Graphics & Website rep for meetings)	8 hrs.
Linda McCarthy (meetings & reviews)	8 hrs.
Ralph Prieto	8 hrs.
Heather Thuotte-Pierson	8 hrs.
Sharon Moskowitz	5 hrs.
Total Hrs.	890

XIII. Key Tasks and Timetable

(**) Denotes Decision/Approval Milestones. Steps 7 & 24 start concurrent development.

	Task	Duration	Start	Finish	Resource
	<i>D2L Prototype Project</i>	107 days	3/1/04	7/27/04	
1	New Tutorial Analysis Phase--LINCC Serials Check-in	10 days	3/1/04	3/12/04	
2	Submit Project Plan to Imp. Team		3/17/04	3/17/04	
3	**Meeting: Kick-off project – Analysis Phase complete		3/18/04		<i>WBT Team</i>
4	New Tutorial Design Phase—“LINCC Serials Check-in”	9 days	3/19/04	3/31/04	Cherie, Wayne
5	**Meeting: Design complete		4/1/04		<i>WBT Team</i>
6	Development Phase	72 days	4/1/04	7/9/04	
7	Setup D2L & Import Blackboard course	24 days	4/1/04	5/5/04	
8	<ul style="list-style-type: none"> Setup D2L for CCLA branding 	2 days	4/1/04	4/2/04	Wayne, Booker
9	<ul style="list-style-type: none"> Import LINCC user accounts 	5 days	4/6/04	4/12/04	JohnR
10	<ul style="list-style-type: none"> Prepare presentation layout and navigation 	2 days	4/5/04	4/6/04	Wayne
11	<ul style="list-style-type: none"> Import Blackboard LINCC Circulation Basics course 	3 days	4/7/04	4/9/04	Wayne
12	<ul style="list-style-type: none"> Investigation of interface with Webhound 	3 days	4/12/04	4/14/04	WebStats Team, Wayne
13	<ul style="list-style-type: none"> Integrate D2L with LORS (Registration sys) 	5 days	4/15/04	4/21/04	WBT Team, Website Team
14	Evaluation--D2L migration--using Bb course	9 days	4/22/04	5/4/04	
15	Pre-QA Review	3 days	4/22/04	4/24/04	WBT Team, Website Team
16	**Meeting: WBT & Website teams approval (Pre-QA Review)		4/26/04	4/26/04	<i>WBT Team</i>
17	Alpha test	3 days	4/27/04	4/29/04	
18	<ul style="list-style-type: none"> LINCC user accounts-- Review 		4/27/04	4/29/04	Nicole
19	<ul style="list-style-type: none"> Course import function -- Review 		4/27/04	4/29/04	Nicole
20	<ul style="list-style-type: none"> D2L--LORS integration test 		4/27/04	4/29/04	Nicole
21	<ul style="list-style-type: none"> Statistics Reporting--Review 		4/27/04	4/29/04	WebStats Team
22	CCLA Staff Review (Beta test)	3 days	4/30/04	5/4/04	

23	**Meeting: Final comments & acceptance of Bb course migration. Go/No Go for D2L		5/5/04		WBT Team
	If Go: Begin purchase order process with Distance Learning for D2L contract.		5/30/04		
	If Go: Import more Blackboard courses	See step 30			
24	New Tutorial Development	52 days	4/1/04	6/11/04	Cherie, Wayne
25	• Lesson 1: The Serials Module		4/1/04	4/23/04	
26	• Lesson 2: Checking in predicted issues using the Items window		4/9/04	5/13/04	
27	• Lesson 3: Checking in predicted issues using Fast Check-in		4/19/04	5/24/04	
28	• Lesson 4: Checking in unexpected issues using the Items window check-in		4/23/04	6/2/04	
29	• Lesson 5: Troubleshooting		4/29/04	6/11/04	
30	Courseware Integration to CMS (D2L or Bb?)	20 days	6/14/04	7/9/04	Wayne
31	**Meeting: Development Phase completion Review and Approval Go/No Go for new course(s)		7/9/04		WBT Team, Website Team
32	Evaluation Phase (Final)	10 days	7/12/04	7/23/04	
33	• Alpha Testing (QA)	3 days	7/12/04	7/14/04	Nicole
34	• Statistics reporting	5 days	7/12/04	7/16/04	WBT Team, WebStats Team
35	• Corrections & Modifications	2 days	7/15/04	7/16/04	WBT Team
36	• Beta Testing (Internal Preview)	4 days	7/19/04	7/22/04	CCLA staff
37	• Final corrections & Modifications	1 day	7/23/04	7/23/04	WBT Team
38	**Meeting: Evaluation Phase Completion-- Final review and approval		7/23/04	7/23/04	WBT Team, Website Team, FA
39	Implementation Phase: Product release & support	3 days	7/26/04	7/28/04	
	• Prepare for Production server mode. CCLA Website configuration		7/26/04	7/27/04	John R, Website Team
40	• Support Plan (service desk training)		7/26/04	7/27/04	Wayne, Service Desk
41	• Product Release to Community Colleges		7/28/04		