Desire2Learn (D2L) Demonstration: Effect of Learning Management Systems on Student and Faculty Outcomes

2010 DePaul Faculty Teaching and Learning Conference Version 1.2



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Presentation handouts available online at:

http://www.depaul.edu/~jmoore/d2lstudy-dtl/

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Introduction

I volunteered to teach **MKT 595: Internet and Interactive Learning** via D2L for the 2009-2010 Autumn quarter. This was the first time I taught this course entirely online.

I must admit to not following some best practices in developing this course - I was creating content as the course was being taught ("jumping out of the airplane and building a parachute before I hit the ground").

Class material was based upon **Apple Keynote** presentations from previous courses. I took this and created video lectures with **ScreenFlow**, which were then streamed (**Ooyala**) and embedded in D2L. Students were able to download M4V versions (playable in QuickTime, iTunes, etc., and on iPods and iPhones) of the video lectures from **iTunes U**. Written content was created in **Apple Pages** and made available as Adobe PDFs for the students to download. The same written content was converted to HTML and became the narrative of the course. These HTML pages were uploaded into the D2L content management system. As an experiment, I used **Softchalk** later in the course to reduce development time.

The course was enhanced by the usual online tools - discussion boards, quizzes, drop boxes, etc. Wimba was used for a "live" online class. I did not have time to fully investigate Wimba integration with D2L, and instead choose to run this part of the course through Blackboard.

Students were surveyed anonymously each week. Beth Rubin organized a LMS study survey at the end of the course.

Class size was capped at 28 students. One student dropped out in the second week, their place was filled by one of the wait-listed students.

More information (including the syllabus) about MKT 595 can be found here:

http://www.depaul.edu/~jmoore/mkt595/

My intention with the course was not to faithfully recreate a Blackboard course in D2L, but to see if D2L provided affordances that changed the way I taught. There were many methods of design and teaching that I was able to employ through D2L. I was happy with the outcome. I am still learning new ways to better use the Learning Management System.

I am currently using D2L to supplement a face-to-face version of MKT595. The course is now in its third week, and have improved my understanding of how D2L can be used to teach a better class.

Three Fundamental Features

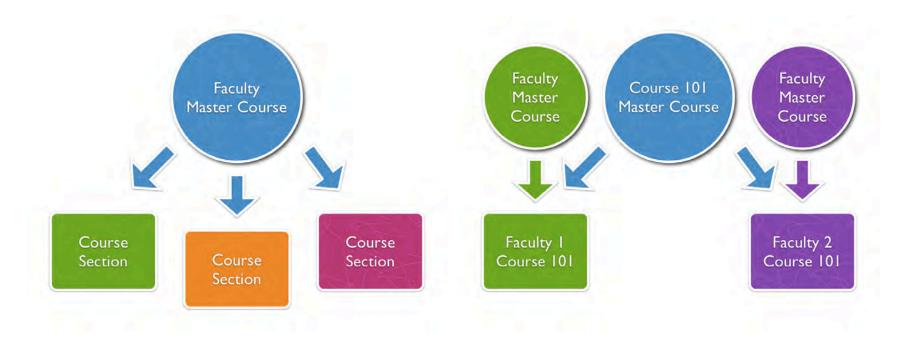
Looking back, there are three fundamental features of the D2L Learning Management System that will allow DePaul to create online, hybrid and web-enhanced courses that meet the needs of Vision twenty12 (http://president.depaul.edu/Vision2012/). These features are:

- 1. Content Management: The CMS.
- 2. Hyperlinking
- 3. Scripting

My presentation today will explain how I see these three features transforming the way we teach.

Content Management

Currently, our use of online learning promotes a siloed approach to how content is created and distributed. This is contrary to the concept of a university, and introduces inefficiency, errors and inconsistency. Using a Content Management System (CMS) has the potential to resolve this issue/



Hyperlinking (links to course content)



Your blog assignment this week is to:

- 1. Create a blog for MKT 595 using Blogger.
- Post one journal entry to chart your research, discoveries and thoughts for this week (this is graded as assignment 4). NOTE: This must be Internet marketing related.
 - 1. Use tags to categorize your postings.
 - 2. Respond to any comments left on your blog.
- 3. Share the URL for your blog on the Week 1 discussion board.

Complete instructions are in the Week 1 handouts (PDF).

Scripting (restrictions and intelligent agents)



D2L Features



System Check on login page

- Ensures that students are using a supported browser.
- Reduces helpdesk calls.



Student Profiles

- Created once, appear in all courses.
- Students can create and upload multiple homepages.



Comprehensive Reporting

- Access logs.
- Tool use.



Student Checklists

- Students can check completed assignments.
- Events appear in calendar.



Discussion Board

- Similar to Blackboard, but with more options to customize.
- **NOTE:** Currently lacks subscribe option.



Dropbox

- Well-designed interface.
- Supports multiple and sequential uploads.
- Supports feedback.
- Can link directly to gradebook.



Gradebook

- Well-designed interface.
- Multiple views.
- Import / export grades.



Quizzes

- Conditional release.
- Sophisticated logic.



Impersonate User

 From the classlist there is the option to impersonate a student. Very useful for fixing issues - but should only be available for use if passed by our Office of General Counsel, and if students accept use.



Hyperinks

• Link to, or embed any course element.



Intelligent Agents

• Scriptable events.



Widgets

• Small modules that add functionality to a webpage



Restrictions

• Used to prevent or hide course elements, unless a condition (posting in the discussion board, completing a quiz, etc.) has been met.

LMS Study

LMS Study Faculty Interview Protocol

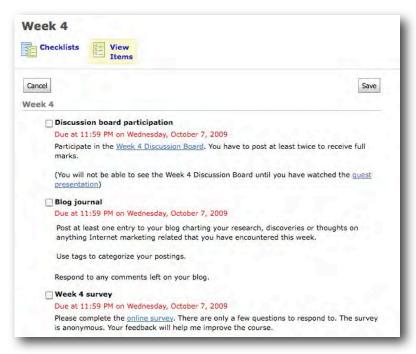
Beth Rubin interviewed me (Friday November 20, 2010) as part of our LMS study. I have taken her transcript and expanded my response. This interview took place over the telephone, after I had finished teaching MKT 595 with D2L for the first time.

1. Which tools or features in the D2L LMS allowed you to teach more efficiently?

I would say three areas:

1. The first, and the one that's most important to me was **hyperlinking**. Within D2L there's the ability to link from element to element. I could link to any object in the course, instead of having to provide explicit instructions for students to follow. By this I mean linking to elements within the course – such as surveys, discussion board, previously mentioned materials, drop box, etc.

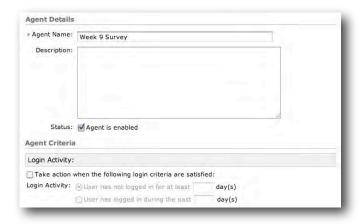
With Blackboard I could create basic course links, but not from inside a paragraph of text, or from an image. In D2L I am able to hyperlink in context – linking directly to the element "X", not to the general area.



For example, I provide a weekly checklist for the students. Each listed item can link directly to the assignment in the course. Effectively, I'm turning the course into a website.

2. The next thing (in terms of efficiency) were **Intelligent Agents**. I was able to set them up in such a way to trigger email notifications based upon certain events - such as if students completed a survey, or scored a certain grade on a quiz. These e-mails could be used to prompt me back into action. The down side to email

notification is that they can be swallowed by spam filters (such as DePaul's - I had to recover the occasional email). There's more opportunity here than I had the chance to experiment with.



Possible ideas:

- Automated emails to students who have not logged into the course for x days.
- Automated emails to students who what not read through the material (or taken a quiz, etc.)
- 3. The third one is a simple thing. On the course home, there is a widget called "**Updates.**" The widget tells me in one place what students have done (and I need to do). For example:



These are the core ones that I think made a difference. I have been using other tools; these helped the most.

2. Which tools or features in the D2L LMS allowed you to teach more effectively?

That would definitely be the **content management system**. This is closely associated with the idea of hyperlinks that I mentioned in my response to the first question. The content management system allows me to create the course that I want to teach; I'm not hampered by having to design something that the system is forces upon me, - which is the case when I use Blackboard. D2L allows me to create the appropriate structure for my course. I've broken my course into weekly segments. In each segment, I have a page by page structure that students work through. The methodology behind creating the course was that effectively I was writing a book; each week of the course is a chapter in that book. The course follows a narrative structure. I created videos that accompanied the text; they are side by side with text in the course. The CMS allowed me to create the structure that I wanted.

I wanted a clear path that the students followed, I did not want them jumping from bucket to bucket in the course. I wanted a clear trajectory for them to follow. That was the most important thing for me in terms of effectiveness.

The CMS is very deep; I can put in anything that I want. I was able to

- Upload (and expand) zipped SoftChalk files
- Upload PDF files
- Embed Ooyala streamed videos

and link to them from multiple places in the course

This made a big difference to me.

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Week 3

Cancel

Week 3

View

Due at 11:59 PM on Wednesday, September 30, 2009

Due at 11:59 PM on Wednesday, September 30, 2009

In your teams, I would like you to complete two short tasks.

 Create a free Google Analytics account and add tracking code to your blog: http://www.google.com/analytics/
 Using Access Manager, add my account (imoore.depaul@gmail.com) so I can view

Complete an imaginary DMOZ submission for the College of Commerce.
 Create an imaginary Adword campaign for MKT 595, that would be displayed on a

To complete this assignment, download and complete the "Week-3-Assignmen Microsoft Word document from the Week-3 Dropbox. When you have finished the assignment, upload your Microsoft Word document to the same gropbox.

o Keywords (the words/phrases that word invoke the display of the

o Constraints (methods that would limit the display of the advertisement to

Analytics exercise

Team exercise: Paid Search

o Headline o Description line 1 o Description line 2 Save

Also – from a student perspective – what made a big difference were the weekly **checklists**, which highlighted the deliverables. It shows up as a reminder to the students; they were actively going in and checking off what they'd done.

The discussion board is – this is a nuanced response. I'm trying to do something with the discussion board that I can't do in Blackboard. I'm trying to do it, but haven't hit it yet. I know I can grade each individual post (in my case on scale of 1-3). D2L allows me to award an overall maximum or minimum grade. What I want to do is to sum the individual graded posts on a scale of 0 - 5. If you posted 5 times, I grade each post, and then add these individual grades together, but cap at 5 points. I haven't been able to get the system to do this automatically yet. It would make me more effective, since students would see my grading for each individual post.

I used all the tools. There are things I liked:

- **Drop box**. I liked the ability to quickly leave feedback for students there. I found the layout organized, I was able to quickly see what I wanted to see.
- I was impressed by **ePortfolio** option, but didn't use it.
- I liked the sophistication of the **gradebook**. I was impressed by it. However, Blackboard is catching up. I could set up intelligent methods for grading, where students would be awarded a minimum or maximum grade based on criteria I defined. Statistical feedback was helpful; I could see how well folks were doing with graphical analysis.
- I experimented with **conditional release**, which I see as an effective way to teach. Students cannot proceed to the next stage of the course unless they reached a particular grade in a quiz, or cmpleted a survey, or read an item of text. Conditional release is available in Blackboard, bit not at the level of sophistication that it is in D2L.
- I used **groups**. This is a tool that Blackboard has, but there is such as clear difference here. Groups allowed me to have students easily self-select into groups. I found D2L groups straightforward to use, and I think it's integrated well into the gradebook. For example, group members could upload a file; I'd grade it, and the grade would be applied to all members of the group. I could override the group grades if I needed.
- The **gradebook** allows you to do smart things, such as hiding a grade from students. You can have a hidden participation grade, which then combines values to create a visible participation grade. You can set up scriptable events that students cannot see.
- D2L felt like Lego, because of the content structure. You're assembling things from basic elements into something that's very complex.
- Surveys I use them in Blackboard, too. I did not see this as a differentiating feature.

 \bullet The CMS is the core thing; but the others are deep when you dig into it.

3. Which tools or features in the D2L LMS hindered your ability to teach efficiently?

There were two things that I had issues with:

- 1. **Surveys.** I grade participation in weekly anonymous surveys; I know how to do this in Blackboard, but not in D2L. The gradebook in Blackboard indicated whether a student has completed a survey; I don't know how to do this in the same way in D2L. Worst case scenario I have 28 students and 27 surveys have been completed, but I don't know who did it. I tried to work round this with Intelligent agents but that method was a little inefficient.
- 2. **Discussion board**, interestingly enough. On the whole I liked the D2L discussion board, but the split screen view (thread above, and discussion question below) became a problem. I had to scroll and move items around. Sometimes the problem is due to my preferred view. I'm still working out what works best for me. The other discussion board view has popup windows, which I don't like

In terms of the model for discussion board questions – there was terminology that was new to me, which didn't make sense. You have a topic within a forum, which I found confusing. I had to create a forum that the topic went inside – a container. I understand the reason, but this was an adjustment; had to change the way I was thinking.

4. Which tools or features in the D2L LMS hindered your ability to teach effectively?

I realized that part of it was my unfamiliarity with the system created a learning curve. Due to my compressed time learning how to use D2L, and simultaneously building a course largely from scratch, I was less aware of all that D2L could do. With more time I would have created more complete instructions and tutorials for my students.

- In the first week I asked students to create a profile page within D2L, and introduce themselves to the rest of the class. I was less effective here because I did not know the system as well as I know Blackboard.
- Email (an issue because we're not integrated yet). What I typically do is send out emails to students. At the moment, I can't hide student emails from each other in the "To" field. I don't like using BB, because it increases the liklihood that email will be blocked or filtered. So I sent email externally, using a bulk-personalized system (MaxBulk Mailer).

Those are the main ones - due to unfamiliarity with the system, and lack of integration with Wimba and PeopleSoft. I had to use Blackboard to use Wimba.

Also, with Blackboard you can allow students to subscribe to the Discussion Board. I don't know how to do this in D2L (currently not a feature). You could use Intelligent Agents, but this would be a little ungainly.

5. Is there anything else you'd like to add?

I enjoyed the experience. I know that I want to have a test shell; I didn't have enough time to do what I wanted to do; the written content I created on the fly. I was developing content as I figured out D2L.

I didn't want to teach using a straight copy of a course taught in Blackboard; I wanted to see if familiarity with the toolset changed the way I designed the course, and it did. People who are interested in how the systems work need to help people design a better course, through knowledge of how the tools operate. This will affect how we create the template. The worst thing would be to replicate what we have in Blackboard.

I haven't had an opportunity to play with this feature yet, but I think it will be valuable to copy experiment with course copies and master courses in D2L.

Interviewer Notes (Beth Rubin):

At end: inquire about satisfaction with specific tools or features (inquire only about those that were not mentioned):

- Discussion
- Quizzes or Self assessments -- used and liked them.
- Calendar it linked directly to the checklist, so all my students were using the calendar. It worked well.
- Email
- Gradebook/tools for giving formative or summative feedback for students
- Checklists yes, loved it.
- Automated email/intelligent agent (and for what) yes, loved it, for self-alert. Did not trust it to send emails to students due to filtering (spam filter), and who they were coming from. They were coming from Beth Rubin; over time it was changed to D2L study; I want it to come from me, not a centralized resource.
- Conditional or limited release of any item used tons, based on viewing items, on getting a certain grade, and on taking a survey. I had to explain it to one student only. Everyone else got it (I sent the information in a weekly email).
- Competences NO.

Probe about any external features or tool: -- what was embedded in LMS vs. linked to it vs. fully external.

- Using Ooyala; I created my own account in Ooyala, and embedded it into D2L into the content in the LMS.
- Used outside MaxBulk Mailer, so I had a separate list of email addresses. Was totally externally.
- Apple iWorks Keynote, which is an Adobe .pdf creator the results were uploaded. Shows as either a link to students, or opens up the .pdf within the window.
- Also used Softchalk Lessonbuilder to create .html content, and uploaded them as zipped files which were unpacked by the system. Also used Dreamweaver and
 pasted .html into the system. No huge problems.
- One issue was their WISIWYG editor opens a window; it became a pain because of creating quizzes. They're in .html. The issue was time; in Bb I switch off the editor, and paste html in. To do it in Bb, we'd have to change the system (e.g., bulk-upload using Softchalk or Respondus or another tool.)
- Also used iTunes U for my video content. It's available as an embedded streaming video file from Ooyala, and also as a downloadable podcast from iTunes U. Insert a link to iTunes U (exactly the same as any other system.)

• Used Wimba; we all went through Blackboard.

LMS Study Survey (Partial)

Question 47: What do you like about this course management system?

- Compared to blackboard, I think this course management system is more intuitive for the user.
- It was easy to use.
- It's user-friendly. It's a lot easier to use than Blackboard and the CDM system.
- The user interface is simple yet powerful
- The simplicity of the design.
- Works very well
- I liked the navigation, look and feel of the system.
- Everything is in one place and the checklist is very helpful1
- The course management system is very easy to follow.
- It is a different format, but it seems that it allows for more content to be placed on the site in a much more accessible way.
- · Its ease of use
- It was very user friendly and stable.
- The opportunity to check materials whenever I want.
- I can keep tracking my achievements.
- Materiasl are very well organized.

- D2L is a ton better that the Blackboard software. Profiles, navigation and "look and feel" are all great.
- Easy to navigate through and find what I need
- much better than blackboard.
- Creating a personal profile, the discussion board interface, the checklist system, font and design customization, the way the video player can break up the video into slides to allow for easier navigation through the video.
- I liked the checklist because it would remind me of what exactly I had to do without having to click to a totally different screen.
- Having all the content laid out was nice, in order to see how much was included for the week.
- I like how it is broken into sections. The sections make a lot more sense than the Blackboard system.
- I liked that you could see how your grade compared to that of others easily, I liked that you could see who was online at any given time, and it was also very easy to find everything that I needed for the course.

Question 48: What do you dislike about this course management system?

- Sometimes the system was slow. I am not sure if it the server where this site is being hosted or a problem on my end.
- Can't think of any reason to dislike the course management system.
- Sometimes the navigation menu on the left hand side keeps resetting itself; it's quite inconvenient to have to go to a particular week submenu every time you click on something in the right hand side.
- I can't recall anything that I dislike.
- I cannot save my password on the login page
- The content section needs to be presented in a more organized format.
- Some times the guizes would not function as they should.
- I would have liked the ability to download the materials rather than opening directly to a pdf first. I also didn't like how if I encountered an internet connection problem, the system went back to the home page.
- I think the site can be confusing based on the way it is laid out
- It didn't make updates, for examples even though I had taken my quizzes it showed as if I haven't. It would be nice if the checklist was somewhat automatically populated. For example, I shouldn't have to check in if I completed my quiz or survey.
- It was different and difficult to get used to after using Blackboard so long, but once I did figure it out it was easy.
- Could have more of a AOL chat room / msn messenger look & feel portion.
- It felt like there was information overload at times with too many places too look. The file structure was a bit overwhelming.
- The discussion board format is not easy to view and follow.
- The checklist should update automatically.
- I didn't like the discussion board format. You could only see a few post headings at a time and constantly had to resize the reading pane. A vertical navigation format with the reading pane on the right might be better.
- Discussion Board tool needs to be organized better (e.g. get rid of the horizontal bar between navigation and content)

- I wish the contents section stayed like I leave it when I log out. I hate having to scroll all the way down to the current week or close out each individual week that has passed.
- The discussion board would be easier to use if we could see all posts on one page it's hard to follow the threads when they're on 2 pages.
- forum does not offer te option to exclude original message in the responses.
- Hard to contact other individuals directly, the dropbox area was a bit strange, and, most of all, it makes students seem like just a name on a screen. Students are allowed to upload photos of themselves yet they are not displayed anywhere in the interface besides their profiles. They should be used in a more Facebook or Twitter-thumbnail sort of fashion. Also, every user should be given a way to express themselves within the LMS. We had to have a blog for the class yet it would be nice if we could have had a public blog hosted from within the LMS (e.g.: http://depaul.desire2learn.com/studentname)
- Nothing
- I think it would be cool if the checklist could be automated. So, as you turn in various assignments, it would fill in the checklist.
- I wish that the course management system had a instant message/chat feature.

Question 49: Additional comments (Optional):

- The only additional comment I have is that the discussions did not really get the user to explore or drill down to relevant issues. I felt it was very general and broad.
- I was quite skeptical whether I would learn in an online class. Professor Moore has done a great job at keeping the material interesting while relevant and for the most part easy to understand. There are some topics that are technical so it is a little bit harder to grasp the concepts. Overall I like the course.
- I would still strongly encourage a face-to-face meet at least once just before the class starts or the on the first day of class. Also I would incorporate a real-time dicussion forum. Last the success of knowledge goined and enjoyment of this class is directly resulting from the tenacity of the teacher. Any stories of failures from other classes, aside from the obvious, would therefore be contributed to the controls of the professor.
- Prof Moore was a fantastic professor in every aspect, ranging from providing feedback to simply making himself available for students. It was obvious that he really put in the time to make the learning experience beneficial to the students.
- The content and nature of this class is perfect for an online format.
- Great course...learning a lot and well structured by Prof. Moore.
- I am very enthusiastic about this LMS system. I haven't used many others besides Blackboard and the DePaul CDM system, both of which I absolutely hate.

 Desire2Learn is bar none the best LMS I have yet to use and I truly enjoyed doing my coursework through it. I would take more online courses were I to be able to use this platform.
- I'm not sure if this could be avoided or not, but the D2L system was down for maintainance overnight right before we had to submit our final exams. It would probably make more sense to have it down for maintainance on Sunday night when it is less used like Blackboard is.

Commerce Upcoming Events

. D2L: How It Works

Desire2Learn (D2L) is the new Learning Management System (LMS) that DePaul will be adopting. This session will provide you will a thorough understanding of how the various elements in D2L operate. You will see how existing courses have been successfully copied from Blackboard to D2L. Links to documentation, videos and hands-on training will be provided.

- June 29th: 10-11 a.m.
- RSVP: http://condor.depaul.edu/~jmoore/tech/

D2L Basics

There are three basic functions of D2L that will be covered in this session:

- 1: Uploading documents.
- 2: Use of course cartridges.
- 3: E-mail

In this short session, you will learn the basics of D2L. Links to documentation, videos and hands-on training will be provided.

- July 27th: 10-11 a.m.
- RSVP: http://condor.depaul.edu/~jmoore/tech/

Desire2Learn Extreme Makeover

D2L is the new LMS (Learning Management System) that DePaul centrally supports for all classes. Last year, Technology Tuesdays presented Blackboard Extreme Makeover. In this corresponding session we will cover quick and painless ways you can give your new D2L course an Extreme Makeover – turning a plain course into something more glamorous (and pedagogically sound).

• September 28th: 10-11 a.m.

Desire2Learn (D2L) Demonstration Page 29 of 29

• RSVP: http://condor.depaul.edu/~jmoore/tech/

More Information?

Desire2Learn Community

https://community.desire2learn.com

Click on Enrollment button (top right corner)

