Recommendations for How to Support Students in Accessing their LMS Courses

User Experience Research & Design Team

December 2017

Executive Summary

Campus will be supporting two LMSs starting Spring 2018. As such students will need to navigate to the right LMS for their course, which may cause frustration and confusion.

Currently, students can go to their portal and access a D2L deep link into their course. Adding a Canvas deep link will require extensive development efforts. OIT Development team wants data to justify development efforts.

To collect this data, we administered a short, student survey (see Appendix A for survey). The survey was posted on D2L, in CU Boulder Today, and on OIT’s social media channels. The survey was available for one week. 2907 students responded to the survey.

Here are our major findings from the survey:

1. The majority of students (86.81%) access their D2L courses in the following ways:
   a. Having the D2L website bookmarked (40.26%)
   b. Typing in learn.colorado.edu in their browser (25.03%)
   c. Searching for "D2L CU Boulder" (or similar keywords) using a search engine (e.g., Google) (21.52%)

2. The majority of students (78.75%) have never used the current D2L deep link from MyCUInfo.

3. The majority of suggestions (67.70%) for how to address the challenge of identifying which LMS to use for which class involve a communication from faculty members:
   a. Emailing students (34.39%)
   b. Making an announcement at the beginning of class (33.31%)

Based on our findings, we recommend one or a combination of the following approaches to help students access the right LMS. Further detail is provided in the Recommendations section below:

1. **Have faculty members** communicate to their students which LMS to use for which course.
2. **Cross-list** each course in each LMS. For example, if a course is using Canvas, create a D2L course shell that directly links to the Canvas course.

### High-Level Findings

This section provides a summary of the high-level findings from the survey. Because of time constraints, we prioritized analyzing the questions that directly address the above challenge. Some questions along with demographic information will be analyzed and described at a later date.

### How Student Access Their D2L Courses

To **infer how students might access their Canvas courses**, we asked students the following question related to D2L:

> Please describe how you typically access your D2L courses. Check all that apply:
> - I type in learn.colorado.edu in my browser
> - I have the D2L website bookmarked
> - I have my specific D2L courses bookmarked
> - I search for “D2L CU Boulder” (or similar keywords) using a search engine (e.g., Google)
> - I go to myCUinfo and access D2L from the right column menu option labelled “Desire2Learn”
> - I go to myCUinfo and access my specific D2L course from the "Grades/Details" tab to the right of my Course Schedule tab
> - I rely on information provided in my course syllabus
> - Other. Please specify

To generate these options, we piloted this survey with a small group of students and asked the same question in an open-response format. The open-ended responses were analyzed and categorized into the options above.

**In summary, the tactics that students most use to access their D2L courses are:**
- **Having the D2L website bookmarked** (40.26%)
- **Typing in learn.colorado.edu in their browser** (25.03%)
- **Searching for "D2L CU Boulder" (or similar keywords) using a search engine** (e.g., Google) (21.52%)

The graph below shows the tactics students use to access their D2L courses (ordered from most popular to least popular).
The data from the graph, is also presented in the table below.

<table>
<thead>
<tr>
<th>Response</th>
<th>Percent</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have the D2L website bookmarked</td>
<td>40.26%</td>
<td>1837</td>
</tr>
<tr>
<td>I type in learn.colorado.edu in my browser</td>
<td>25.03%</td>
<td>1142</td>
</tr>
<tr>
<td>I search for &quot;D2L CU Boulder&quot; (or similar keywords) using a search engine (e.g., Google)</td>
<td>21.52%</td>
<td>982</td>
</tr>
<tr>
<td>I go to myCUinfo and access D2L from the right column menu option labelled &quot;Desire2Learn&quot;</td>
<td>5.52%</td>
<td>252</td>
</tr>
<tr>
<td>I have my specific D2L courses bookmarked</td>
<td>2.59%</td>
<td>118</td>
</tr>
<tr>
<td>Other. Please specify*</td>
<td>1.88%</td>
<td>86</td>
</tr>
<tr>
<td>------------------------</td>
<td>-------</td>
<td>----</td>
</tr>
<tr>
<td>I go to myCUinfo and access my specific D2L course from the &quot;Grades/Details&quot; tab to the right of my Course Schedule tab</td>
<td>1.82%</td>
<td>83</td>
</tr>
<tr>
<td>I rely on information provided in my course syllabus</td>
<td>1.38%</td>
<td>63</td>
</tr>
</tbody>
</table>

* Due to time constraints, these free responses were not analyzed in depth. Unique responses ranged from the browser url bar autofilling when the students types in the letters d or l, to students setting D2L as their homepage, to students keeping the D2L site open in their browser.

How Often Students Use the MyCUInfo D2L Deep Link

Because of system limitation, we do not have objective analytics to help us determine how often students actually use the current D2L deep link from MyCUInfo (see Appendix B for screenshot). As such, we asked students to provide us with a self report of how often they use this feature.

The graph below provides frequency data for how often students use the D2L deep link from MyCUInfo. The majority of students have never used (78.75%) the current D2L deep link from MyCUInfo.
The data from the graph, is also presented in the table below.

<table>
<thead>
<tr>
<th>Response</th>
<th>Percent</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Always, I use this everytime I need to access my D2L course.</td>
<td>1.10%</td>
<td>32</td>
</tr>
<tr>
<td>Most of the time</td>
<td>1.41%</td>
<td>41</td>
</tr>
<tr>
<td>About half the time</td>
<td>1.34%</td>
<td>39</td>
</tr>
<tr>
<td>Sometimes</td>
<td>14.81%</td>
<td>430</td>
</tr>
<tr>
<td>Never. I've never used this before.</td>
<td>78.75%</td>
<td>2287</td>
</tr>
<tr>
<td>Other</td>
<td>2.58%</td>
<td>75</td>
</tr>
</tbody>
</table>

Based on the quantitative data the majority of students (78.75%) have never used this feature before. After analyzing the open-ended responses to the Other answer option, it seems that some students did not know this feature existed. Quotes included:

- “Didn't know about this”
• “I did not know that those tabs existed; I have never used them before. That isn't available for my academic experience. Those tabs do not show up on my computer...And no, it is not because of my computer.”
• “I never knew this feature existed”

Student-Generated Solutions to Using Two LMSs

To help us identify how best to help students access their Canvas and D2L courses starting Spring, we asked students the following open-ended question:

Starting Spring 2018, CU Boulder will be supporting two different learning management systems (D2L and Canvas) as part of the D2L to Canvas Migration project. This means that some of your classes might be using D2L and other classes might be using Canvas. How would you like to know which learning management system to access for each of your classes?

We had 2956 unique suggestions to address this challenge. Some respondents provided multiple suggestions and each suggestion was then analyzed separately. Other responses (329 responses) did not address this question and were not included in the analysis.

We used a qualitative, open-coding approach where we identified categories of student-generated solutions based on the textual responses. The table below identifies the categories that emerged. They are rank-ordered based on frequency.

The majority of suggestions (67.70%) for how to address the challenge of identifying which LMS to use for which class involve a communication from faculty members either through emailing students (34.39%) or making an announcement at the beginning of class (33.31%).

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Percent*</th>
<th>Count</th>
<th>Quote</th>
</tr>
</thead>
<tbody>
<tr>
<td>Email</td>
<td>Email from faculty member or other communicating which LMS is used for the class along with a direct link to the class LMS.</td>
<td>34.39%</td>
<td>1017</td>
<td>“An email explaining which system will be used or providing a link to a university website listing courses for each system. Also, instructions on how to use the new system would be helpful.”</td>
</tr>
<tr>
<td>Class Announcement</td>
<td>An announcement</td>
<td>33.31%</td>
<td>985</td>
<td>“I would like to be told via my instructors within my</td>
</tr>
<tr>
<td>Feature</td>
<td>Description</td>
<td>Percentage</td>
<td>Count</td>
<td>Comment</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>------------</td>
<td>-------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Deep link from myCUinfo</td>
<td>A deep link from myCUinfo to the LMS course accessed from the Grade/Details tab.</td>
<td>17.71%</td>
<td>494</td>
<td>&quot;Now that I know that My CU Info feature exists I would probably use that initially. Or I would look at D2L and see that my class wasn't listed and then check Canvas.&quot;</td>
</tr>
<tr>
<td>Link in Syllabus</td>
<td>A direct link to the LMS course from the syllabus.</td>
<td>8.18%</td>
<td>242</td>
<td>&quot;I'd like to have it clearly stated on the front page of the syllabus for the class. As well, if some classes decide to start using Canvas, it would be nice if the professors who start to use Canvas give us a brief, 5 minute overview about how to navigate Canvas for their class for students who haven't used it before.&quot;</td>
</tr>
<tr>
<td>Cross-Listing</td>
<td>Courses listed on both D2L and Canvas. Both LMS linking to the other when a course isn't available in that LMS.</td>
<td>7.2%</td>
<td>213</td>
<td>&quot;Put it access to both D2L and Canvas on both of those programs. This way we can go back and forth no matter which site we are on&quot;</td>
</tr>
<tr>
<td>Tutorial</td>
<td>A video demonstrating how to use the</td>
<td>0.17%</td>
<td>5</td>
<td>&quot;Obviously, I'd like to have instructions on how it works, and how it</td>
</tr>
</tbody>
</table>

classes and having it on the syllabus! I think it's the easiest way to communicate and make sure that the information is received by students because some students may not check their emails regularly."
| LMS (specifically Canvas) | functions differently from D2L. Maybe a even a video that's narrated would be helpful, so that I could visually see what's different and where things are." |

* Based on a total of 2956 unique suggestions to address this challenge.

**Recommendations**

To help students know which LMS to use for which class, we propose the following recommendations. These recommendations emerged from the survey data and are rank ordered with our first recommendation being the most desireable. Ideally, the project team adopts both recommendation for a multipranged approach to addressing this challenge.

1. **Have faculty members** announce at the beginning of class which LMS they are using for their course and encourage students to access the course immediately and bookmark it (or make a note). If faculty are using Canvas, have them quickly show it to students to get them familiarized with both the new LMS and how course content is organized. This will address some students’ concerns about needing to learn a new LMS. In addition to a first-day-of-class announcement, ask faculty members to email their students the direct link to their LMS course as well as add that link to their syllabus. Furthermore, when the due date for the first assignment, quiz, reading, etc… gets close, have faculty remind students about which LMS to should use and show students how to access that assignment, quiz, reading, etc… This might help reduce any confusion about how to access the assignment, quiz, reading, etc…
   a. If feasible to OIT, **email students their list of classes** with a direct link to their LMS course. The email should also include messaging around this initiative. This might help raise awareness amongst students about the transition to Canvas. The data suggests that students were not aware about this transition.

2. **Cross-list** each course in each LMS. For example, if a course is using Canvas, create a D2L course shell that directly links to the Canvas course.

We feel that there isn’t enough data to justify creating a deep link to Canvas courses from myCUinfo. Namely for the following reasons:

1. Only 21.25% of student respondents have ever used this feature. Most of them (14.81%) have sometimes used it.
2. Students rely on other strategies to access their LMS course (e.g., bookmarking). We anticipate that students will bookmark their LMS course after the faculty announce it during the first day of class.
However, if the project team decides to develop this functionality, we recommend providing adequate documentation in both Canvas and D2L about how to access this feature in myCUinfo.

In addition, we have identified additional recommendations that might address this challenge and support students during this transition period when campus is supporting two LMSs.

- Add a link to Canvas from myCUinfo
- Add a link to Canvas from D2L and vice versa (for easy navigation between the two)
- Include messaging in D2L and Canvas about this transition.
Appendix A: Student Survey

How do you access your D2L courses?

The Office of Information Technology would like to learn more about how students currently access their Desire to Learn (D2L) courses.

Please complete this short, five-minute survey by December 7. In return for your feedback, you can enter your email address into a drawing to win one of five, $10 Amazon Gift cards. Winners will be emailed on December 8.

Q2 I am a(n)
   o Undergraduate student
   o Graduate student
   o Other

Q3 My expected graduation date is (e.g., May 2018)

Q4 Think back to your first semester at CU Boulder, how did you initially know that you need to use D2L?

Q5 Please describe how you typically access your D2L courses. Check all that apply:
   o I type in learn.colorado.edu in my browser
   o I have the D2L website bookmarked
   o I have my specific D2L courses bookmarked
   o I search for "D2L CU Boulder" (or similar keywords) using a search engine (e.g., Google)
   o I go to myCUinfo and access D2L from the right column menu option labelled "Desire2Learn"
   o I go to myCUinfo and access my specific D2L course from the "Grades/Details" tab to the right of my Course Schedule tab
   o I rely on information provided in my course syllabus
Q6 Please use the image below to answer the question that follows.

Q7 The image above is a screenshot of myCUinfo showing you links you can use on the Grade/Details tab to directly access the D2L course for a specific class.

How often do you use this feature?
- Always. I use this every time I need to access my D2L course.
- Most of the time
- About half the time
- Sometimes
- Never. I've never used this before.
- Other
Q8 Starting Spring 2018, CU Boulder will be supporting two different learning management systems (D2L and Canvas) as part of the D2L to Canvas Migration project. This means that some of your classes might be using D2L and other classes might be using Canvas.

How would you like to know which learning management system to access for each of your classes?

________________________________________________________________

________________________________________________________________

________________________________________________________________

________________________________________________________________

________________________________________________________________

Q9 To be entered into a draw to win one of five, $10 Amazon Gift Cards, please type in your CU Boulder email address.
Appendix B: Screenshot of D2L deep link from MyCUInfo

![Screenshot of D2L]

* FCQ = Faculty Course Questionnaire (ratings of teachers and classes by CU students)