

Student Experience with D2L and other LMSs



University of Colorado
Boulder



Executive Summary

The University of Colorado Boulder began migration from Blackboard to Desire2Learn (D2L) in 2011¹. To help determine whether or not Desire2Learn (D2L) meets the needs of CU Boulder's faculty and students, student-focused qualitative and quantitative survey data, interviews, and social media data from 2015 and 2016 were used for this report. Additionally, new data was collected from October to December 2016. This report interprets the data gathered and presents the relevant findings about the student experience with D2L.

Summary of Findings

Looking at all the data gathered, students are generally satisfied with D2L. However, a few pain points emerged as negatively impacting the student experience with D2L. Namely,

- Students feel that D2L's aesthetics (user interface look and feel) are outdated.
- Students are frustrated with D2L's lack of simplicity.
- Students wish that faculty would use the D2L gradebook more effectively.
- Students wish that all their faculty would use one LMS.
- Student are frustrated with faculty's inconsistent configuration of D2L courses.

¹ [University of Colorado at Boulder Migrates to Desire2Learn Learning Suite \(2011\)](#)



Data Collection and Analyses

Our discovery work consisted of gathering and analyzing existing data and new data about the student LMS experience. Table 1 provides a summary of the data collected and analyzed.

Table 1. Summary of Data Sources

Data Source Name	Description of Data and Methods	Sample Size
MyCUInfo 2015 Usability Survey	Survey data collected in Fall 2015. Qualtrics report generated in October 2015.	3,713 submissions (approx. 90 percent students, 10 percent faculty)
2016 Online Experience Student Interviews	30-minute in-depth interviews about the online student experience. Interviews conducted in October-November 2016.	16 students
WRTG 3035 Spring 2016 Report	Report co-written by entire class.	N/A
Social Media Posts	Searches for posts and comments related to D2L on Facebook, Twitter, and Reddit, originating from Boulder, CO, or posted to CU Boulder groups. Posts between May 2015 and November 2016 were collected.	N/A
Student Flash Survey	Quick, in-person surveys were conducted using an iPad and Qualtrics in November 2016.	96 students
Student-Wide Survey	Qualtrics survey was posted to D2L, MyCUInfo, and CU Boulder Today in December 2016.	687 students

Findings

This section presents the general and holistic findings when taking into consideration all the data collected and analyzed about the student experience with D2L and other LMSs.

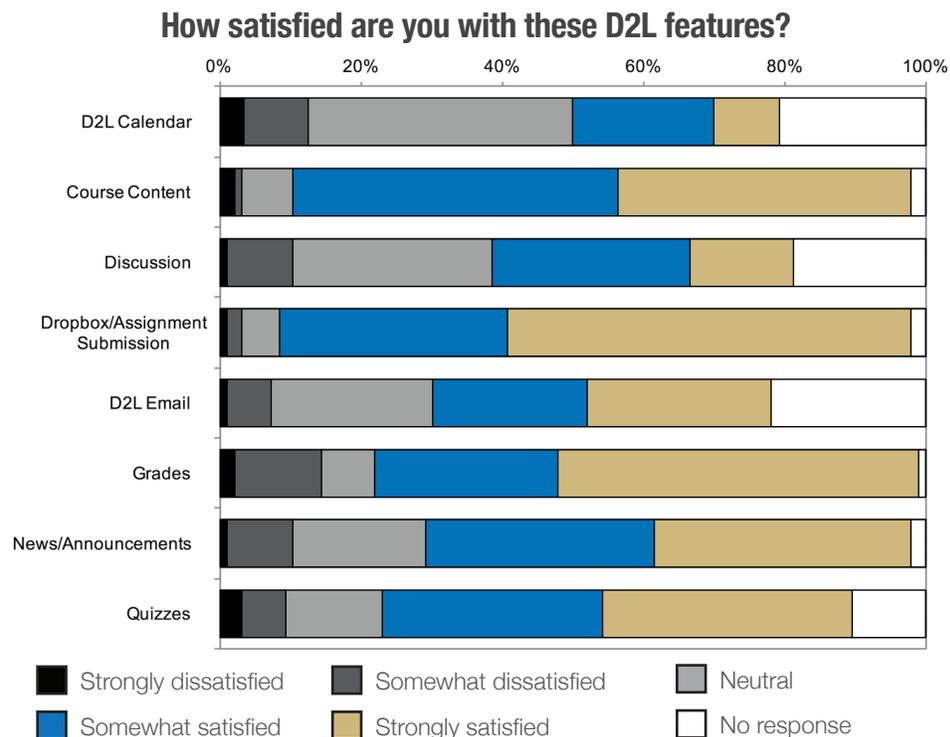
Satisfaction

Findings across all the data sources suggest that students are generally satisfied with D2L. For example, of the 244 open-ended responses on the Student-Wide Survey, there were 33² comments (13.5%³) from students voicing satisfaction with D2L.

*"I really like Desire2Learn. I think it works well please keep it."
(from Student-Wide Survey)*

Additionally, results from the Flash Surveys indicate that students are generally satisfied with specific features in D2L (Figure 1) and with D2L as a whole (Figure 2). Figure 1 below shows that the majority of responses about levels of satisfaction with D2L features were mostly positive. Table 2 provides a summary of the level of satisfaction with each tool.

Figure 1. Student satisfaction with D2L features



² Average across the two coders.

³ For the Student-Wide Survey results, we decided to report on themes that were reflected in at least 7% of the comments.

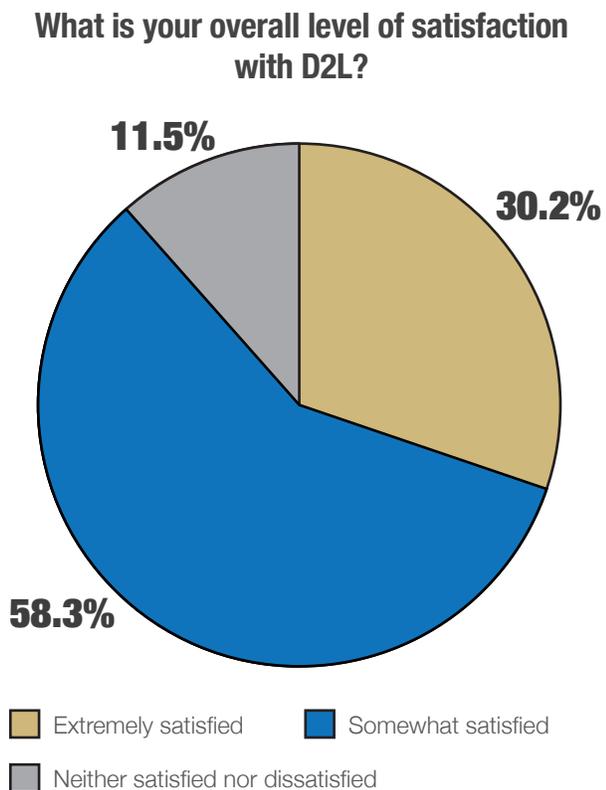
Table 2. Percentage of students at least somewhat satisfied with D2L features

D2L Feature	Percentages of at least somewhat satisfied	Percentages of at least somewhat satisfied that exclude no responses
D2L Calendar	29.2%	36.8%
Course Content	87.5%	89.4%
Discussion	42.7%	52.6%
Dropbox/Assignment Submission	89.6%	91.5%
D2L Email	47.9%	61.3%
Grades	77.1%	77.9%
News/ Announcements	68.8%	70.2%
Quizzes	66.7%	74.4%

The D2L Calendar received the lowest satisfaction rating with only 36.8% of respondents being satisfied with this feature. According to the data, students prefer to have a unified calendar that shows their class schedules, assignment due dates, exam dates, and so on. Students felt that the current calendar feature in D2L does not meet their needs. For example, one student noted “I wish you could do a calendar view of all your upcoming assignments on one calendar.”

Results from the Flash Survey also indicate that the overwhelming majority (88.5%) of students who participated in the Flash Survey were at least somewhat satisfied with D2L (see Figure 2). The rest of the students, 11.5% were neither satisfied nor dissatisfied. A notable finding is that none of the students chose Somewhat dissatisfied or Extremely dissatisfied to answer this question. For the open-ended question, some students, however, expressed minor to moderate dissatisfaction with specific D2L features, particularly its lack of mobile capabilities.

Figure 2. Student satisfaction with D2L



In addition, results from the Student Wide Survey were analyzed and D2L scored a 69 on the System Usability Scale (SUS). The SUS is a reliable tool for quickly measuring the usability of a system. It is an industry standard and can be used with small sample sizes. The average SUS score is considered 68, meaning a score lower than this number is below average, and a score higher than this number is above average⁴. According to literature on calculating usability, a SUS score of 69 is average, not quite achieving good. Figure 3 below describes SUS scores in more detail; it shows that a SUS score of 69 is within the acceptable range.

Figure 3. [From Determining What Individual SUS Scores Mean: Adding an Adjective Rating Scale](#)

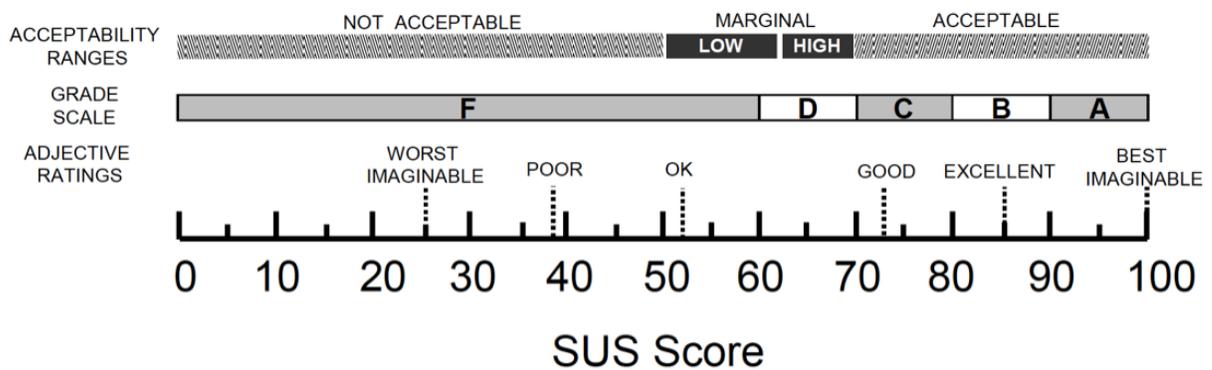


Table 3. LMS SUS Scores

LMS	SUS Score
D2L	69
Moodle	64
Blackboard	65.5
Canvas ⁵	76

In addition to quantitative data that students are generally satisfied with D2L, quotes collected from students also reference satisfaction:

- “It’s usually reliable. I’ve never had a problem with Dropbox or getting quizzes/tests done.” (from 2015 MyCUInfo Survey)
- “Overall, I think D2L is intuitive and accessible. I have taken three online courses as a student, and all three instructors have used D2L well.” (from 2015 MyCUInfo Survey)
- “Nothing really, it’s pretty easy to use.” (from Flash Survey)
- “I found desire to learn easy to use and didnt [sic] have issues with it.” (from Student-Wide Survey)

⁴ <https://www.usability.gov/>

⁵ [From University of Minnesota Canvas Pilot](#)

Pain Points

When looking at the student data, two types of pain points emerge: Pain points specific to D2L and pain points specific to how faculty use D2L. The latter strongly emerged from the Student-Wide Survey. Students who did find fault with D2L itself noted issues with D2L's aesthetics and its lack of simplicity. These specific pain points (along with others) have been used to shape questions in the RFP. The majority of student feedback, however, involved frustrations with faculty use of D2L. According to data from the Study-Wide Survey, students desire consistent use of a single LMS campus-wide, regardless of course level, department, or teacher. Students who saw flaws in D2L tended to blame faculty use (or lack thereof) of the LMS, and lack of LMS knowledge or skill on the part of the teacher. The sections below provide additional details.

Pain Points with D2L

Based on the Student-Wide Survey, students expressed two major pain points with D2L, one relating to its aesthetics and another one relating to its lack of simplicity. These two points also emerged across all the other sources of data we included in our analysis.

Aesthetics

Students expressed that they find D2L's look and feel outdated. In addition, feedback from students suggests that this outdated design may be impacting their ability to complete simple tasks using this interface. Of the 244 open-ended responses on the Student-Wide Survey, there were 20⁶ comments (8.2%) about D2L's outdated interface look and feel.

Quotes from students include:

- "Making the site somehow easier to follow, larger font size, different color pattern, etc." (from Student-Wide Survey)
- "D2L has a 1990s aesthetic with an incomprehensibly awful workflow. For instance, the grade display function is remarkably cumbersome from a student perspective. For the price the university must pay for this LMS, there must be an alternative that is designed by a company with 21st-century programmers who actually understand the needs of students and faculty." (from Student-Wide Survey)
- "D2L looks somewhat old-fashioned so a revamp is necessary. Accessing grades and notes requires one too many clicks and searching." (from Student-Wide Survey)

⁶ Average across the two coders.



Lack of Simplicity

D2L's lack of simplicity emerged as a pain point from the student perspective. Of the 244 open-ended responses on the Student-Wide Survey, there were 26⁷ comments (10.6%) about D2L's lack of simplicity.

Specifically, students commented on:

- The D2L interface not being simple to use
 - “Overall accessibility. There are too many functions on the website that are difficult to find or figure out. It feels engineered, rather than being tailored to the users. The UI is, overall, poorly assembled.” (from Student-Wide Survey)
 - “The organization of the files in a class and how you have to download files before you open them. News pages are in an awkward place to see, I frequently miss them” (from Student-Wide Survey)
 - “Sometimes looking for things that your teacher posted is confusing because you have to go in a lot of tabs.” (from 2015 MyCUInfo Survey)
- Accomplishing tasks in D2L is not simple
 - “It took lots of searching and digging to find my quizzes and assignments and as a result, i came close to not thinking i had assignment at times.” (from 2015 MyCUInfo Survey)
 - “D2L is slow, cumbersome, impractical. It makes things such as reading documents and accessing assignments aggravating. While it's convenient as a platform for displaying information and news, the interface is terrible and I feel as if the website itself was poorly coded.” (from Student-Wide Survey)

Pain Points with Faculty Use of D2L

In addition to the above frustrations with D2L, students indicated specific pain points with faculty's uses of D2L: inconsistent use of the gradebook, inconsistent use of D2L, and use of different LMSs. The subsections below dive deeper into each of these pain points.

⁷ Average across the two coders.



Ineffective Use of the Gradebook

Students wish faculty would provide more transparency in their grading process by routinely posting and updating grades online. Students seem to want all teachers to be required to do this, regardless of use of other LMS features. Of the 244 open-ended responses on the Student-Wide Survey, there were 36⁸ comments (14.7%) about faculty's inconsistent use of the gradebook and the lack of transparency surrounding grades.

Specifically, students commented on:

- Gradebooks not kept up to date
 - “If theres [sic] one thing i think that needs to be improved is how often teachers update grades and their syllabus. It would be more beneficial to get grades and/or feedback from our teachers sooner while the subject still has a strong presence in your memory.” (from 2015 MyCUInfo Survey)
 - “I think for whatever system is in place, a component of your grades being posted and transparent [sic] the whole semester is essential. That is why D2L was what I preferred to other systems professors use.” (from Student-Wide Survey)
- Gradebooks not set up to display current course grade
 - “IT SHOULD CALCULATE OUT YOUR CURRENT GRADE IN THE CLASS!” (from Student-Wide Survey)
 - “the grades should always have a cumulative calculator if the professor has already put it under the criteria.” (from Student-Wide Survey)
 - “I think that CU should use a system that will calculate one's grade “thus far” each time a new assignment grade is entered. Students will be able to feel “on top of things” without having to spend time calculating their grade for each class all of the time.” (from Student-Wide Survey)
- Gradebooks not set up to calculate final grade
 - “Provide an easier way of calculating class grades, or have that become an automatic function of the system.” (from Student-Wide Survey)
 - “Please incorporate some way to calculate the average of the grades for each class on D2L - (sarcastically) because I love only seeing the grades for individual assignments and not what they average out to be in an overall class grade.” (from Student-Wide Survey)
 - “I wish we could see our calculated final grade for each class. That would be very easy to implement and very helpful for many students.” (from 2015 MyCUInfo Survey)

⁸ Average across the two coders.

Use of Different LMSs

Students also wish faculty would use one LMS. Feedback from students suggests that they are frustrated with different faculty using LMSs (D2L, Moodle, Canvas). This creates unnecessary burden on the students as they become required to learn different LMS. Of the 244 open-ended responses on the Student-Wide Survey, there were 24⁹ comments (9.8%) voicing the students' frustrations about faculty's use of different LMSs.

Quotes from students include:

- “I don't like it when my professors use other platforms and then I have to remember individually for each class all of the different network locations for resources and materials. If anything, the framework should more strictly require profs to use d2l.” (from Student-Wide Survey)
- “That there be more consistency in teachers that use the system. I had five classes this semester and two of the teachers used their own separate websites to post content. I would recommend there be one aggregate site where all content is posted and if there is some technical restriction of the site than professors can utilize an email listserv.” (from Student-Wide Survey)

Inconsistent Use of D2L

Students wish that faculty use D2L in a consistent way across all courses. Findings suggest that students are frustrated with using and learning to use D2L courses that are differently set up. Of the 244 open-ended responses on the Student-Wide Survey, there were 53¹⁰ comments (21.7%) about faculty's inconsistent use of D2L.

Quotes from students include:

- “Also, some professors are very disorganized/undisciplined with D2L. One professor will have everything (syllabus, schedule, assignments, tests, readings, dropboxes, grades, etc.) uploaded frequently and in an organized fashion, while other professors seem not to care. I have had some professors not submit anything to D2L at all - not even a syllabus, and we don't get to see a single grade or even have an idea of how we're doing in the class until the final grade rolls around on myCUinfo. I think much of the value at this point of D2L lies in the professors who use it. So I think professors should be required to use D2L to a quantifiable degree, because it's not fair to the students when we put massive amounts of time and thousands of dollars into each class, yet despite all our efforts, the professor can't even be bothered to grade a single point of our work.” (from 2015 MyCUInfo Survey)
- “Many teachers do not use d2l in a standardized way, so knowing exactly what needs to be done and how quickly to access the assignments they want completed can be a hassle when dealing with different styles of teachers.” (from 2015 MyCUInfo Survey)

9 Average across the two coders.

10 Average across the two coders.



Recommendations

Based on the student data collected and subsequent analysis, students are generally satisfied with D2L. Their biggest frustration, however, was with faculty's inconsistent use of D2L across different courses. In fact, around 22% of open-ended comments on the Student-Wide Survey mentioned this as a major pain point that negatively impacts the student experience with D2L. Based on this prominent finding, we recommend the following:

- Develop standards and best practices for faculty to use D2L (or any other LMS) in a consistent way. This would alleviate students' frustrations with having to learn different ways to access course content for different courses. We also recommend developing trainings, documentation, templates, etc... to support the faculty-wide consistent use of LMS.
- Additionally, develop a policy to support the use of one LMS campus-wide. This would reduce the student frustration that accompanies the need to learn how to use different systems.