

# Cidi Labs Homepage Templates User Testing Analysis

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# Summary

Cidi Labs, a tool that enables instructors to create custom page designs in Canvas, also allows for administrators to create institution-wide templates. The Academic Technology Applications (ATAP) team wanted to create a set of templates for CU instructors to make Cidi Labs easier to use, and to improve the student experience in Canvas courses. They asked the Learning Experience Designers (LxDs) to gather data to inform the template design, and to perform user testing on the templates before launching.

The project created three templates based on that data, then tested the templates for usability with students, modifying where indicated. The templates launched at the start of the Fall 2019 semester. When template usage is established among instructors, student and instructor feedback will be gathered and utilized to modify templates if needed, as well as to create new templates if desired.

## Student Survey Analysis

To assess initial student responses to Cidi Labs homepages already in use in courses, LxDs distributed a survey in Spring 2019 to students whose professors participated in the Cidi Labs pilot.

- [Survey questions](#)
- Responses: 205 responses, 5 courses

## Highlights

- Custom homepages generally seem to offer students a more cohesive experience than just a navbar and modules
- Most students prefer homepages to be at least somewhat similar across their Canvas courses, and some want homepages to be very similar
- Most students want easy access to what they see as the essentials: contact information, syllabus/schedule, homework, grades and lecture slides
- Students find graphics engaging when tailored to course, but not engaging when generic or stock
- Too much content on the homepage causes student confusion and impedes comprehension and navigation
- Some students want or need links on both the left navbar and the homepage. Others note redundancy or feel confused by the multiple pathways. No conclusive answer was obtained during this project
- Student comments about navigation confusion indicate they are sensitive to abrupt shifts in organizational and structural logic when moving from the homepage to default Canvas

pages. Instructors should design the architecture of their course and the homepage holistically, rather than designing a homepage in isolation

## Further Analysis

Analysis of the responses revealed two opposing expectations for what a course homepage in Canvas should provide.

The most common expectation was for a static page with access to course components deemed essential, such as teacher contact information, course schedule, syllabus, and lecture slides. A less common, but still present, expectation, was for a dynamic page, more like a blog, that updated as the class went along and brought relevant content to the top of the page (such as upcoming assignments).

Responses also showed a tension between expected degree of consistency between course homepages, favoring consistency but with important caveats. Of 168 responses, 96 (57%) indicated a preference for homepages being at least “somewhat similar,” and 58 (35%) indicated a preference for for them to be “very similar.” Still, a minority of students clarified in further questions that different courses have different needs, and therefore might need to utilize different layouts or aesthetics; they also indicated that different course appearances helped them know which course they were in at a given time.

Ratings were generally positive for each homepage instructors had designed. One homepage was rated lower, but had far fewer responses, making generalizations difficult. The instructor of that course had not only built a homepage but had removed the left navbar, forcing students to interact directly with links in the homepage to get anywhere in the course. This removal of familiar navigation paths seems to have caused considerable frustration with students.

One question, explored further in usability testing but still ambiguous, is which links belong on the left navbar, which on the homepage, and which on both. Students don’t want links to be removed from the navbar, but experience momentary confusion when links with the same name appear in multiple places. In general, because students are already familiar with the Canvas navbar, instructors should keep it.

## Template Creation

Elements from the two most positively reviewed homepages were extracted and used as the basis of two templates. One template featured a banner, 3 navigation buttons, contact information and the course schedule in a week-by-week accordion menu. The other template was more complex, with a banner followed by a tabbed content layout featuring sections for contact information, a syllabus, a course schedule, and additional resources.

A third, very basic template was also created, for those faculty who want simplicity. This page displayed a banner, 3 navigation buttons, and instructor contact info.

## Usability Testing Analysis

The overall testing goal was to explore whether the designed templates offered students an improved experience with aesthetics, navigation, and ease of use. The test script specified Tree Testing tasks identified by students in the survey as high priority, such as checking the course schedule, submitting assignments, locating lecture slides, and finding grades. Students were asked to rate tasks on a 5 point scale, from difficult to easy. They were also at times asked to rate content on a 5 point scale, from useless to useful.

LxDs targeted between 5-10 test subjects and tested 6. Tests utilized A/B Testing, showing each student 2 different homepages out of 4 (3 custom templates and 1 “default” Canvas course homepage), varying homepages and order each time.

### Highlights

- Students generally did well with simpler tasks on every template, such as finding the page to submit an assignment, and finding grades. The ease of simpler tasks was rated on average between 4 and 5 out of 5 by testers.
- Students struggled more with tasks requiring higher-order thinking. When directed to find out if they had to complete a reading for the first week of the course, on average students rated easiness as 3.7 out of 5. Furthermore, some students who rated this task very easy had actually failed the task--they concluded they had no reading when actually they had not managed to find it.
- On the task of finding instructor contact information, each custom template outperformed the default Canvas setup.
- Those who tested Template 1 valued its simplicity.
- Those who tested Template 2 rated the week-by-week menu highly. One student did not find the menu until midway through testing due to the need to scroll.
- Those who tested Template 3 appreciated that the tabbed layout provided easy access to high priority content without needing to leave the page or scroll down. One student preferred the simplicity of Template 1, and wanted the tabs to be replaced with hyperlinks to subpages.
- Banners on each template were appreciated for their visual appeal, but ultimately seen as wasted space because images were stock and not customized.

## Further Analysis

Testing, along with the Card Sort activity, allowed LxDs to observe how students approach overall course architecture, and how expectations and desires may differ depending on different course requirements.

In general, conclusions on whether particular templates offer an improved experience are difficult to make. Variation in individual student preference, compared with wide differences in how instructors structure a course outside of the homepage, significantly impacts feedback. That said, each template tested seemed to offer at least a slight improvement over Canvas default, and sometimes significant improvements. The best recommendation after usability testing is to educate instructors who choose to use Cidi Labs with best practices based on student needs.

Notable: When thanked for participating in testing, two students shared, unprompted, that they thought it was excellent that OIT was conducting testing with students, and that they wished CU would do more to evaluate software with users.

## Card Sort Analysis

Each student who completed usability testing was sent a card sort survey to complete the next day. [17 cards](#) such as “Grades” and “Calendar” were provided for students to arrange and label.

The card arrangements and categories students produced varied to a degree, but revealed a similar task-based approach to content within Canvas. Students access a Canvas course to complete specific activities, rather than to explore.

In general, students seem to conceive of two broad umbrellas for course features and content. First is static content, meant mainly for students to consult or reference. This includes contact information, syllabus, and any additional resources pertinent to the course. Second is active content, meaning it’s a task or a to-do. This includes exams, quizzes and assignments.

Two subcategories, lecture slides and course calendar, straddle these lines. Lecture slides are sometimes referred to as static content for the student to check and download; still, students need to actually study the slides, often in relation to a more active task like an exam. When students referenced the schedule or calendar, they meant something passive they needed to check; but when they referenced deadlines, they meant a more active concept related to required action on their part, which also reveals an implied task of planning.

# Appendix

## Student Survey Questions

Q1. Do you like the course homepage?

Q2. What is your favorite part of the homepage? What is your least favorite part?

Q3. How easy is it to find information you need on the homepage?

- 1 - very difficult
- 2 - difficult
- 3 - easy
- 4 - very easy

Q4. How easy is it to navigate this course from the homepage?

- 1 - very difficult
- 2 - difficult
- 3 - easy
- 4 - very easy

Q5. How do you typically navigate the course?

- Clicking links in the course homepage
- Clicking links in the left navigation bar (Canvas default)
- A mix of both

Q6. To what extent do you want all your Canvas courses to have a similar homepage layout?

- 1 - Homepages don't need to be similar
- 2 - Homepages should be somewhat similar
- 3 - Homepages should be very similar

Q7. Would you prefer all your Canvas courses to use a homepage like this one?

Q8. What information do you prefer to have on the course homepage?

Q9. Do you have any suggestions for improving the course homepage?

Q10. Sketch out or describe your ideal homepage layout:

## Survey Quantitative Data

Q2. Do you like the course homepage?

	C1	C1%	C2	C2%	C3	C3%	C4	C4%	C5	C5%	Total	T%
No	3	9%	6	6%	0	0%	5	56%	0	0%	14	8%
Indifferent/ weak yes	2	6%	4	4%	6	20%	1	11%	0	0%	13	8%
Yes	27	82%	82	88%	24	80%	3	33%	3	100%	139	83%
Don't use	1	3%	0	0%	0	0%	0	0%	0	0%	1	1%
No answer	0	0%	1	1%	0	0%	0	0%	0	0%	1	1%
<b>Total</b>	<b>33</b>	<b>100%</b>	<b>93</b>	<b>100%</b>	<b>30</b>	<b>100%</b>	<b>9</b>	<b>100%</b>	<b>3</b>	<b>100%</b>	<b>168</b>	<b>100%</b>

(note: free response answers, coded and tallied)

Q3. How easy is it to find information you need on the homepage?

	C1	C1%	C2	C2%	C3	C3%	C4	C4%	C5	C5%	Total	T%
Very difficult	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Difficult	7	21%	5	5%	3	10%	4	44%	0	0%	19	11%
Easy	17	52%	28	30%	15	50%	4	44%	1	33%	65	39%
Very easy	9	27%	60	65%	12	40%	1	11%	2	67%	84	50%
<b>Total</b>	<b>33</b>	<b>100%</b>	<b>93</b>	<b>100%</b>	<b>30</b>	<b>100%</b>	<b>9</b>	<b>100%</b>	<b>3</b>	<b>100%</b>	<b>168</b>	<b>100%</b>

Q4. How easy is it to navigate this course from the homepage?

	C1	C1%	C2	C2%	C3	C3%	C4	C4%	C5	C5%	Total	T%
Very difficult	0	0%	0	0%	0	0%	1	11%	0	0%	1	1%
Difficult	7	21%	5	5%	2	7%	4	44%	0	0%	18	11%
Easy	16	48%	24	26%	15	50%	4	44%	1	33%	60	36%
Very easy	10	30%	64	69%	13	43%	0	0%	2	67%	89	53%
<b>Total</b>	<b>33</b>	<b>100%</b>	<b>93</b>	<b>100%</b>	<b>30</b>	<b>100%</b>	<b>9</b>	<b>100%</b>	<b>3</b>	<b>100%</b>	<b>168</b>	<b>100%</b>

### Q5. How do you typically navigate the course?

	C1	C1%	C2	C2%	C3	C3%	C4	C4%	C5	C5%	Total	T%
Links in homepage	2	6%	16	17%	6	20%	6	67%	3	100%	33	20%
Left navbar	21	64%	17	18%	10	33%	2	22%	0	0%	50	30%
Mix of both	10	30%	59	63%	14	47%	1	11%	0	0%	84	50%
No answer	0	0%	1	1%	0	0%	0	0%	0	0%	1	1%
<b>Total</b>	<b>33</b>	<b>100%</b>	<b>93</b>	<b>100%</b>	<b>30</b>	<b>100%</b>	<b>9</b>	<b>100%</b>	<b>3</b>	<b>100%</b>	<b>168</b>	<b>100%</b>

Clarifying comments:

- Both options should be present (left navbar should not be removed)

### Q6. To what extent do you want all your Canvas courses to have a similar homepage layout?

	C1	C1%	C2	C2%	C3	C3%	C4	C4%	C5	C5%	Total	T%
Don't need	3	9%	9	10%	1	3%	0	0%	0	0%	13	8%
Somewhat	21	64%	53	57%	13	43%	6	67%	3	100%	96	57%
Very similar	8	24%	31	33%	16	53%	3	33%	0	0%	58	35%
No answer	1	3%	0	0%	0	0%	0	0%	0	0%	1	1%
<b>Total</b>	<b>33</b>	<b>100%</b>	<b>93</b>	<b>100%</b>	<b>30</b>	<b>100%</b>	<b>9</b>	<b>100%</b>	<b>3</b>	<b>100%</b>	<b>168</b>	<b>100%</b>

Clarifying comments:

- Different courses have different needs
- Some degree of differentiation helps students locate themselves within different courses

### Q7. Would you prefer all your Canvas courses to use a homepage like this one?

	C1	C1%	C2	C2%	C3	C3%	C4	C4%	C5	C5%	Total	T%
No	7	21%	11	12%	3	10%	7	78%	0	0%	28	17%
No preference	6	18%	8	9%	1	3%	0	0%	0	0%	15	9%
Soft yes	2	6%	7	8%	8	27%	2	22%	1	33%	20	12%
Yes	17	52%	62	67%	18	60%	0	0%	2	67%	99	59%
No answer	1	3%	5	5%	0	0%	0	0%	0	0%	6	4%



<b>Total</b>	<b>33</b>	100%	<b>93</b>	100%	<b>30</b>	100%	<b>9</b>	100%	<b>3</b>	100%	<b>168</b>	<b>100%</b>
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(note: free response answers, coded and tallied)

## Card Sort Category List

1. Lecture Slides
2. Course Schedule
3. Professor Contact Info
4. TA Contact Info
5. Assignments
6. Grades
7. Readings
8. Homework
9. Quizzes
10. Exams
11. Midterms
12. Discussions
13. Syllabus
14. Calendar
15. Due Dates
16. Files
17. Modules