



# Seamless Online Student Experience: Summative Report

User Experience Research & Design Team

November 22, 2016

## Executive Summary

During the last *Student Success Executive Committee* meeting on September 22, OIT presented initial data about the students' online experience. It is evident from the data that the online student experience is fragmented and a source of frustration for the students. This fragmented experience is leading to missed registration deadlines, un-waived health insurance fees, and general student frustration with the CU Boulder experience. To improve the online experience and support students in accomplishing tasks that are seminal to their success, leaderships will need to minimize the underlying technology and the overarching business services organization while putting the key activities student need to accomplish in the forefront. Leadership will need to support the design of a seamless online student experience through advocating coordination amongst the business units.

As part of the September 22 discussion, leadership asked OIT to further collect and analyze more in-depth data about the online student experience and present it at the next *Student Success Executive Committee* meeting on December 1. Based on the data collected from and about students and its analysis, the following six design principles for a seamless online experience emerged:

- Accessible and Secure
- Whole and Connective
- Personal and Adaptive
- Intuitive and Easy-to-use
- Reliable and Efficient
- Beautiful and Simple

## Approach

To better understand the online student experience, we (the *User Experience Research & Design Team* in OIT) led a discovery phase where we collected various data about the student experience. Subsequently, we designed a *Data Gallery* where we invited representatives from the different business service areas that impact the online student experience to help us interpret the data.



## Discovery

Over the past few months, we have been gathering data about the online student experience. We have conducted 17 interviews with students, talked to 40 different staff members, and obtained quantitative data about the online student experience. See table in the Appendix for a very high-level summary of the different types of data we collected.

## Interpretation

To interpret this data, we invited representatives from each of the major business service areas that affect the student online experience to a *Data Gallery*. The *Data Gallery* was a two-hour semi-structured activity that provided 15 individuals with the opportunity to reflect on the data collected and to provide their insight. Individuals from the following business service areas<sup>1</sup> participated in this activity:

- Bursar
- Housing and Dining Occupancy Management
- Housing and Dining IT
- Strategic Relations
- New Student and Family Program
- Disability Services
- Admissions
- Advising
- Graduate School
- Financial Aid
- OIT

The outcome of the *Data Gallery* was a set of design principles for a seamless online student experience.

## Design Principles

Design principles are principles or characteristics that guide the design of a product, service, tool, etc... In this case, the following design principles would guide the design of a seamless online student experience.

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<sup>1</sup> An individual from the Registrar's office was invited; however, was unable to attend.



## Accessible and Secure<sup>2</sup>

- Adhering to accessibility standards to design a seamless experience that is comparably accessible to *all* students, including students with disabilities. Please refer to the *Scope section* of the [CU Boulder ICT Accessibility standards](#).
- Protecting student data and other confidential information as listed under the [Policy for Web Site and Web Application Safety](#).

## Whole and Connective

- Providing students with a comprehensive single, point of entry that connects them to all administrative and academic services that they need. This includes pervasive single sign on.
- Designing an accompanying face-to-face or virtual, peer-to-peer, or staff-to-student experience to connect students to the resources they need when they need them.

## Personal and Adaptive

- Personalizing the content and providing students control over the information they see. This includes providing students with several options on how to find the information they need.
- Designing an adaptive experience that provides students with the right information at the right time. The experience adapts to the specific time in the academic year, to the type of student, their current status, etc.

## Intuitive and Easy-to-Use

- Designing an easy-to-learn interface with functions that are easily understood or easily predicted by students.
- Allowing students to accomplish tasks easily with reduced frustrations.

## Reliable and Efficient

- Providing students with a robust technology infrastructure that does not fail them when they need it the most. This also includes the online experience being browser agnostic.
- Allowing students to get their tasks done in the most efficient ways. This includes leveraging mobile-friendliness and search and integrating all student data with all systems.

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<sup>2</sup> These principles did not emerge from the data. They address two types of information technology compliance.



## Beautiful and Simple

- Leveraging beautiful and aesthetically pleasing interfaces to design a delightful and pleasant online experience.
- Designing for simplicity. Allowing students to accomplish tasks in the least number of steps possible.

## Recommendations

To ensure the design of a seamless online student experience, it is imperative to rely on the student data collected and translate the above design principles to technical, functional, and experiential requirements. The table below provides clarifying examples:



Design Principle	Definition	Requirement	Example Data Point
Whole	Providing students with a comprehensive single, point of entry that connects them to all administrative and academic services that they need. This includes pervasive single sign on.	Integrating all online components of the student experience in one place. This includes designing a single point of entry that links out to places like MyCUHub, MyCUHealth, D2L, campus map, student employment, recreational services and so on. In addition, this includes designing a calendar that features all of a student's unique administrative and academic deadlines.	"I guess if it could be possible to just log into mycuinfo first and then have a drop down menu or something so then you can access the other sites that would make it easier or if there were one central webpage that like listed the links, cause generally if I forget which one I have to go to then I'll just like google it and that'll direct me to the department website or whatever." (Student Interview, Allie)
Connective	Designing an accompanying face-to-face or virtual, peer-to-peer, or staff-to-student experience to connect students to the resources they need when they need them.	Providing front-line staff cross training to ensure that students can always receive the answers they need from any front-line person they ask regardless of business service area. In addition, design an accompanying and	"The webpage always directs you to another that then directs you back to the original one. It's a constant loop of unanswered questions. Everyone of the employees is clueless and either directs you to the webpage you



		comprehensive online help resource for student.	were already on or the call the bursars office to be transferred over and over again” (Student, Advising office).
Personal	Personalizing the content and providing students control over the information they see. This includes providing students several with options on how to find the information they need.	Personalized dashboard that shows important information such as tuition balance due, campus cash, registration time, advising holds, and so on.	“For me, like it’s kind of hard at CU to know how much you have left on your buff one card and at the same time it’s hard know whether or not you have a hold on your account so like if like this master website or whatever at the top you know have information about this kid so like “this is how many meals you have left this week” “this is how much money you still owe us” that stuff like “this is when your registration date is” like if there was a bar that updated as you use those it’d answer like 80% of my questions.” (Student Interview, Mike)



Intuitive	Designing an easy-to-learn interface with functions that are easily understood or easily predicted by students.	Renaming some systems for clarity and to reflect the functions of the systems and what they allow students to do. For example, renaming MyCUHub to MyCUAdvising or renaming identikey to something.	From staff conversations (Occupancy Management).
Reliable	Providing students with a robust technology infrastructure that does not fail them when they need it the most.	Online experience is browser agnostic.	“[MyCUHub] Gives me troubles with certain browsers only works on Chrome I think” (Pain Point Questionnaire)
Efficient	Allowing students to get their tasks done in the most efficient ways. This includes leveraging mobile and search and integrating all student data with all systems.	Leveraging a robust search function to allow students to search for the information they need and to be confident in the accuracy of the results they find.	“So there is a search ... hang on I have to think about this. Every time I register I always try to search this one way and I never can. Oh oh, sometimes I just want to search a class my a professor's name. Like I just want to know what they professor is teaching. But you can't do that.” (Student Interview, Hope)



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## Appendix

The table below summarizes the different types of data we collected and provides a brief description.

Data Type	Description
Student Interviews	Interviews with current students and one interview with an incoming student.
Student Focus Group	Focus group with a representative sample of students to map out the touch points of the student experience and how they would rate each touch point in terms of frustration, familiarity, ease of use, frequency, and duration.
Advisor Insights	Conversations with several Arts & Science advisors.
Staff Insights	Conversation with staff members from Admissions, Financial Aid, Registrar, Housing and Dining, BuffOne Card office, New Student and Family Program, and Office of Information Technology.
Pain Point Questionnaire	A brief questionnaire to uncover the biggest pain point of the student online experience and why.
Social Media Posts	Facebook, Twitter, and Reddit posts between May 2015 and present.
New Student and Family Program Survey Data	2015 and 2016 post-registration survey data from new students.
MyCUInfo Survey Data	2013 and 2015 survey data about MyCUInfo
Bursar Data	Tuition and fee billing-related tasks in MyCUInfo.
Student-Design Portal Mockup	Students in an Advertising class designed a



	mockup of a new student portal.
Student Portals at Peer Institutions	Exploring other student portals at peer institutions
IT Call Center Logs	IT Service Center log data between May 2015 and present.