

Overview

The Foundation for California’s Community Colleges and ideas42 have worked together to apply a behavioral science lens to the community college student journey. Through data analysis and conversations with students, staff, and other stakeholders we have identified five key behavioral barriers that prevent students from matriculating at a California Community College (CCC). A full summary of these barriers is available at bit.ly/cc42diagnosis.

Our design principles, explained herein, address these barriers. These design principles can be applied to evaluate the behavioral strengths and weaknesses of any potential CCCApply design idea. This document is divided into two additional sections: one devoted to applying these design principles, and another that gives more context, evidence, and implementation advice for the principles.

Applying the Design Principles

These design principles can be applied to evaluate the strength of a given idea for CCCApply from a behavioral perspective. While these principles are powerful independent of each other, the way they interact should also be considered. When evaluating a design idea, there may be tradeoffs between principles that the designer will need to consider and weigh. This checklist is meant to serve as a way of evaluating these strengths and identifying those potential tradeoffs.

Principle	Open Channels	Reduce Hassles	Eliminate Ambiguity	Affirm Identity	Create Scaffolding
Guiding Question	Does this prioritize connecting students with help?	Are we reducing what students need to do to enroll?	Does this help make questions and consequences clear?	Does this help welcome all identities?	Does this help walk students through a difficult decision?
How to get there: Does the idea...	<input type="checkbox"/> Help get information to colleges ASAP? <input type="checkbox"/> Prioritize gathering contact information? <input type="checkbox"/> Provide access to live help?	<input type="checkbox"/> Decrease the number of questions? <input type="checkbox"/> Allow students to temporarily skip questions? <input type="checkbox"/> Reduce clicks? <input type="checkbox"/> Keep students in the application? <input type="checkbox"/> Make a reminder actionable?	<input type="checkbox"/> Explain everything in plain, non-threatening language? <input type="checkbox"/> Explain how information will be used? <input type="checkbox"/> Prioritize help text?	<input type="checkbox"/> Affirm student belonging? <input type="checkbox"/> Avoid priming negative identities? <input type="checkbox"/> Use inclusive language?	<input type="checkbox"/> Expect that students won't always know what to choose? <input type="checkbox"/> Simplify choices with skip logic?

Evidence

Design Principle #1: Open Channels

Channels are seemingly-minor situational factors that make it disproportionately easier for students to complete the application process. Psychological research tells us that channel factors not only increase impelling forces, helping to move people forward more efficiently, but also decrease constraining forces, serving to decrease or even eliminate some of the other barriers people face.ⁱ In our diagnosis research, we saw time and again that students coming straight from high school had access to college staff and outreach professionals who were able to help them through the process. However, many other types of students do not have access to these channels.

Changes to CCCApply must open channels, connecting all students to the resources they need to be successful in the application process and beyond.

- ◆ **Send student contact info to their chosen college ASAP:** When colleges can see who is interested in attending their schools, they can use their considerable resources to help students through the process. We recommend getting consent to release the information from students on the first page of the application, and sending student data to colleges immediately. This one change has the potential to strengthen everything else by connecting students with mentorship and help from the start of the application process.
- ◆ **Prioritize contact information gathering:** Any questions or sections that may present hassles, include jargon, or create identity challenges should be avoided until after colleges have received contact information for interested students.
- ◆ **Provide access to live helpⁱⁱ:** Static help text and links to resources are important, but it is even better to connect students to help in real-time while they are completing their applications. This help can take many forms, including phone numbers and live chat.

Design Principle #2: Reduce Hassles

Hassles – seemingly small hurdles that disproportionately inhibit completion of a task – can have the unintended consequence of delaying or derailing application submission. There is strong behavioral evidence to indicate that reducing hassles can help students move through the college matriculation process as simply as possible.ⁱⁱⁱ In our diagnosis interviews, college outreach workers specifically cited many materials that students need to locate and reference as a barrier to completion.

A new CCCApply should reduce the number of things a student needs to do, the amount of information they'd have to search for, and the number of steps that need to be completed.

- ◆ **Decrease the number of questions:** Anything that can be removed from the application entirely, decreasing its overall length, will result in fewer opportunities for student drop off.
- ◆ **Allow students to temporarily skip questions that involve outside materials:** Allowing students to temporarily skip questions that require them to search for or ask for information from a 3rd party, such as SSN, will prevent them from being derailed during the initial application process. If

students are allowed to skip entering this information, they should also be reminded to come back to it later.

- ◆ **Reduce clicks whenever possible:** Minimize the necessity to manually click around and navigate within CCCApply. Make important contextual information available within the application pages, and ensure the flow of the application is intuitive.
- ◆ **Keep students in the application as much as possible:** There may be outside resources that are useful to students when applying, but avoid requiring students to download an app or navigate to a different page. Similarly, students should be able to log in to the application just once, without being frequently auto-logged-out.
- ◆ **Make reminders actionable:** Any time a student receives a text or an email reminding them to resume their application or complete a step, they should also receive clear, easy instructions about how to proceed.

Design Principle #3: Eliminate Ambiguity

Research tells us that ambiguity around how to proceed with a process or around the risk involved in making a decision can lead to inaction.^{iv} In our diagnosis interviews, students consistently referenced ambiguity caused by jargon and confusion about why certain questions are asked. Even seemingly-simple terms like “Enrollment Status” can be confusing for a first-time student.

Avoiding ambiguity means making it easy for all potential students to understand the questions and response options on the application. Additionally, the consequences of selecting any particular option should also be made clear, eliminating any feelings of uncertainty that pressing submit may bring up for students.

- ◆ **Explain everything in plain, non-threatening language:** The tone of the application should be professional but friendly. Wording should be concise and at a roughly 6th grade level. Where there is terminology that is unfamiliar to a person who has never attended college, it should be exchanged for more common language. “Legalese” – legal terms that would not make sense to a student – should be eliminated, simplified, or hidden as much as is possible.
- ◆ **Explain how information will be used:** Use headers and help text to give simple information about why questions are being asked, where the information is going, and how it will be used.
- ◆ **Prioritize help text:** Important tips should be visible on the page without clicking or hovering when possible. Help text can be used to define a term and explain why something is being asked or what the information is being used for.

Design Principle #4: Affirm Identity

When people are primed to consider specific, sensitive identities they hold, it can change how they interact with a process or perform on a subsequent task.^v 19.64% of students who paused within or dropped off of CCCApply altogether in 2017 did so on the Personal Information Page. Many of these questions bring up sensitive identities. Students may lack clarity on how this information will be used and

assume that it is a part of the college's assessment of their qualifications, rather than information gathered for demographic reporting or other reasons

To combat this effect, the application should readily communicate to students that they, however they identify, are welcome in college:

- ◆ **Affirm student belonging:** Eliminate sensitive questions wherever possible. When such questions must be included, ask them in a friendly tone. Communicate that many questions are not used to evaluate a student's fit for college, but instead for demographic reporting or to assess their need for support.^{vi}
- ◆ **Avoid priming negative student identities:**^{vii} Move identity questions to late in the application, when students have already made progress and some trust has been built. Make identity questions short and easy to answer.
- ◆ **Use inclusive language:** Sensitive questions should be written using accepted phrasing conventions that appropriately reflect the true range of identities.^{viii} Allow students the option to define themselves, where possible, or decline to respond, rather than just check boxes that might not always fit.

Design Principle #5: Create Scaffolding

Scaffolding is a system of support that helps an individual solve a problem by simplifying tasks and providing motivation.^{ix} Students – who often enter college unsure of what their ultimate educational goals might be – need this scaffolding to help them make informed decisions.^x Our diagnosis interviews revealed that many students aren't always getting this help inside the application, especially when making selections around goals and majors.

The application should provide students with the contextual information they need to make important, informed, decisions about their future. If a choice is too complex to scaffold well, consider moving it outside of the application.

- ◆ **Allow students to signal when they don't know:** Allow students to indicate that they don't know the answer to important questions and align processes and policies to help them figure it out without disadvantaging them in the registration or financial aid processes.
- ◆ **Simplify choices with skip logic:** When a section requires making a complicated choice, break the choice down into smaller steps and use a logical sequence of questions to walk students through it.

Endnotes:

- ⁱ Lee Ross and Richard E. Nisbett, *The Person and the Situation: Perspectives of Social Psychology* (London: Pinter & Martin Ltd, 2011).
- ⁱⁱ Lindsay C. Page and Hunter Gehlbach, “How an Artificially Intelligent Virtual Assistant Helps Students Navigate the Road to College,” *AREA Open*, October 2017, <https://doi.org/10.1177/2332858417749220>.
- ⁱⁱⁱ Eric P. Bettinger et al., “The Role of Application Assistance and Information in College Decisions: Results from the H&R Block FAFSA Experiment (Under Second Revision for QJE),” 2011, <http://oreopoulos.faculty.economics.utoronto.ca/wp-content/uploads/2014/03/The-Role-of-Application-Assistance-and-Information-in-College-Decisions1.pdf>.
- ^{iv} Larry G Epstein, “A Definition of Uncertainty Aversion,” *The Review of Economic Studies* 66, no. 3 (July 1999): 579–608.
- ^v Margaret Shih, Todd L. Pittinsky, and Nalini Ambady, “Stereotype Susceptibility: Identity Salience and Shifts in Quantitative Performance,” *Psychological Science* 10, no. 1 (1999): 80–83.
- ^{vi} Elisabeth Barnett, “Validation Experiences and Persistence among Urban Community College Students” (Ph.D., University of Illinois at Urbana-Champaign, 2006), <http://search.proquest.com/docview/305328452/abstract/8328B4E147384201PQ/1>.
- ^{vii} Claude Steele and Joshua Aronson, “Stereotype Threat and the Intellectual Test Performance of African Americans,” *Journal of Personality and Social Psychology* 69, no. 5 (1995): 797–811.
- ^{viii} “Best Practices for Asking Questions to Identify Transgender and Other Gender Minority Respondents on Population-Based Surveys” (Los Angeles, CA: The Williams Institute, UCLA School of Law, September 2014), <https://williamsinstitute.law.ucla.edu/wp-content/uploads/geniuss-report-sep-2014.pdf>.
- ^{ix} Brian R. Belland, ChanMin Kim, and Michael J. Hannafin, “A Framework for Designing Scaffolds That Improve Motivation and Cognition,” *Educational Psychologist* 48, no. 4 (October 2013): 243–70, <https://doi.org/10.1080/00461520.2013.838920>.
- ^x Alissa Gardenhire-Crooks, Herbert Collado, and Barbara Ray, “A Whole ‘Nother World: Students Navigating Community College” (MDRC, July 2006), <https://files.eric.ed.gov/fulltext/ED493007.pdf>.