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# User-Centered Design In and Beyond the Classroom: Toward an Accountable Practice

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**Abstract**

The authors, an instructor and students, describe our practice of user-centered design on three levels: in the design and structure of an advanced undergraduate course in which we all participated, in student projects designed during the course, and in our reflections on the course presented here. We argue that principles of user-centered design can and should be more than course concepts and assignments; they can be core practices of the course that hold both students and teachers accountable for the impacts of their rhetorical choices. We offer a model for other teacher-scholars looking to involve students in the design of their courses and in writing together about their work.


*Keywords:* user-centered design; user experience; usability testing; design thinking

## 1. Our approach to user-centered design

### *1.1. Introduction*

In this article, we discuss and demonstrate a collaborative approach to designing and redesigning for usability not only in the structure of a class, but also in the projects that happen in and beyond that class, including this article. We begin by defining our local context and the terms we draw upon. Next, we articulate our collaborative knowledge-making process for this article, which was itself a participatory usability study of two iterations of a course. The heart of this article is a collection of narratives, one from each coauthor. We conclude by distilling and offering our recommendations for instructors looking to implement participatory, accountable user-centered design (UCD) principles and practices in their teaching and writing.

As Douglas Eyman (2009) argues, "Curricular design is all too often enacted through a systems-design, rather than a user-centered, framework. We know what skills and rhetorical tools we want students to take with them from our

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classes, but we often ascribe these outcomes from our own understandings of usefulness and appropriate function" (p. 222). Following Eyman, one of the core assumptions that guides the pedagogical design we examine in this article is that principles of UCD can and should be more than course concepts and assignments; they can be core practices of the course that hold both students and teachers accountable for the impacts of their rhetorical choices. In other words, the course we examine here was designed not only to *teach* UCD and usability testing, but also to *be tested* for usability, both through feedback during and immediately after the course and, ultimately, through the collaborative analysis and reflection process that we describe here.

### *1.2. Defining our context*

We examine two iterations of English 382, an upper-division undergraduate writing course that Ann Shivers-McNair taught in 2016: one in the spring quarter and one in the fall quarter. The class was themed "Rhetoric in the Making," because it was inspired by Ann's research on a makerspace in Seattle and by the work of scholars such as David Sheridan (2010), who advocate for treating fabricated, 3D objects as rhetorical compositions. Though the course is part of a sequence, it is also open to non-majors, and it satisfies a university-required general education writing credit. Thus, the class positions English majors alongside engineering, business, science, social science, humanities, and fine arts majors in a fairly small class. The spring section had 17 students, and the fall section had 20 students.

#### *1.2.1. Course goals*

While the focus on the class was on production, course readings drawn from digital rhetorics, cultural rhetorics, and technical communication, as well as design, provided a set of concepts and shared vocabulary for our rhetorical making processes. The course assignments and activities were designed to position students with a wide range of expertises and experiences alongside each other as respondents and collaborators, as we worked toward the course goals:

- Learn and draw on concepts and strategies in writing studies, rhetoric, design, and technical communication
- Draw on and expand your communicative, cultural, and technical resources to explore projects related to your interests
- Create space for nonlinear composing processes and for encountering failure
- Set appropriately challenging goals for your projects and be accountable to them
- Participate in a feedback-rich environment
- Develop contextualized, culturally-sensitive measures to assess your work-in-progress
- Collaborate ethically with others

#### *1.2.2. Studio activities and reports*

Studio activities were low-stakes, weekly assignments that followed the arc of the design thinking process: empathize, ideate, prototype, test, and refine (d.school, 2010). Each week's studio included three components:

- the activity itself (conducted outside of class),
- small-group, in-class discussion of students' experiences with the activity, and
- a report on both the activity and the discussions in which students solicited feedback and guidance from the instructor.

The first studio activity prompt was open-ended and designed to get students thinking about possible projects by experiencing and examining the relationship between writing and other forms of making. Prompts then moved students toward empathizing and researching communities who would use and be impacted by the students' projects. In the latter part of the quarter, the studio prompts moved through design and testing processes. While the weekly activity prompts followed the arc of the design thinking process and UCD, these prompts could be repeated or otherwise localized in order to encourage students to try out ideas and take risks. Ann's evaluation of the studio reports was guided by Jane Danielwicz and Peter Elbow's (2009) approach to contract grading, in which students who met the basic requirements of each assignment (which included accounting for the effectiveness of their work for their intended audience/users) automatically qualified for a B grade and could score higher by exceeding the requirements.

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