Let’s Get Real: Using Usability to Connect Writers, Readers, and Texts

A canonical feature of today’s writing classrooms is a focus on audience—and a corresponding acknowledgment that writing is (or should be) more than an exercise. Many teachers design assignments that ask students to consider how audience and other rhetorical concerns should shape their writing. But for students, the concept of audience too often remains a notional idea—an envisioned reader or an imagined response. Even if the target audience does read the writing, that reading typically occurs after the culmination of the piece rather than during the construction—the process—of the writing.

In this column, we explain two powerful concepts that can empower students to go far beyond simply imagining how the intended audience might respond. We show how lessons in usability and user-centered design give students systematic strategies for working with real audiences. These lessons ingrain the idea that interaction with readers is essential not only in the aftermath of writing but also during the process of writing. Although the terms usability and user-centered design may be new to you, we show how the concepts permeate everyday life—and how they can function as simple but useful tools for teaching writing well.

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User-Centered Design in Everyday Life

When writers pay attention to usability, they take into account how readily their readers can use the written information they have provided. This process isn’t new: to see how it works, let’s rewind to the days before GPS, Google Maps, and cell phones. If you wanted to email (or handwrite!) directions that would help new friends to find your house, you might state, “Drive down Summit Street, cross the Ottawa River. As you get closer, you’ll see a Rudy’s Hot Dog on the left. Turn right just after the viaduct—if you see Kroger’s you’ve gone too far. Turn around. It’ll be on the left. It’s the green house with a big tree in the front.”

The success or failure of your instructions would be obvious. If your friends found your house quickly, you had written a successful document. If they showed up late, or had to ask for further directions, or gave up, then the quality of your instructions might be called into question. When they arrived, your friends might say, “Well, we didn’t see the Rudy’s, but once we hit Kroger’s we knew where we were,” or “We were completely lost. Did you realize the river comes after the Rudy’s? And what’s a viaduct?” After giving similar directions several times and hearing from those who tried to follow them, a writer would make changes and become good at providing guidance to certain places. Based on user feedback, the writer knew what to emphasize—Rudy’s Hot Dogs might not be a good marker, but the river was hard to miss; the term viaduct was unfamiliar to many; and so forth. This cycle of revising based on feedback was an iterative process—an interaction between the writer and readers that helped improve the directions. In other words, the instructions were continually revised with an eye toward user-centered design based on the usability feedback given by the early users.

In everyday situations like the scenario we have just described, the cycle of feedback and revisions may occur by happenstance.
But skilled writers (and writing teachers!) can turn this cycle into a strategy. Our students can borrow from the professional writing playbook: they, too, can work with feedback from real readers during their writing process. They can learn a systematic approach to usability testing that can help them to draft and revise for user-centered design. By working with real readers, student-writers can intentionally write for user-centered design—composing effective and well-received documents that meet their own goals as well as the needs and expectations of their audiences.

A Beginner’s Guide

In professional writing, usability testing investigates how well users can find, understand, and use a document (Lannon). Usability testing involves gathering feedback from users, analyzing how successfully they used the document, and drawing on the test results to change or refine the design. The process is repeated in a recursive cycle until the writer believes that an effective, user-centered document has been achieved.

Good technical writers make regular use of usability testing, but professionals including engineers, product designers, and computer programmers also theorize, refine, and develop approaches to usability testing and user-centered design. The process we briefly describe above is something that is done not only for writing but also for objects and processes—again and again and again. Design concepts are developed, tested, revised, and made real. (Just imagine how many times a new iPod goes through usability testing!)

For our purposes here, we offer an introductory look at usability to share how we can take elements of this complex process and use it with students to enhance their experiences with writing.

Teaching the Strategies

There are at least two different approaches that we as writing teachers can take to incorporate lessons on usability and user-centered design into our curricula. One approach focuses on writing as a research tool related to the design of an object or process. In an English class, this approach may be especially effective when the writing is used in conjunction with projects in other courses, particularly those with plenty of hands-on design activity. For example, students in a partnering science class focused on simple machines could design and build a new simple machine of their own and then test its effectiveness by gathering feedback from people attempting to use their invention. Students learning to write apps for phones and tablets might also engage in a process of usability testing and user-centered design. The writing angle of such projects involves teaching students to write usability tests, conduct them, and then compose analytical reports about their results.

A second approach has a much more explicit writing focus, and it does not require students to be involved in a non-writing design project or a partnership with another class. For this approach, students’ writing is the “object” that they design, test for usability, and revise for effective (user-centered) design. Our colleague from Michigan State University’s WIDE (Writing in Digital Environments) Center, Bill Hart-Davidson, gave us one such example for use with high school and middle school students. In this project, titled “Plz hlp me txt,” students develop a technical document for older adults, instructing them on how to effectively text message. Students engage in a usability process. Students use primary and secondary source research and their own understanding of the older adults who are their target audience to draft an initial set of instructions about how to text. Then, they conduct usability testing: they gather a small group of representative users who use the instructions to help them send and receive text messages. The student writers observe their users as they use the written instructions to guide them in completing a series of texting tasks. They make notes about their users’ in-process missteps and frustrations, and they also gather feedback through survey and interview questions. The students then use this feedback to revise their instructions, revising and repeating the process as often as necessary to get their writing right.

As you may imagine, the testing project could be adapted in several ways. For example, any process in which students are “expert” and others (such as older adults or younger students) may not be skilled, but may have interest, would be appropriate: using a Wii, reading on a Kindle, and creating and maintaining a blog are among the many possible topics.
Other variations on this type of lesson sequence are also possible. Our experiences with teaching these concepts lead us to believe that there are some essential elements to effective lessons on usability and user-centered design. These include the following:

- **User-centered design as a goal.** It is important that students understand the goal of the lessons: gathering feedback through usability testing is a meaningful strategy only if it is used as a means to achieve user-centered design. In other words, it isn’t helpful to know where or how our writing confuses or frustrates our readers unless we also use that information to improve our writing in ways that will be noticeable to our audience.

- **A focus on task-oriented writing.** Usability is inherently connected to tasks. For usability testing to be meaningful, students need to see how their readers are using the documents they wrote to complete a task. Usability tests should help students to answer several questions about how readers interact with their writing: Are the users learning what we want them to learn? Does the document help them minimize their errors in the desired task? Are they satisfied with process?

- **An early focus on users (the audience).** Writers need to understand from the start who will be using a document, what environments they will be using it in, and what tasks they will be asked to perform. To that end, a strategy used by some professional writers can also be used by student writers. Students can write *personae*, or detailed descriptions of the archetypal users of a particular document or media. Persona pieces tend to be around 200–500 words; they are often written as if they are about a single person or persons, and they detail the target users’ vital statistics, motivations for learning, and experiences and traits that may influence their view of the tasks they will need to complete as users.

- **Real questions, real research.** One of the truisms of usability is that writers should never make assumptions about what the users do or don’t know. You may be familiar with a classroom activity that we’ll call the “Peanut Butter and Jelly” demonstration: as we’ve seen it done, the teacher asks students to write the instructions for creating a peanut butter and jelly sandwich. Students are reminded to remember all the details that a user might need to remember. It’s often sort of a gotcha activity, as other students in the class are then asked to follow the written instructions. If the instructions begin with “first, you need to spread the jelly,” the teacher might ask what should be used to spread it or simulate trying to spread the jar, since the students didn’t tell the teacher to open the jelly. You get the point.

  The problem with this activity, as we see it, is that the demonstration is a fun game, but students aren’t really forced to consider what their audience does or doesn’t know, and they don’t have to think about how one audience or user differs from the next. So although this assignment may have merits of its own, there are more powerful ways to teach students to think carefully about real users and their needs and expectations. For that reason, we try to design activities where our students will have to do some real research before and during their design process in order to understand what knowledge, interests, preferences, misconceptions, and the like their users will bring to a given usability task.

- **Real testing, real revision.** As we all know, perceptions and reality can be two different things. It isn’t enough for student writers to ask their readers what they think about a document. What is essential is that readers also be asked to use the document to complete the kinds of tasks it is meant to guide. (In high school settings, projects that create documents intended for student users allow for a convenient in-class population of willing participants for usability testing.) In Leah’s professional writing class, one group of students is drafting a handbook for parents whose preschoolers will attend a new lab preschool on campus. To conduct their usability testing, these students arranged for a few parents of preschoolers—some
well acquainted with this stage of parenting, and others not—to complete a usability test. They asked the parents to find certain essential bits of information in the handbook, to explain key policies in their own words, and also to use the handbook to help them show how they would complete tasks such as arranging for their child to take medication during the preschool session. In addition, the students developed a survey asking the parents for their feedback on the content, organization, style, design, and ethos of the document. After the usability testing was complete, the student writers used the feedback to make important changes to their draft document. They reported on their test results and subsequent revisions in a report that accompanied their finalized handbook.

From our experiences as writers and teachers, we know the power of usability and user-centered design. Usability testing allows students to engage with a real audience. Not only do they envision this audience by writing a detailed persona, but they also meet them and engage in an iterative process with them, often learning about their misconceptions and stereotypes and gaining new insights about the audience.

Usability testing also gives students direct and unvarnished feedback on their writing. If a document is ineffectively written, the students not only hear about it, they actually get to see the document fail as their users struggle to use it to complete a task. Then, they take this feedback—this field research—and use it to revise the piece with a design that better fits the users’ needs and expectations. Along the way, students move from thinking of their audience as a nebulous concept toward knowing readers as real people—and they understand more fully that writing is an act with real consequences.

Works Cited


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