

Strategic Assessment and Usability Studies: Tracing the Evolution of Identity and Community Engagement in an Undergraduate Professional and Technical Writing Program

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Abstract. In this article, we reflect on ongoing, annual assessments at our institution: Saginaw Valley State University, a regional, teaching-focused institution in Michigan's Great Lakes Bay Region. Our programmatic development includes a recent external review conducted by the Council of Programs in Technical and Scientific Communication, and follows the cycle of assessment-to-implementation through several revolutions, tracing the evolution of usability studies as a defining local theme in our undergraduate program in Professional and Technical Writing (PTW). Annual cycles of reflection and assessment resulted in the development of a programmatic commitment to usability studies, including the development of a space to enact these practices. Further consideration of that commitment during ensuing years revealed a deepening student connection to concepts and strategies from usability studies. Although this article traces our own journey, we conclude by offering a five-part heuristic for programmatic development that readers may find useful for thinking about their own administrative priorities and practices.

Keywords: usability studies, participatory design, program administration, professional and technical writing, assessment, writing research centers

In the inaugural issue of *Programmatic Perspectives*, James Zappen and Cheryl Geisler (2009) frame ways in which communication technologies—

particularly computer-mediated technologies—are emblematic of a “fundamental shift in information design from the efficient delivery of information to users to more immersive user experiences” (p. 5). Our own story in a small rhetoric and professional writing department at Saginaw Valley State University (SVSU), a regional, teaching-focused university in Michigan’s Great Lakes Bay Region, parallels this fundamental shift toward a more-focused, nuanced understanding of user experience and usability studies. Locally, assessment of student portfolios serves as a significant catalyst for our programmatic evolution toward usability studies through public intellectualism and service learning.

“Information design is currently experiencing a transformation from its traditional emphasis upon system performance and the user satisfaction that results from system functionality and efficiency to a greater emphasis upon the quality of the user’s engagement with the system” (Zappen & Geisler, p. 7). As our department underwent fundamental changes in 2010 (events we discuss later in this article), usability studies offered us two particular ways to enact programmatic evolution. First, we saw a focus on usability studies naturally coalescing with existing programmatic emphases on public intellectualism and service learning. Second, a programmatic focus on usability studies could provide our students with a better understanding of the ways in which users engage with documents, interfaces, and other information artifacts. Research in the field of technical and professional communication during this timeframe also appears to support a trend toward incorporating usability studies into programmatic initiatives.

In their study “Current State of U.S. Undergraduate Degree Programs in Technical and Professional Communication,” Lisa Meloncon and Sally Henschel (2013) report that only 11% of undergraduate curricula in technical communication offer a regular course (either elective or required) in usability studies. They note, however, that from 2005 to 2011 (the years between their study and that by Sandy Harner and Adrienne Rich upon which they build), the number of academic programs that require such a course increased from 1% to 11% (p. 56), indicating a growing programmatic emphasis across the discipline on connecting students with these concepts. Our own programmatic evolution, driven by programmatic assessment, mirrors ongoing shifts in user experience, usability studies, and disciplinary directions.

In this article, we reflect on our own ongoing, annual assessments, including a recent external review conducted by the Council of Programs in Technical and Scientific Communication (CPTSC). We follow the cycle of

assessment-to-implementation through several revolutions, tracing the evolution of usability studies as a defining local theme in our undergraduate program in Professional and Technical Writing (PTW). Annual cycles of reflection and assessment resulted in the development of a programmatic commitment to usability studies, including the development of a space to enact these practices. Further consideration of that commitment during ensuing years revealed a deepening student connection to concepts and strategies from usability studies. Although this article traces our own journey, we conclude by offering a five-part heuristic for programmatic development that readers may find useful for thinking strategically about their own administrative priorities and practices.

Professional and Technical Writing at Saginaw Valley State University

The SVSU Professional and Technical Writing (PTW) program launched in 2001 as an assembly of courses from its host department (English), Graphic Design, and Philosophy. By 2005, the program underwent its first revisions, resulting in the streamlining of curricular options. Between 2005 and 2013, seven faculty members were hired to facilitate study in PTW; five remain active in the program. In 2010, the PTW program relocated from English into its own department, Rhetoric and Professional Writing (RPW).

The current PTW curriculum prepares students to become generalist technical communicators. That is, we do not serve a niche industry or specialization. Rather, the program is designed to develop professionals to enter a variety of industries and to serve a variety of roles. Alumni work in traditional industries: computer, automotive, insurance, and publishing, among others. Other graduates have secured positions with organizations that demand generalist expertise, such as nonprofits, libraries, or political organizations and government offices. Philosophically, the program emphasizes critical thinking and critical doing, a blend of concept and strategy—of theory and practice.

We translate such broad concepts into assessment practices by defining four areas of professional and programmatic knowledge: 1) writing, 2) design, 3) communication tools and technologies, and 4) theoretical perspectives. These areas are broadly conceived, allowing students to explore and develop their own interests and specializations within the curricular structure. Later, we'll elaborate on these assessment areas.

Students engage in a variety of information design projects, from scholarly arguments to professional documents, such as proposals,

instruction sets, and reports. In all instances, we emphasize awareness of audience, context, purpose, and professional and ethical considerations. Students negotiate these emphases as they develop into reflective, adaptable information designers.

In a session from the 2010 meeting of the Association of Teachers of Technical Writing (ATTW), Bill Williamson, the RPW Department's first chair, described the PTW program this way.

PTW ... is a conceptually rich cultural enterprise founded on critical thinking and action, dependent on awareness of many layers of literacies, and dedicated to civic responsibility and community building. We teach our students to be adaptable, creative, and context-aware. They learn to be professional, authoritative, and attentive to details. They learn that forms and genres are only the beginning places for the real work of communicating to diverse audiences, that technology may function among other things as a tool, as a medium for expression, or as an impediment to social equity. And, they learn that when you need to get something done, you learn how others think, how they solve problems, how they view the world, and you find a way to create the possibility for entering into productive partnerships with them. (Williamson, ATTW)

Despite our broad-spectrum approach to curriculum development, many students opt to seek deeper knowledge that serves specific professional profiles. Historically, student interests emerged around topics such as alternative energies and environmental communication, digital journalism, entrepreneurial studies, and usability. Students who seek experiences that help them build such specializations often emerge as leaders within their programmatic cohorts, and just as often they explore pathways by which they might apply that knowledge in the communities in which they participate. That spirit of public intellectualism is important to the program.

Programmatic Emphases and Assessments at SVSU

Public intellectualism and service learning have always been important to individual PTW faculty. All department members are engaged in a variety of community initiatives that connect classrooms and offices to locations and challenges beyond the university. It is therefore logical that such commitments emerged as key elements of PTW's programmatic identity during its ongoing evolution. When Kay Harley's exploratory committee formulated its initial vision for a PTW program, they emphasized hands-on knowledge of writing strategies and engagement with real communication

challenges. Such philosophical framing resulted in courses built on service learning initiatives and on an internship or cooperative education experience as requirements for graduation. They saw such practices as a way to balance theoretical approaches with pragmatic goals.

Significantly, faculty members have maintained a consistent commitment to fostering student participation in programmatic administrative processes. PTW students have historically responded well to both the expectation and the opportunity, embracing possibilities for engaging in research projects and programmatic initiatives. Also, student research and information development projects regularly contribute to the success of a range of campus clients, including the RPW Department. As active members of the conversation about curriculum development and in response to the demands of their work in the campus community and beyond, students began requesting courses on video production, digital publishing, and usability studies.

PTW undergrads regularly position themselves as advocates for users and other stakeholders. They have in recent years completed usability studies on behalf of the university library, information technology services, and the university writing programs, among others. Ongoing projects include research collaborations with the SVSU Writing Center, Career Services, Web Development, and our first ventures involving corporate partners. In addition, individual members of our departmental faculty engage in a variety of high- and low-stakes pedagogical and administrative initiatives on campus. In this context of scholarly and professional service, usability studies and associated design practices anchors departmental contributions to its campus and community constituents.

We want to pause here to revisit how a confluence of cultural forces created an exigence for programmatic growth around usability studies here at SVSU. Ultimately, it is our ongoing commitment to regular, reflective, and targeted assessment in PTW that helped us generate programmatic action around this area of inquiry. By 2006, we had committed to annual assessment of portfolios from our capstone course (RPW 481 Managing Document Design Projects). Our institutional standard was at that time to assess programs every three to five years. However, because our program enrollments were in the 15 to 30 range at that time, we found value in assessing every graduating class. That practice has been useful for programmatic decision making, and thus we have maintained it even as the program has grown and evolved. More recently, SVSU hosted an assessment team from the CPTSC. We will address the internal mechanism first.

Annual assessments evaluated portfolios from the capstone course on the four broad areas of professional and programmatic knowledge we identified earlier: 1) writing, 2) design, 3) communication tools and technologies, and 4) theoretical perspectives. These knowledge areas blend rhetorical strategies (audience, purpose, context, and genre) with theoretical perspectives, and practical knowledge (technology and project management, for examples). These areas are assessed through nine core competencies: audience, purpose, genre, context, language, technology, design, theory, and project management. RPW faculty score 0–5 for each competency based on evidence of proficiency demonstrated in portfolio materials. A score of 0 indicates the standard for proficiency was not met, and a score of 5 indicates the highest possible proficiency. Faculty reviewers may also indicate a category score of NA (not applicable) or NM (not measurable). Portfolios are randomly distributed to faculty members, who score each category based on the above rubric. Each competency is then assessed an average score, which is used to calculate the cumulative average competency for a given assessment year. The composite average score from 2009–2012 is 3.48; scores from 2009 are the lowest so far at 3.0335, and 2011 represents the highest scores at 3.9 (Herzog 2015, p. 46). These scores provide a baseline for better understanding students' proficiencies with these core competencies.

Annual portfolio assessments have helped focus attention on student proficiencies and areas for growth. In contrast, the program review by the CPTSC provided a comprehensive assessment of our program. During the 2014–2015 academic year, RPW Chair Brad Herzog lead the department faculty in conducting a self-study. This internal review included questionnaires distributed to current students and alumni, focus groups coordinated by a colleague from the Psychology Department, and a review of comparable programs across the United States. The external review followed the self-study. The CPTSC representatives interviewed faculty, students, and administrators, toured facilities, conducted classroom visits, reviewed materials such as the self-study and departmental website, and attended a meeting of our student organization. Their report recommended strategies for programmatic refinement and growth that emphasize marketing and publicity, curriculum, and ongoing service-learning initiatives.

These assessment activities helped us establish and maintain a programmatic commitment to usability studies. Even that emphasis evolved over a few cycles. The portfolio review from 2005 demonstrated that enrollees on the cusp of commencing from the program were capable

writers but were less consistently adept with concepts in visual rhetoric and information design. Specifically, we recognized a need for our students to be more consciously aware of the rhetorical and information design choices they were making for audiences outside of academic contexts. Responding to assessment results, PTW faculty engaged in curriculum reforms that would expand the range of foci for knowledge building, but remain anchored in the well-established strengths that had defined the first years of study in the program.

Following the 2014-2015 academic year, we assessed portfolios in our introductory course (RPW 260 Introduction to Professional and Technical Writing) in addition to those from the capstone course: "Based on our assessment and discussion of the 481 and 260 portfolios, we noted that many of the authors revealed an insufficient awareness of their audience in their work" (Herzog, p. 40). Although we certainly hoped students would more effectively demonstrate proficiency with audience awareness, we also recognized this as an opportunity for usability studies to help students better understand user needs. This focus appears to align with the external reviewers' recommendation for increasing service-learning opportunities, specifically highlighting the Center as a space to facilitate the integration of such projects.

Our studies from 2006 to 2010 showed us that our students were weak overall in demonstrating how their work was informed by theory. Exit interviews and focus group discussions revealed that many of our students saw theory as a disconnected, peripheral activity, and generally not central to their academic needs or professional development goals.

One particular scholarly deficiency students exhibited was a lack of a critical understanding of nonacademic audiences. In other words, even when creating documents for external users and contexts, students struggled to see beyond the professor and classroom when crafting information products. For example, although portfolios should be designed with potential employers in mind, documents designed by PTW students instead often referred to coursework, or otherwise situated the authors as students rather than as professionals. Although this struggle for contextual awareness is certainly not unique to our program, we wanted a way to help our students more genuinely theorize about external audiences.

Usability Studies offered a means for helping students to bridge the gap between their notions of practical knowledge and the faculty's programmatic commitment to developing reflective practitioners capable of engaging in theory building. Although usability was at that time one

element of content among many in the Instruction Writing course, some of our faculty members began to develop a much more consistent commitment to integrating user-centered design into the student experience of PTW. Williamson states during an episode of *The Technical Rapport* podcast: “[Usability] went from being an idea that was really at the periphery of the curriculum, but central to our needs [to] become absolutely core to the studies that our students are engaged in by the time they are done with their degree.” Indeed, usability studies is essential to our students’ experiences. We will return to that thread in a bit when we describe three core courses that implemented usability.

We see the combined mechanisms of internal and external assessment, and the programmatic actions they inspire, as ways to help students improve their rhetorical strategies, audience and context awareness, and to apply appropriate, constructive theoretical models to their professional development and communication activities.

Usability Studies as a Site for Scholarly and Professional Engagement

In our scholarly and pedagogical investigations of usability studies, we maintain consistency with the broader programmatic and professional philosophies that we foster in the PTW program at SVSU. That means exploring the complementary relationships between theory and practice; framing investigatory methodologies in the context of design; and design itself as a collaboration among technical communicators, employers and clients, and audiences with whom content is meant to connect. We regularly link the work of developing professionals in the program with people and ideas through exploration of ethics and civic engagement, moving beyond disconnected pedagogies where students design information products without the benefit of a practical, cultural context. In these ways, we see our programmatic assessment as being strategic because it is a locally-situated (Huot, 1996 & 2002), reflective practice, operating at the convergence of theory and practice and student feedback. To make these intersections more tangible, we will trace the thread of usability studies as a unifying methodology through our undergraduate program in several ways in the sections that follow. But first we begin by framing usability itself as an area of study.

Although the history of usability studies is connected to several disciplines, including software development and human factors engineering (Redish and Barnum, 2011), it has been an integral part of technical communicators’ work for several decades. “From the 1980s on,”

write Ginny Redish and Carol Barnum, “many technical communicators made the transition from writing as user advocate to usability specialist—helping to build usability into products, doing user research and analysis, assuring usability through usability testing and other evaluation techniques” (p. 92). In *User-Centered Technology: A Rhetorical Theory for Computers and Other Mundane Artifacts*, Robert R. Johnson (1998) suggests that during the 1990s (the decade that preceded the development of his book), usability experts were typically not the same people responsible for creating the documents that supported commercial technologies. In addition, he describes the outcome of usability in mechanistic terms: “usability research became increasingly interested in testing documents to determine such things as the accuracy, completeness, and usefulness of texts” (pp. 81–82). However, Johnson also argues that usability research offers insight into the motivations, habits, and strategic engagement with information and technologies, thus fostering the growth of “technical rhetoricians” who might temper technical values with humanistic ones (pp. 161–4). Johnson challenges technical communicators to “move more aggressively into the foray concerning technology and humans in a broader, more theoretically and historically based manner” (p. xiii) than they have. He argues for a user-centered approach to usability testing.

In our program, we draw heavily on a user-centered approach to frame much of the research our students conduct. We want students to be aware of the needs, values, and attitudes of audience members and to think critically about the ways in which users interact with a variety of systems. Again, we find the work of Zappen and Geisler valuable for framing the ongoing evolution of usability studies at SVSU.

“Traditional views of information design,” argue Zappen and Geisler, “emphasize the performance of the technology as measured by the functionality and efficiency of the human-system interaction, and thus of the simplicity and transparency of the technology that mediates the interaction” (p. 7). As we noted, however, a shift in recent technical communication scholarship extends traditional views of usability to prioritize “the quality of the user’s engagement with the system” (p. 7). Such a view needs to recognize not only the technological aspects of the system and its relationship with the user but also the social and cultural contexts within which those human-system encounters occur. Technical communication scholars advocate a more participatory design philosophy that emphasizes the development of “tacit knowledge” (Spinuzzi, p. 165), framed within civic engagement (Scott, 2004) through usability studies and testing to foster better spaces for public deliberation (Simmons and

Zoetewey, 2012).

Each of these configurations of usability and related areas of inquiry help us extend and contextualize our local approach. Clay Spinuzzi's notion that "[p]articipatory design is research" (p. 163), and therefore fosters theory building, meshes well with our methodological positioning of usability studies. By emphasizing knowledge building, he challenges technical communicators to reflect on what they know, and how they know it. "Participatory design's object of study is the tacit knowledge developed and used by those who work with technologies" (p. 165). As a research method grounded in design, it is ideally suited to linking with usability and civic engagement.

Echoing Johnson's challenge for technical communicators to "move more aggressively into the foray concerning technology and humans in a broader, more theoretically and historically based manner" (p. xiii), J. Blake Scott (2008) asserts that "We need more expansive definitions and discussions of usability, ... ones that account for the practices through which particular goals and methods are operationalized and customized" (p. 406). Scott distinguishes between "practices, as situated, tactical, and specific performances, and methods, as more generic procedures for organizing activities and structuring relations" (p. 382). After engaging in iterative cycles of document development and document studies, Scott's students "expressed more process-focused and user-centered notions of usability ... " (p. 390). However, of greater value to him was their more-sophisticated examination of usability as a form of collaboration: "In addition to better understanding usability as an iterative process, most students' usability experiences appeared to give them a better appreciation for user-centered goals, such as engaging users as partners in text development and facilitating a deeper, more empowering understanding of information-in-context" (pp. 390–391). A focus on "user-centered goals" and "information in context" allows usability specialists to better understand social and civic aspects of interface and system design, taking into consideration the usefulness of information for users.

In *Interaction Design for Complex Problem Solving* (2004), Barbara Mirel defines usefulness as "the ability to do better work better" (p. xxxi). Michele Simmons and Meredith Zoetewey (2012) extend the importance of social and civic commitments in usability studies when they emphasize that civic websites are spaces that "call for an enhanced usability approach to account for users who approach sites with different aims than those envisioned for them by designers" (p. 252). In other words, although the civic website may provide access to information that meets usability

criteria, focusing on whether or not that information is useful for users helps to better understand social and civic motivations that may not have originally been considered by site designers. Simmons and Zoetewey describe the emphasis on usefulness “as a progression of disciplinary developments rather than a new approach” (p. 252). Indeed, as technical communicators continue to shape their roles as usability specialists, they must continue to be informed by the user-centered focus of the 1980s, 1990s, and early 2000s, and advance the contemporary commitment to civic and social concerns, as research and practice reciprocally inform one another (Rude, 2015).

We have so far emphasized evolving, social-critical frameworks for usability studies. However, we also draw on historically significant texts. Core readings typically begin with the work of scholars such as Donald Norman, including *Emotional Design* (2004), and *The Design of Everyday Things* (2002); as well as Barbara Mirel’s “Advancing a Vision of Usability” (2002); Karen Schriver’s *Dynamics of Document Design* (1997); Steven Krug’s *Rocket Surgery Made Easy* (2010), and *Don’t Make Me Think* (2006); and Janice Redish. Redish’s (2012) *Letting Go of the Words* serves in our Writing in Electronic Spaces course (discussed below), which offers students an introduction to web communication. We see the impacts of such scholarship reflected in our graduates, some of whom have become usability specialists.

Foundational texts such as these not only blend disciplinary approaches, but they also challenge readers to integrate theory and practice in their own work. When we present these texts as complementary elements from the bodies of knowledge for usability studies and information design, we signal to our students that we want them to understand what it means to engage the world as critically thinking information developers who are informed by integrating theories from technical communication and usability studies. Further, we hope to see them engage methods of document testing appropriate to their design contexts fluidly and adaptively. Therefore, our programmatic and pedagogical foci fuse traditional user-centered information design with current views on the social and civic implications of usability studies. Our current work with the Usability Research Team (URT), discussed below, challenges students to consider not only the usability of a system or interface but also users’ unique context, motivations, and implications.

In the following sections, we demonstrate how the body of knowledge we have framed here informs our local, programmatic development. We discuss the development of the SVSU Center for Usability Studies before

describing the evolution of usability within our curriculum. We then discuss our programmatic emphasis and the courses where usability studies provide the core theoretical concepts.

The Center for Usability Studies and Universal Design

The PTW program secured funding in 2011 for a user-experience research and development facility, the SVSU Center for Usability Studies and Universal Design (the Center). The facility provides a site where SVSU faculty and students can engage in a variety of projects related to information design and document/product testing. It serves as a place for testing digital and print documents, as well as testing other products and designs; it provides a space where stakeholders and clients can engage the problem of implementing universal design principles in a variety of situations. Such work has become essential to the development of professionals who create high-end information products and essential to the success of companies that engage in design assessment.

The secondary function of the Center is developing and refining documents such as those the facility is equipped to study. Thus, project teams and clients can engage in focused development of information products and make immediate transition from testing to production. In addition, this provides a facility where special content documents (e.g., those requiring video and audio content, which are in increasing demand) are produced. Sites on our campus for such production are at present extremely limited.

The Center is physically compact. Figure 1 (page 108) illustrates the two-room configuration for the facility. The main space features three distinct zones. All machines are Macintosh desktop models configured with both Apple *OSX* and Microsoft *Windows* operating systems. The row of four machines along the left wall is equipped for information design. The solo machine can serve as an administrative or observation tool. The three machines configured hexagonally can be separated by movable screens and are all equipped with software for conducting usability studies (e.g., Clearleft *Silverback*, Techsmith *Morae*). The machine in the secondary room serves two purposes: one for information design, and one for usability studies. Because of its relative isolation, this machine is configured for higher-end audio recording. However, its separation also makes it ideal for use as an observation and administrative post during user testing.

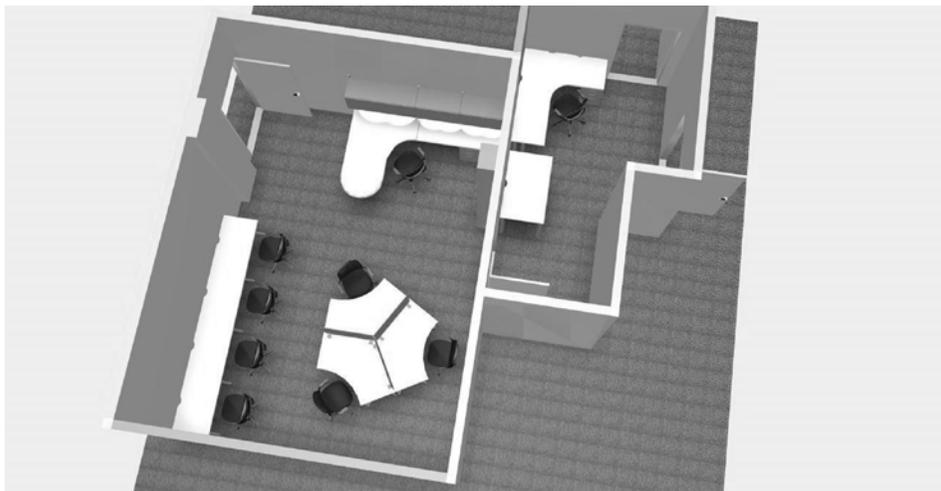


Figure 1. The SVSU Center for Usability Studies and Universal Design

Beyond its physical design, the Center connected forces from three different locations: the technical communication profession, the PTW program, and administration of faculty development for online learning at SVSU. Locally, the Center was conceived as a space for research and development and for pedagogical action, not a space for generating revenue for the University. Thus, free from several constraints, such as a need to generate an “externally-funded revenue stream” (139), outlined in Tharon Howard’s (2015) recent *Programmatic Perspectives* article, the Center materializes programmatic commitment to usability studies. Although the Center marks a milestone for usability studies at SVSU, it is part of the ongoing evolution within the PTW program.

The Evolution of Usability Studies and PTW at SVSU

Usability studies is integrated into the PTW curriculum at SVSU in several locations. In the courses where we emphasize these concepts, we frequently merge service learning with usability studies to help students understand the balance between theory and practice and the impact their designs might have on users beyond academic contexts. As we have already explored, this balance is informed by research in technical communication and grounded in our portfolio-driven assessment process.

Now, we briefly highlight three courses from the curriculum because they represent three important points within our program. We also describe the activities of our URT. Core concepts in these courses parallel disciplinary foci on user-centered design, as well as social and civic contexts for documents. Students navigate multiple responsibilities: as

producers of texts (in a broad sense of the word) and as usability specialists who must critically assess their work through usability testing. Testing takes many forms, from talk-aloud protocols, to card sorting, to more-sophisticated data capture and analysis using the Center's resources. Each of the three courses we examine here are required experiences for PTW majors. The courses are summarized in Table 1.

Table 1. Summary of Usability in Core PTW Courses

Course Number	Course Title	Usability Emphasis
RPW 285	Writing in Electronic Spaces	Usability testing typically emphasizes in-progress websites. Projects integrate users as participants in site development, including several revolutions of usability testing and website development.
RPW 322	Instruction Writing	Students create a variety of user documentation in print and digital genres. Usability testing typically includes utilizing video capture and talk aloud.
RPW 481	Managing Document Design Projects	Students have the opportunity to develop and implement immersive, client-based usability studies for complex and diverse user-centered projects.

RPW 285 Writing in Electronic Spaces

In RPW 285 Writing in Electronic Spaces, we emphasize the dynamic nature of writing for the web and other digital contexts. Students learn the basics of markup languages and cascading style sheets, and they complete projects that emphasize the design of digital texts. Students create websites during this course; for some, this is a completely new venture. Although these projects take various forms (e.g., digital portfolios, personal or promotional websites, topically driven exploratories), we emphasize a bottom-up, user-centered approach. That is, students employ an array of low-tech organizational and planning strategies before they write any code. By the time students transition to production, they have likely already proctored or participated in several usability tests to better understand user needs for their own projects, and those of their peers. Students then conduct more-advanced usability studies in the Center, combining screencasting and mouse-tracking among other data streams, to test their sites prior to final delivery and deployment.

RPW 322 Instruction Writing

RPW 322 Instruction Writing focuses on both digital and print media. Here again, we emphasize a need to create user-centered, contextually

appropriate documents. Thus, usability studies have become essential course content. It was in fact the first site where we integrated that content. Again, the Center offers students a dedicated space and proper tools for conducting testing of instruction sets, regardless of the medium. When students create print documents, they can use digital video recorders to capture users engaged testing. The combined audio and video data streams enable students to review user successes and struggles and to hear them articulate their experiences.

RPW 481 Managing Document Design Projects

RPW 481 Managing Document Design Projects (the PTW capstone course) integrates usability in much the same ways as Instruction Writing. Students work with external clients in a service-learning capacity and are responsible for planning, implementing, and assessing a project that addresses their clients' needs. Students design and conduct a variety of usability testing strategies to better understand user experiences. Where the capstone course deviates from the other two courses, however, is that students may opt to focus their entire client project on examining a set of usability issues. In recent years, such projects have become more common.

RPW 324 Special Topics in PTW

One of the ways we explore new curriculum directions is through our RPW 324 Special Topics in PTW course listing. We recognize the need to develop more courses that focus on usability, including one or more where the theories and practices of usability studies provide the primary content. During the fall semesters of 2013 and 2015, Scott Kowalewski taught courses on usability and user-centered design under the department's Special Topics designation. Although the course, which was listed as User-Centered Design and Usability Studies, evolves with each offering, the core outcomes have provided a consistent foundation for study. (See Table 2 for details.) Students strove to master course outcomes through projects designed to develop grounded knowledge of the conceptual models and methodological approaches that anchor usability studies. The Center served as the primary site for conducting studies and analyzing data.

Table 2. Pedagogical outcomes for User-Centered Design

RPW 324: User-Centered Design and Usability Studies (Special Topics)			
Outcome 1	Outcome 2	Outcome 3	Outcome 4
Understand theoretical (e.g. cognitive, behavioral) issues and challenges facing professional and technical communicators in the areas of usability, user-centered design, and human-computer interaction.	Demonstrate proficiency with industry-standard tools and technologies employed by the professional and technical communicators who design user documentation and conduct usability tests (e.g., Clearleft <i>Silverback</i> , Techsmith <i>Morae</i>).	Apply knowledge of user-centered design and usability testing by designing a bottom-up, user-centered approach to document design, usability, and/or accessibility, while working to solve complex and dynamic issues of human-computer (or human-document) interaction.	Evaluate the results of usability tests, and apply that information to advise clients on appropriate document revisions.

Both iterations of User-Centered Design and Usability Studies required students to complete client-driven projects. Those clients were local individuals or organizations who needed guidance developing or managing a document or interface. Students designed and implemented their own studies based on contextual parameters. For their tests, they developed scenarios and tasks, created and implemented schedules, analyzed data, and composed recommendation reports. We would like to add this course to our standard curriculum, rather than continue to offer it as a special topic.

Other Programmatic Initiatives

The 2015 CPTSC review of our program highlighted the potential for integrating the Center even more deeply into programmatic initiatives, thus forging stronger connections with the rest of SVSU, the region, and with the scholarly community. During this academic year, we have launched three usability-centered projects. First, we formed a usability studies research team. Second, we utilized the Center as a space for creative and scholarly activity. Third, we have positioned the Center as a

locus for development of usability professionals and scholars through the creation of a new publication venue. We discuss each initiative briefly below.

We assembled a Usability Research Team (URT) that brings together six undergraduate students, two PTW alumni, and four RPW faculty members. All have some academic or career interest in usability studies and user experience. Five of the six students have completed Kowalewski's User-Centered Design and Usability Studies course. Three of the six students are at the time of this writing employed in positions that integrate usability. The URT has secured clients both on and off campus, including SVSU's Writing Center and Office of Web Communications and an online software tutorial company. The Team's mission is to serve a variety of stakeholders and establish the Center as a resource for campus and community partnerships.

Beyond the URT, the Center also supports several other scholarly and service projects. For example, the Center has provided a space for Cardinal Solutions, an interdisciplinary campus collaboration that brings together students and faculty from RPW, Art/Graphic Design, Business, and Computer Science. Cardinal Solutions serves as a communication, design, and marketing consultancy for its clients. Clients bring projects that are multifaceted, complex, and that transcend disciplinary borders. Williamson serves as the RPW faculty representative and associate coordinator for the project. PTW students contribute their knowledge and skills in various ways.

The Center also provides a recording space for *The Technical Rapport*, the RPW Department's podcast. The podcast draws guests from among RPW students, faculty, and alumni, as well as from a range of other places and contexts. Topics for individual episodes vary but have included usability studies, community engagement, innovation in technical communication, and world usability day. Kowalewski created the enterprise and co-hosted and co-produced the 2015–16 season with Michael Blodgett, a senior PTW student. Beginning in fall 2016, Williamson will join the production team.

Finally, the Center serves a space to facilitate creative and scholarly projects. Fall 2016 will see the launch of a new publication that focuses on usability studies, universal design, and accessible design. ZeeTwoTwoNine.org (a site whose name pays homage to the Center's original campus location) will host three professional and scholarly spaces for traditional articles and alternate media explorations of the subject matter. We envision the site as a space for both practitioners and scholars.

Linking Programmatic Assessments and Outcomes with Intellectual Commitments

Assessment activities, specifically annual portfolio evaluations and a CPTSC external review, led the PTW program and the RPW Department at Saginaw Valley State University to some key places during their relatively brief histories. The changes enacted and initiatives launched directly from the outcomes of assessment have altered the very identity of the program and its host department. All such programmatic endeavors have been designed to grow the department or program in some manner, whether through raising awareness of the students, faculty, and programs; through establishing partnerships; or through promoting the development or mission of the stakeholders who have become associated with PTW, RPW, and the Center.

For us, usability studies has emerged as a significant force for programmatic focus, growth, and maturation. Certainly, we might have directed our pedagogical and administrative energies and talents in another direction. However, the habits of discipline and profession that define usability studies seemed initially to align with both our programmatic needs and the professional development weaknesses we observed among our students. Because the PTW program was so strongly defined by a spirit of professional service and public intellectualism, a shift toward deeper commitments to participatory design made good programmatic sense for us. Because at that time usability studies was emerging as a broader locus of professional authority and expertise, we gained more momentum toward the programmatic shift upon which we have embarked. Indeed, our shift toward usability as a programmatic cornerstone has proven to be a wise decision.

As we move toward concluding our discussion here, we want to return to a few of the local values and forces that anchored our programmatic work of the past decade. Throughout this article, we have highlighted commitments to student development; ongoing assessment; professional service; public intellectualism and engagement; critical reflection and critical practice; and a commitment to ethical, responsible programmatic growth. Those values drive the nature of the assessment activities we implement, as well as the way we process and interpret the data we gather. We place great emphasis on respect and personal connection, whether with students, alumni, colleagues, or others. Programmatic action is for us a process that is inextricably intertwined with these values. In that spirit, we offer a five-part heuristic for programmatic assessment. In this brief

description of our heuristic for assessment, and the rationale behind the questions that frame that heuristic we offer traces of query, action, and outcomes. We see these heuristics as places for further exploration for PTW at SVSU. But we also hope they might offer hints at places where others might begin to explore solutions to their programmatic challenges.

Five-Part Heuristic for Programmatic Review

Before we conclude, we would like to offer a five-part heuristic that distills our assessment practices. With each of the five parts, we offer a question that helps drive our assessment focus. We then provide a brief rationale for why we believe these questions are important. Lastly, we offer an example for each heuristic illustrating how each is enacted at SVSU. While this framework is localized for our contexts, we hope others will find value for their own specific programmatic assessment.

1. In what ways do students drive programmatic evolution?

Rationale: What we have learned through our journey is that students not only have many insightful observations and suggestions, but they value being part of the process. They appreciate having a voice in departmental development, and they recognize the ways in which past students have helped to shape our current programmatic focus.

Ways enacted at SVSU: We include student feedback through a variety of formal and informal assessment methods, including focus groups, questionnaires, exit interviews, and in-class reflections. During the 2014–2015 self-study, for example, questionnaires and focus groups were particularly informative.

2. In what ways does (inter)disciplinary identity impact programmatic development?

Rationale: Usability studies and user experience are innately interdisciplinary (Redish and Barnum, 2011). Usability studies allows technical and professional communicators to leverage our disciplinary strengths and expertise within multi- and inter-disciplinary contexts and partnerships.

Ways enacted at SVSU: At SVSU, the Center for Usability Studies and Universal Design serves as a locus for inter- and multi-disciplinary activity. We assess this work through activities such as our URT.

3. What theoretical approaches inform programmatic initiatives and accompanying pedagogical practices?

Rationale: We recognize that technical communicators draw upon conceptual frameworks from many and diverse contexts, including

rhetoric, cultural studies, sociology, and information architecture.

Ways enacted at SVSU: Our theoretical approach is grounded in the humanistic, socio-rhetorical traditions of technical communication. We engage in theory building by contextualizing activities and projects for students. Assessment frequently involves portfolio review from our capstone course, RPW 481: Managing Document Design Projects.

4. In what ways do programmatic foci create opportunities for research, outreach, and service learning? Reciprocally, how do these foci enact programmatic advancement?

Rationale: By engaging with and working to solve usability problems, blending research with outreach and service learning, students provide their own linkages among programmatic cornerstones. Reciprocally, we consider it equally important to recognize the ways in which these activities might propel programmatic evolution.

Ways enacted at SVSU: The Center for Usability Studies and Universal Design serves as a space to foster and promote research, outreach, and service. Our forthcoming (as of this writing) digital publication, *ZeeTwoTwoNine.org*, for example, demonstrates the reciprocal nature of these threads.

5. What mechanisms exist for programmatic reflection?

Rationale: Because assessment activities provide opportunities to reflect on strengths and weaknesses, we find it useful to situate programmatic reflection in our localized context and create opportunities for ongoing comprehensive assessment.

Ways enacted at SVSU: Some of our reflections have been more focused and nuanced, such as our annual portfolio assessment. Others have provided breadth and depth, such as the external-team review. These reflective activities have painted a juxtaposition of both broad and fine programmatic strokes. Together, these snapshots have identified areas of strength and areas of growth within our department and program. One common focus that overlaps both strength and growth has been the Center for Usability Studies and Universal Design.

We hope this distillation of our localized assessment practices as a five-part heuristic proves helpful to our colleagues at other institutions. We also, however, intend to continue our discussion of this assessment framework in future scholarly projects and hope it inspires other scholars to extend this work.

Conclusion

Through an ongoing process of curricular assessment and reflection, we found ourselves moving toward an emphasis on usability studies at SVSU. That disciplinary endeavor provided the perfect mechanism for relocating our prior commitments to service learning and public intellectualism in an emerging context of professional development for students. Students saw usability studies as an approachable, attainable space within which faculty demands for reflective practice suddenly made sense. Better, it offered them a way to anchor theory in work they could frame for themselves with authority and confidence. Students who may have struggled to apply rhetoric could claim expertise with user experience and document testing. Better, usability studies for them are anchored in technology—in the software packages that allow them to gather and assess data that describes user experiences. These tangible trappings for conceptual work make sense to them.

Although ongoing assessments will demonstrate the success or failure of these new initiatives, we grow more confident by degrees that this confluence of concepts and practices in our program will yield a generation of new professionals who more fully embody and embrace the values that found and guide PTW and SVSU.

Our local efforts have been reinforced by shifts in the field of professional and technical communication and in areas of information design. As Meloncon and Henschel traced an increase in the number of usability classes taught in technical communication during the period of 2005–2011, our own focus on usability studies emerged as a programmatic emphasis. This focus also mirrors shifts in the ways in which user experience has evolved to be more focused on user engagement, as Zappen and Geisler note.

While our five-part heuristic hopefully provides a helpful apparatus for identifying programmatic foci at other institutions, we are left to ponder about other programs whose evolution has reflected or followed similar trajectories as our own. In what ways have usability studies and user experience emerged as a programmatic emphases elsewhere? How has programmatic assessment driven these foci? Beyond the work at our own institution, we hope to explore these questions further with our colleagues at other institutions.

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