

CCID: Articulating a Design-Thinking Center for Multimodal Communication

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ABSTRACT

In higher education institutions, writing in the disciplines (WID) and writing across the curriculum (WAC) programs are commonly received reluctantly by other disciplines and programs (Perelman). The context for these programs - servicing schools and departments but remaining apart from them - creates problems for facilitating effective service. At the University of Nevada, Reno, a new program began in 2015, called Composition and Communication in the Disciplines (CCID) and focusing on building student writing, presenting, and multimodal communication. To counter disciplinary reticence about such programs, CCID uses design thinking at its relational heuristic. In this context, design thinking serves as a means to engage with diverse disciplines and modes of communication active on campus while avoiding the perception of imposed disciplinarity. Although a number of scholars have written about the parallels between design and writing (Purdy; Norman), design thinking has yet to be used as part of a writing program in this way.

This panel presentation includes a short overview of CCID, followed by details of how and why this design thinking-based, multimodal communication program is developing. Hepworth will focus on how design thinking is used to teach the building of effective multimodal student presentations. Mays will focus on how design thinking can be used to enrich writing, encouraging students to see it as active engagement with dynamic audiences. Macauley will discuss design thinking as an opportunity to improve student agency and self-efficacy as communicators.

CCS Concepts

- Knowledge representation and reasoning • Arts and Humanities
- Education → Image composition

Keywords

Design thinking; multimedia; rhetoric; higher education; composition; writing; presenting

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ACM. ACM 978-1-4503-4495-1/16/09 \$15.00

DOI: <https://doi.org/10.1145/2987592.2987632>

1. INTRODUCTION

Writing in the disciplines (WID) and writing across the curriculum (WAC) programs can anticipate reluctance from other disciplines and programs, to put it mildly [1]. Even while most WID and WAC programs overtly recognize and respond to the situatedness of disciplinary communications, especially writing [2, 3], they can be seen as suspect by others for any number of reasons. At the University of Nevada, Reno, a new program began in 2015, Composition and Communication in the Disciplines (CCID), focusing on writing, presenting, and digital composing after freshman composition, developed within all majors, and integrated into all capstone courses. CCID needed a vehicle for that work adaptable enough to facilitate the range of disciplines and media/modes of communication active on campus, while simultaneously avoiding the perception of imposed disciplinarity. Design thinking is that vehicle.

Although a number of scholars have written about the parallels between design and writing [4, 5], especially as that writing becomes more visual and digital, a recent informal survey of writing program administrators reveals that none have seen programs taking design thinking as their foundation. Collaborations with design schools, such as Stanford's "d. School," [6] seem to happen, but those collaborations tend to focus more on resources in support of design curricula or bringing design training to specific students and projects than on an adaptation of design thinking to a university program that includes multiple media and disciplines.

2. SESSION CONTENT

This panel presentation includes six segments.

2.1 A very brief overview

This segment of the session describes three large-scale campus initiatives that contextualize CCID. First, UNR is implementing a new competencies-based Core curriculum to replace its per-course delivery of general education. Second, UNR is increasing and improving its assessment of student learning throughout the undergraduate curriculum. This initiative relies in large part on exactly the aforementioned student learning products. Finally, this segment concludes with discussion of Core Objective One: Effective Composition and Communication, to which CCID is designed to respond. This initiative requires emphasis on writing, presenting, and multimedia in first-year composition, within major courses, and specifically within capstones. Thus, born of the Core revision and necessitated by student-learning assessment, the work of CCID is significant in the ongoing development of UNR undergraduate curricula.

2.2 Articulations

This section focuses on three design thinking perspectives that are influencing CCID and its work.

2.3 Expanding the availability of design thinking

Hepworth focuses on how design thinking can be used as a framework for teaching students to design effective multimedia projects. The term ‘multimedia’ is traditionally used in comprehension and composition programs to refer to all forms of student communication work that are not entirely text-based, typically including a visual component. Specifically, it is commonly used to refer to student communication work in the form of digital presentations (including presentation slides). ‘Multimedia’ is less often used in comprehension and composition programs to refer to student work in the form of crafts, images, movies, and posters; these formats are far less commonly produced in such programs. This usage of the term differs from the more common understandings of multimedia in the design professions and in general use.

Due to the nature of the significant amount of the ‘multimedia’ work produced by students in comprehension and composition programs being in the form of presentations slides, this presentation focuses on them. Preparing and delivering presentations is a common composition task required of students in most, if not all, disciplines. However, the baseline level of student presentation quality does not make good use of the communicative potential of the communication format, as most students are not trained in the range of conceptual and practical skills required for planning, writing, designing, and delivering really effective presentations. Through CCID, we seek to change this common shortcoming in student performance.

The skills students need to excel in delivering multimodal presentations are typically taught in design and communication departments. They require ways of thinking and visual communication strategies that are unfamiliar to most other students. At CCID, design thinking is used as a framework to help familiarize students with these conceptual and production strategies. This presentation lays out how the five stages of design thinking are applied to teaching students from diverse disciplinary backgrounds to plan, write, design, and deliver really effective presentations.

2.4. Complicating writing through design thinking

Mays focuses on the hallmarks of design thinking, which include adaptability for use in “radically indeterminate” situations [7]. As many scholars have noted, these design situations are much like writing situations that also exhibit an indeterminate and evolving nature [4, 8, 9]. While this link between writing and design has been explored in previous scholarship, in this presentation Mays focuses on the less-theorized aspect of how design thinking can encourage fluidity in students’ conceptualizations of *audience*. A bedrock principle in rhetoric and writing studies, audience analysis in most writing pedagogies suffers from what John Muckelbauer calls a problem of “generalized methodology” [10]; in other words, in their attempts to stabilize the inevitably fluid nature of diverse audiences, students necessarily rely on stale generalizations that often reproduce reductive and damaging stereotypes. As Mays argues, in design thinking’s emphasis on an incorporation of dynamic user feedback [4] it is able to disrupt

students’ static conceptions of audiences. Writing pedagogies informed by design thinking model a writing situation that is markedly dynamic and that, for students, clearly displays a resistance to any stabilization. This feature of design thinking thus aligns well with calls in writing studies to recognize writing itself, along with all elements of the writing situation, as fluid, evolving, and dynamic entities [11, 12, 13, 14].

2.5. Design thinking and student writer, speaker, multimedia designer agency, and self-efficacy

Macauley sees important parallels between the processes of design thinking as articulated by Stanford University’s d. school [6] and the research of Bandura [17, 18] because both start with an actor working to solve a problem effectively. Writing approached in this way turns writing for academic purposes away from simply producing textual objects to meet specifications and, instead, encourages and even requires student writers to play a much more active and deliberately agentive and self-efficacious role in that writing. Design thinking facilitates agency and self-efficacy for student writers as both producers and recipients of writing; all of these parallels are essential regardless of medium, so they apply to presenting and multimedia work, as well.

Bandura’s theories of agency and self-efficacy remain largely unchallenged within the field of Social Psychology [17, 18]. He argues that agency is awareness of an active role, which is also necessary for design thinking. Self-efficacy is acting on that awareness [17], and design thinking cannot unfold without active engagement by the designer. In fact, design work assumes the recognition of and acting on problem-solving. Bandura was also first to articulate the components of agency and self-efficacy: intention, forethought, self-reactivity, self-reflectivity [18]. These components sync very well with design thinking that requires both intentional understanding of the problem and corresponding responses to it (empathy and definitions), generating ideas (ideation), making decisions about how best to proceed (prototyping), and seeing how well the work succeeded (testing).

A persistent challenge in academic writing (and presenting and multimedia) is getting students to see that work as something more than compliance or disembodied production. This challenge is amplified significantly when academic writing, presenting, and multimedia are required in courses outside of first-year composition or majors requiring significant amounts of writing, presenting, and/or multimedia. Most faculty are not trained in the teaching of these media. Design thinking puts students in an inevitably active role because, regardless of the problem, solution, or medium, students have to make something, which cannot be accomplished passively. Faculty in a variety of disciplines have relied for too long on lore about what teaching writing is or how they should go about it; design thinking allows CCID to effectively solve problems for them and expose them to a process by which they can do the same in their courses.

2.6. Open discussion, questions, and answers

This panel leaves time for discussion, questions, and answers with the audience.

3. ACKNOWLEDGMENTS

Our thanks to ACM SIGCHI for allowing us to modify templates they had developed.

4. REFERENCES

- [1] Perelman, L. WAC revisited: you get what you pay for. *Writing Instructor*, December 2011. Retrieved January 3, 2016, from The Writing Instructor: <http://www.writinginstructor.org/>
- [2] Soliday, M. *Everyday genres: writing assignments across the disciplines*. Southern Illinois University Press, Carbondale, 2011.
- [3] Waldo, M. L. *Demythologizing language difference in the academy: establishing discipline-based writing programs*. Lawrence Erlbaum Associates Publishers, Mahwah, 2004.
- [4] Purdy, J. What can design thinking offer writing studies? *College composition and communication*. 65 (4). 612-641.
- [5] Norman, D. Writing as design, design as writing. *Turn signals are the facial expressions of automobiles*. Diversion Books, New York, 2014. 175-186.
- [6] Take a d. School class. Retrieved January 3, 2016, from Hasso Plattner Institute of Design at Stanford, Stanford University: <http://dschool.stanford.edu/classes/>.
- [7] Buchanan, R. Rhetoric, humanism, and design. In Handa, C. ed. *Visual Rhetoric in a Digital World*. Bedford/St. Martin's, Boston, 2004, 228-59.
- [8] Carter, M. Ways of knowing, doing, and writing in the disciplines. *College composition and communication* 58 (3). 385-418.
- [9] Marback, R. Embracing wicked problems: the turn to design in composition studies. *College composition and communication* 61 (2). W397-W419. Retrieved July 8, 2016, from National Council of Teachers of English: <http://www.ncte.org/library/NCTEFiles/Resources/Journals/CCC/0612-dec09/CCC0612Embracing.pdf>.
- [10] Muckelbauer, J. *The future of invention: rhetoric, postmodernism, and the problem of change*. State University of New York Press, Albany, 2008.
- [11] Bazerman, C. *Shaping written knowledge: the genre and activity of the experimental article in science*. Madison: University of Wisconsin Press, Madison, 1988.
- [12] Dobrin, S. I. *Postcomposition*. Southern Illinois University Press, Carbondale, 2011.
- [13] Edbauer, J. Unframing models of public distribution: from rhetorical situation to rhetorical ecologies. *Rhetoric society quarterly* 35 (4). 5-24.
- [14] Schryer, C. F. Records as Genre. *Written Communication* 10 (2). 200-234.
- [15] Bandura, A. Self-efficacy: toward a unifying theory of behavioral change. *Psychological review* 84 (2). 191-215.
- [16] Bandura, A. Toward a psychology of human agency. *Perspectives on Psychological Science* 1 (2). 164-180.