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A Writing Typology for Designers

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Abstract

While design is often thought of as a visual field defined by renderings, models, and sketches, the use of writing can be just as pertinent and necessary. This paper presents seven writing types used by students uncovered during an ethnographic study of three interdisciplinary design studios. By reflecting on a compilation of writing practices, this study presents the modes in which we communicate design textually while reconsidering the possibility for new ones that incorporate interdisciplinary values and verbiage.

Keywords: design writing, ethnography, design typology, design tools, design education

1. Introduction

From simple jottings in the corners of sketchbooks to meticulously annotated diagrams, designers record physical evidence of ideas before these notions get lost in the corners of the mind. These markings not only serve as means of reference, but also as a way to process information in the moment. This ability to *"write visually"* through descriptive language allows listeners and readers to paint a picture in their own minds, prompting multimodal manners and exploration of concepts before adhering to visual conventions (Johnson Sheehan, 2002). Writing empowers designers to narrow down their options with verbal means of description, making more pointed and specific design choices not to be overrun with familiar and repetitious imagery. In this way, writing sets up a strong foundation for designs in ways that visual building blocks fail to.

From this, a thorough documentation of this written communication aims to highlight writing as an accessible practice within design. In a world that is largely image-driven, it is helpful to give names to things not only for ease in conversation about design, but also to better understand how to employ techniques as designers. Typologies have long since been used to further inform and make easy reference of common phenomena when designing or communicating design. By introducing a writing typology, design students can break free from the confines of the visual regime often aligned with the design process, including both the preliminary steps of idea formation and the detailing of ideas not easily facilitated by imagery. While this typology may seem familiar to those with knowledge and experience of the design process and its practices, this cataloguing of writing types does not aim to legitimize design, make it scientific and scholarly, or to make it more real. Rather, acknowledging writing types within the field of design *"enables a meta-experience of experience – a noting in the moment, and in reflection, the nature of a thing"* (Mideglow, 2013). This paper thus aims to make these writing types explicit through rigorous observations, analysis, and coding of categories.

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2. Methodology

2.1. Methods

Utilizing an ethnographic approach, this study examined three design courses at a large public American university during the Spring semester of 2020. Methods of inquiry included initial surveys, classroom observations over the course of 10 weeks, informal and formal interviews with key participants following observations, and accumulation of students' process work (notes, sketches, models, and other forms of documentation used to establish a final design) during observations and interviews.

It is important to note that students knew what their writing would be the focus of the study following the completion of informed consent forms. To better understand the role of writing within their projects as a whole and avoid bias, discussions were more comprehensive, focusing on written aspects but also students' work and their experiences as a whole. Because the purpose of this study was to look at the writing methods already in play, no writing was introduced by the researcher or the instructors, other than those already a part of their lessons and pedagogical practices. While this means that multiple examples were documented to meet an array of objectives, the inclusion of the three studios aims to help draw together the overarching writing typologies in existence despite the varied content of the courses.

2.2. Participants

Three design studios were recruited for this study in order to show a range of instructor approaches, curricular activities, design disciplines, and student skill levels. Studios observed included:

- Studio 1 - a fundamental course for first-year students wishing to major in a field of design (interior design, industrial design, or visual communications)
- Studio 2 - an advanced collaborative studio centered around inclusive design for those majoring in interior design, industrial design, and visual communications
- Studio 3 - an advanced collaborative studio on retail design for those majoring in interior design, industrial design, and visual communications

Examples from a range of students in the beginning of their design education to those nearing its completion serve to recognize the acquisition of design knowledge through different studio experiences. Furthermore, the interdisciplinary nature of these courses aims to position this study to look at how writing is used outside of disciplinary lines. Together, accounts from these courses effectively create a comprehensive corpus of writing to draw out overarching themes.

2.3. Theoretical Framing

Using qualitative data analysis methods (Miles, Huberman, and Saldana, 2013), a descriptive coding approach analyzed data for patterns in student writing found via their sketchbooks, posters, and digital documents. A preliminary round of coding clarified that students use writing in various capacities to navigate completion of their projects by identifying common forms also referenced by students: note-taking, a stream-of-consciousness writing, or questions to ask themselves later. A second round of process coding focused more on the context of the documented writing and what it was "doing," characterized by "-ing" words to connote an observed action in the data (L. Katz, personal correspondence, 2020). In this phase of coding, students' observed actions across the three studios were all considered in addition to what was being produced, allowing for a more in-depth analysis of the student writing by placing it into the context of the actions of students engaging with the design process. A final analysis using concept coding illustrated broader themes. Concept codes align with more summative generalizations of processes, not unlike the terminology designers have for the design process - empathize, define, ideate, prototype, test, as outlined by Chen and Venkatesh (2013). With this, the ten weeks of observations and interviews with students were explored more cohesively with the stages of the design process applied, illustrating overarching objectives for using writing that reflect both an end result and the actions needed to produce it.

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3. Writing Types

This careful documentation of writing uncovered its role in design studios, resulting in the formulation of the following writing types:

- Writing as building a design mindset
- Writing as making connections
- Writing as quick ideating
- Writing as captioning
- Writing as planning
- Writing as giving and receiving feedback
- Writing as reflecting

3.1. Writing as Building a Design Mindset

Drawing from Cross's (1982) ideas about the ways in which designers borrow from both the humanities (which are human-focused) and the sciences (which are problem-focused), a "design mindset" is the way in which designers approach a design problem. Designers borrow from both of these realms to think in a way that is both in the rational, cognitive sense, but also emotional (positioned to understand users' experiences) and imaginative (positioned to describe a new experience or idea) (Cross, 1982; Lawson, 2006). With this, writing plays a role in the task of negotiating what is known, felt, and invented.

This became apparent through observations in Studio 2, where students were in the midst of assimilating notes from recent observations they had completed of urban spaces. Students' similarly text-filled sketchbooks housed descriptions of areas and landmarks, rhetorical questions, and considerations for human interaction (Figure 1), all drawn upon by the introductory course material as presented by the instructor the week before. Here, writing serves as a medium that helps students become familiar with fundamental knowledge for their studio. Whether focusing on basic design principles or aspects of a project's content, students use writing to familiarize themselves with the topic and to express what they perceive as important.

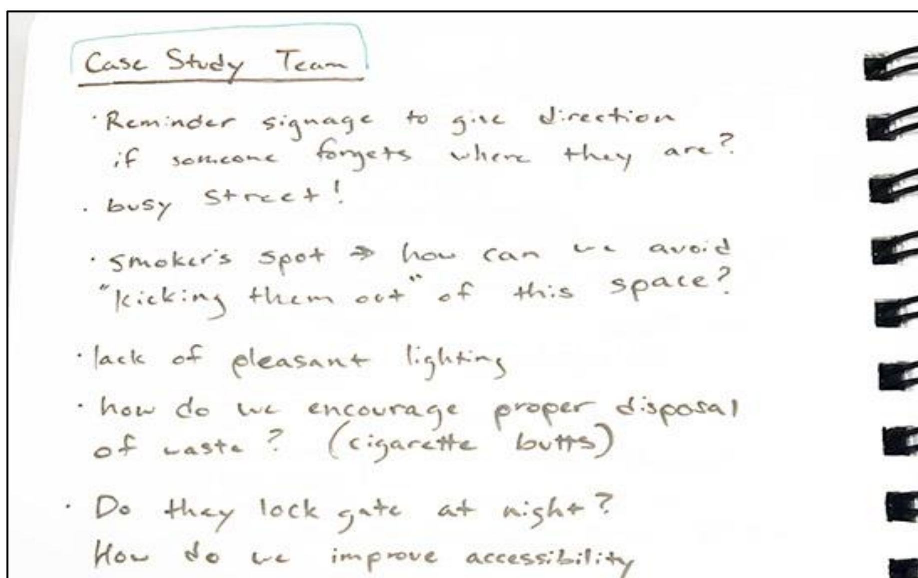

Figure 1. Writing as building a design mindset: Studio 2 student notes

3.2. Writing as Making Connections

This writing type served as a kind of hinge for students to begin to build on this provided language and material. Provided with the grammar of a design mindset, students work to translate what was presented in their own words and to create a bridge between what is known and what can be imagined.

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In Studio 1, the language of design was still a new concept that many students were still learning to grasp. One student used writing to draw parallels between intangible concepts such as “progression & change” to embody physical design qualities such as “fade” or “dissolve,” employing the tools and language presented in class prior to iterating visual design ideas (Figure 2).

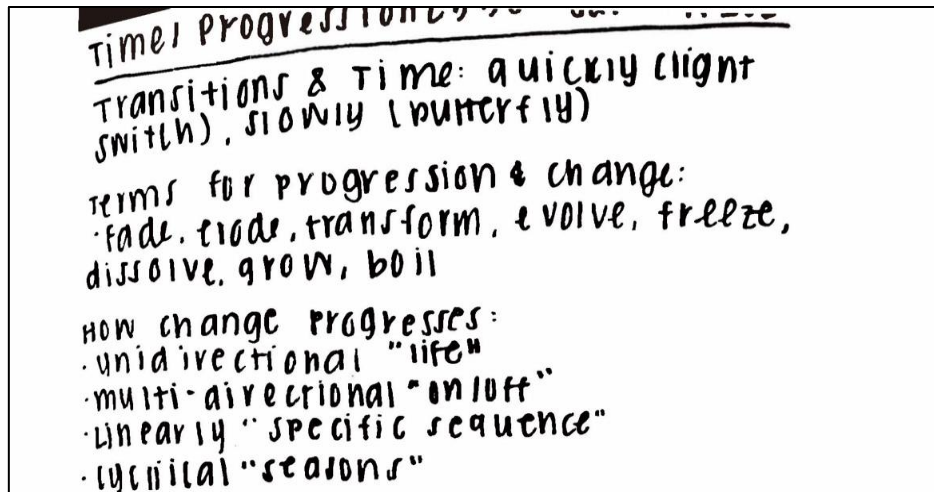

Figure 2. Writing as making connections: Studio 1 student notes

Writing as Making Connections serves to further define and qualify that mindset and framework for designing. Armed with a new design language and vocabulary from course lectures and a preliminary dive into a project’s context, students begin to make use of this terminology, essentially forming their own “sentences" from a learned vernacular and structure.

3.3. Writing as Quick Ideating

Once students identify the initial parameters for project goals and begin to familiarize themselves with its tools and language, they begin to come up with ideas. In interviews with students, writing was identified as a key way to “get ideas down” or to facilitate an “idea dump." Unhindered by the burden of getting the still-forming details right via drawing and empowered by the convenience and simplicity of words, students turned to writing to quickly convey their ideas. One student’s iPad screen portrays the physical qualities and perceived execution of imagined design considerations (Figure 3). This and other examples of writing empower students to move through these ideas quickly without adhering to a confined form or spending too much time working out a visual representation for each concept.

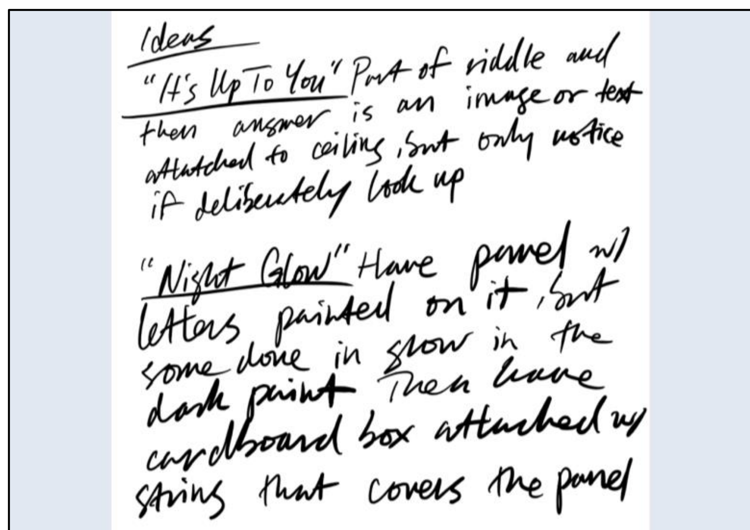

Figure 3. Writing as quick ideating: Studio 1 student ideas

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3.4. Writing as Captioning

Although writing types thus far have all been relatively text-focused, at some point students' projects things became more and more visual. Even then, however, text did not vanish. Writing continued to make its appearance as captions: words describing a sketched scene, post-it notes within a cluster of images, and arrows clarifying depicted qualities. In Studio 3, student groups arranged words and images on large boards to begin compiling a visual and textual representation of their project. Each group employed words and phrases on post-it notes as a naming tool, clarifying graphic content and identifying zones that the images are arranged in (Figure 4). Images of cotton, rolls of yarn, and raw textiles bordered by post-it notes with adjectives like "soft" and "justified," as well as verbs like "being connected," and outcomes like "guided discovery." Additionally, more abstract terms communicate how the group aims to use materials to illustrate the company's "holistic" value. From this, captions can be broken down into four groups:

1. Adjectives - describing the design's qualities as well as materials and construction methods
2. Verbs - demonstrating how users will interact with the design
3. Outcomes – anticipating what the design choices will achieve
4. Attributes – words drawing out specific qualities from images to identify what viewers should capture from them

This type of writing draws upon the ambiguous nature of earlier writing types to make strong connections between intangible terms and more palpable elements. As student designers move more towards visual representations of their designs, these words continue to guide graphic choices and create a bridge between the abstract and concrete.

Figure 4. Writing as captioning: Studio 3 attribute boards

3.5. Writing as Planning

While writing has since been used in ways to explicitly aid in the learning of major design concepts and the formation of new ideas, it also takes on a more background role in the form of planning. To-do lists, bullet points of needed materials, and charts aligning intent and execution all point to the prevalence of writing as planning. An example from Studio 3 in Figure highlights a group project's documentation of collective tasks, expectations, and key ideas, ensuring that internal thoughts were externally documented and communicated. With this, writing holds team members accountable and allows them to work more effectively, thus serving as a tangible contract for the group to reference.

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Figure 5. Writing as planning: Studio 3 student to do list

Here, text takes on a more practical, but also critical, role in the design process. From the student examples demonstrated here, writing works as a way to move ideas into presentable plans.

3.6. Writing as Giving and Receiving Feedback

As student designers take in course material, come up with new concepts, and carry out their plans, at some point they need feedback. Sharing ideas and providing constructive criticism have always been important components of design. While these activities may be primarily thought of as verbal, writing facilitates feedback while providing opportunities for students to both compose and interpret text to improve visual designs. As evidenced in Figure 6, students responded with encouraging words ("WOW! I think this idea is so fun!"), followed by musings for the authors to consider ("I wonder if there is an opportunity to make this a safety device..."). Textual conversations between students effectively crystallized feedback sessions in a more permanent sense than verbalizations alone.

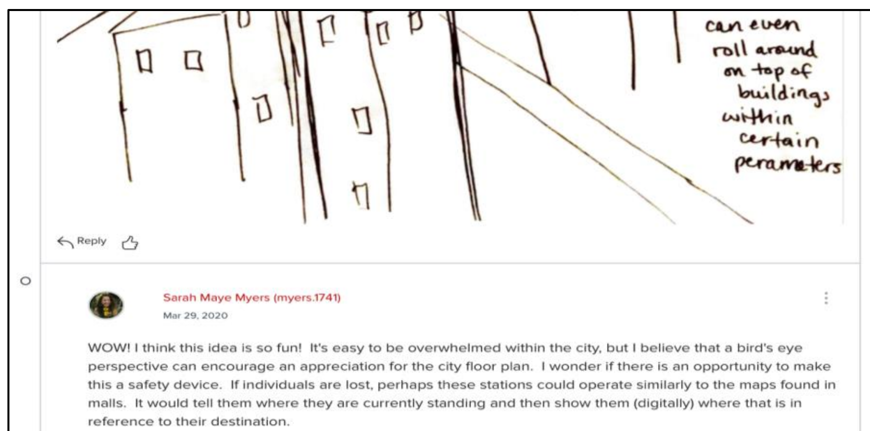

Figure 6. Writing as giving and receiving feedback: Studio 2 discussion board

With this key component of the design process rooted in the giving and receiving of feedback, writing plays an essential role in helping students to not only record the input of others, but to process it as well. Looking to the examples of students' exchanges presented, writing as giving and receiving feedback serves as a tool for students to challenge ideas, consider alternatives, and move designs forward.

3.7. Writing as Reflecting

Finally, students were found to use writing to document and process their ongoing thoughts throughout their projects. While design often focuses on constant iteration and "doing," reflection offers students an opportunity to slow down, ask themselves questions, and revisit other writing types. As inferred by interviews with students, making these thoughts explicit on paper or digital screens allows students to fully process their actions and remain mindful of their work.

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Although students were required to record and document their processes, most seemed to appreciate the work despite it being a tedious task. While one student noted that these written components of the course were difficult, they also “help in finalizing ideas." Another student in the course noted the importance of reflection posts, stating that documenting her thought process is important for portfolio review; this is because if a design doesn't necessarily “come out the way you want it to,” reflection can serve as a way for instructors and external reviewers to still understand the student’s thought process and intentions. The student further posited that process journals encourage students “to actually show that [they]...hold [themselves] accountable,” noting that “it is so easy to skip to the next step and not sit there and brainstorm 15 different ideas when I have this one really good idea that I like." In this way, reflective writing mirrors the iterative, repetitive aspects of the entire design process which requires students to constantly ponder their choices.

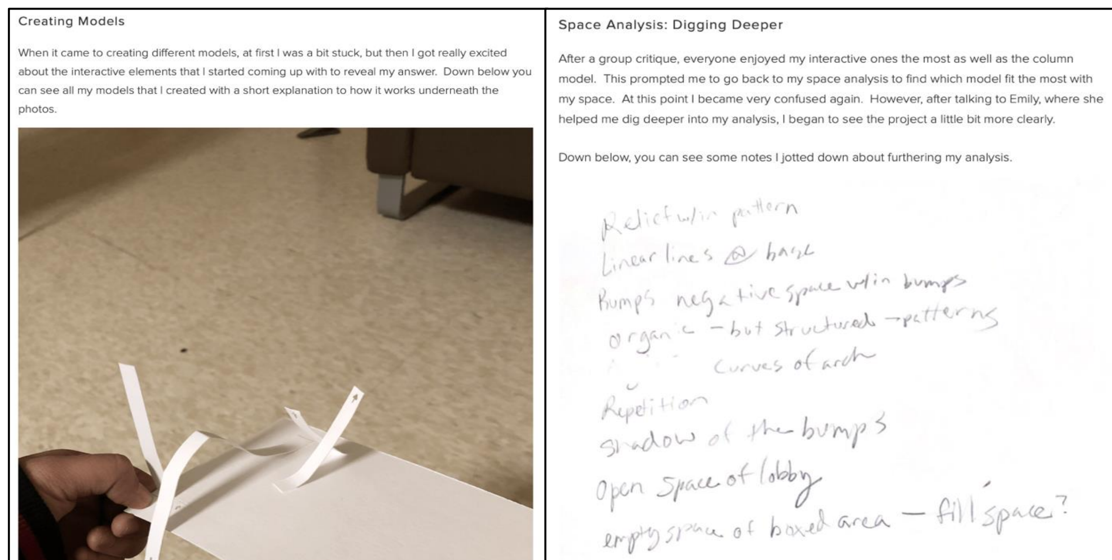

Figure 7. Writing as reflecting: Studio 1 student process post

4. Discussion

This ethnographic study aimed to understand the role of writing practices in design studios. While the act of writing played a critical function in students’ development of their designs, it also aided in their growth as designers. Drawing from design theory and practices on reflective teaching, each of the courses demonstrated strong connections between writing and 1) mentorship role of instructors, 2) the social nature of design, and 3) student reflection and self-awareness. Instructors used their professional and academic experiences to demonstrate writing practices to students, teaching them how to behave and excel in the field. This aspect of mentorship and modelling was furthered through opportunities for students to provide and interpret textual feedback in group critiques and class discussions, affirming the importance of social interactions in studio spaces. Finally, students demonstrated a strong sense of self-awareness in their writing practices and knowledge of how writing helped them as learning designers; from this, students gained important skills in written communication and decision-making to guide them throughout the design process.

4.1. Theme 1: Mentorship Role of Instructors

Within the educational context of the studio, students did not simply come up with ways to advance their ideas and document their design work without outside influences; instead, activities led by instructors created opportunities for students to demonstrate writing abilities and the role of writing in developing design concepts. Of the courses observed, instructors employed writing pedagogies to address *“the types of writing privileged in the university and target professions,”* connecting academic conventions with disciplinary values (Coleman and Tuck, 2019).

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With this, instructors embedded writing in their teaching practices while modelling what it means to be a designer, serving as mentors. Interviews with instructors revealed an intentional integration of writing from the very start of their courses and participation in the program, although this was not a requirement or result of the researchers' study. The instructor for Studio 1 supported the role of writing, stating that "it is significant in helping the student clearly and concisely state their design intent." This was most notably seen in the examples of "writing as making connections," and "writing as reflecting," in which students in Studio 1 use writing to both come up with the original intentions for their designs and reflect on their choices. Similarly, in Studio 3, writing served as a critical tool in understanding the abstract language of retail design, design strategy, and design as storytelling. The professor for this studio noted that she strove to "connect design education to practice" partly "through industry sponsored projects within technical and studio courses where professional engagement is incorporated within the process." This is seen in students' use of writing that mirrors professional practices, such as "writing as captioning" and "writing as planning," both used to explicitly and tangibly track ideas and delegate design tasks. Finally, the instructor for Studio 2 encouraged students to write down questions for their classmates and ask themselves how information applies to their ideas during class discussions, made textual with "writing as building a design mindset" and "writing as giving and receiving feedback." By contributing this anecdotal advice, the instructor aligns writing practices with designerly practices.

Drawing from literature on the importance of feedback within design studios, instructors are essential to *"include inspiring students to take ownership, fostering creative tension, and giving students the opportunity to fail as well as to succeed"* (Yilmaz and Daly, 2015). They thereby encourage students' reflective practices, but also provide a semblance of what design will look like in the professional world by *"learning by doing"* (Lawson, 2006). Writing practices that facilitate these methods of showing students how to be good designers and providing opportunities to act out this role therefore promote writing as a valuable skill in both theory and practice.

4.2. Theme 2: Social Nature of Design

Interactions between students and instructors can be similarly expanded to those between students and their peers. In each of the studios, the learning and acquisition of new terminology and concepts did not take place in silos; class time was largely used for students to not only share the progression of their ideas with their instructors, but others in the course as well. This idea of the studio experience as a social one is not new to veteran designers, but is further justified by Vygotsky's Social Development Theory, which effectively claims that "two heads are better than one," supporting moments when students can work collectively, share ideas, and ask for feedback (Social Development Theory). While this is often assumed to be carried out verbally, students consistently referred to their writing when engaging with their peers, pointing to their notes in "writing as building a design mindset" and application of terminology in "writing as making connections." Students supported each other in the sharing of these documents, giving visibility to the remnants of their thoughts.

Moreover, due to the advent of COVID-19 during this study, much of these interactions moved to an online format in which students emailed, messaged, and used online discussion boards to communicate with one another. As observed in each of the design courses for this study, students also engaged in guided and more informal discussions with instructors and peers. Writing facilitated these interactions, with students serving as scribes of studio dialogue through "writing as giving and receiving feedback." As students worked through abstract and new concepts, the social nature of the design studio could be seen as a place for making these complex ideas more approachable and transparent with writing.

4.3. Theme 3: Student Reflection and Self-Awareness

Finally, design students used writing for themselves to not only reflect on their designs, but to also reflect on themselves as learners and emerging designers. Drawing from the previous two themes, students develop an *"inner speech"* by first working through abstract design concepts within their studios alongside their instructors and peers (Social Development Theory). By using writing to facilitate communication externally, students simultaneously promote learning between each other and

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within themselves. During an interview with an advanced student in Studio 3, she noted the importance of text as "an idea dump" to "work through the ideas versus just thinking about them," noting that just "seeing the words on a page helps." This student's comments place writing as a tool for making ideas more concrete and real than a fleeting thought, yet also as a means of getting concepts recorded quickly to be further detailed at a later time, as illustrated in "writing as building a design mindset," "writing as making connections," "writing as quick ideating," and "writing as captioning."

Furthermore, a student in Studio 1 noted that writing "helps in finalizing ideas," communicating the value of writing ideas down as not only efficient and convenient, but necessary for remembering and referring to ideas later. This is reminiscent of Schon's position that texts (in his case, sketches) *"'talk back' to the designer"* (Stompff, Smulders, and Henze, 2016). In this way, design students are constantly referencing their writing *"to make sense of them, potentially with a view to informing future choices, decisions or actions"* (Reynolds, 2011). While these ideas are most obviously supported in "writing as reflecting," students' engagement with the iterative process of design invited them to use writing as a form of reflection in each stage of their projects.

5. Conclusion

5.1. Implications for Design Pedagogy

Writing was largely found to be directly ingrained in course goals and subject material, making it relevant and desirable to students. This blend of theory and practice effectively describes Schon's (1983) concept of reflection-in-action, or *"on-the-spot surfacing, criticizing, restructuring, and testing of intuitive understanding of experienced phenomena"* (Reynolds, 2011). Given the social nature this definition implies, reflective practices must take place within a specific context, which Schon terms a *"reflective practicum"* in which students *"live in"* (1983). The studio effectively meets this definition, providing a kind of special ecosystem for students to grow skills to prepare for the profession over the four (or so) years of their college program. With this structure already in place, a successful integration of writing, then, integrates writing as a characteristic of studio culture, assesses the kinds of writing already taking place, and pinpoints examples of writing which serve to move designs forward.

5.2. Implications for Design Students

Along with these implications for design educators, so too are considerations for students. Most college students largely experience academic writing in the form of Freshman composition papers, resumes, and the occasional essay. With this, it is important to consider assignments authentic to design, which may look a bit different from 5-paragraph essays and lab reports students produced in high school. Design writing may then be an entirely new genre, *"likely to be multilayered and metaphorical, metaphysical and qualitative, rather than transparent and one-dimensional"* (Doloughan, 2002). This style or language will likely model the design process itself – messy, abstract, and highly visual – which may not comply with more academic conventions of writing. To practice and develop this, students should be afforded low-stakes, approachable means of writing serve as an avenue to integrate more rigorous, scholarly writing into their practice.

5.3. Implications for Design Professionals

The use of writing in design education also has a direct impact on the profession as well while preparing future designers. Reynolds (2011) suggests that involvement by employers in the training of future employees is paramount to the development of the profession; students must have a clear idea about what the expectations will be for them in the field. Design students must encounter lessons and experiences with strong connections to the profession, connecting theory with practice. With this, we cannot treat writing as separate from the studio experience, an activity for students to hone within the silos of their dorm rooms. From this study, writing is every bit as social, iterative, and imperative to the design process as more visual mediums.

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Furthermore, instructors’ professional experiences and ties with local design firms, as presented in this study, demonstrate moments of success: writing activities that directly relate to design tasks, workshops with designers using writing, and opportunities for creative expression spark student interest in writing and acknowledgment of it as a valuable skill. With drafting, renderings, and prototyping all taking place under the models of professionals set before students, so too must writing.

5.4. Final Thoughts

This study examined the writing practices observed by students across three design studios. Additional studies conducted at other universities are needed to represent the goals and curriculum of various design programs, providing a more holistic overview of how writing is used in design studios. Furthermore, while the focus of this study was on students’ experiences, work, and relationship to design and writing, additional studies following a longitudinal format would allow for the comparison and validation of my impressions from this study. Conclusions of this study suggest that students develop their writing skills through activities provided by studio instructors and professional partners, serving as a model for design practice. With this, additional studies should explore more thoroughly the breadth of tools being used and compare the efficiency and success of their implementation in design classrooms.

The writing practices observed by design students not only demonstrate the apparent parallels between the writing and design processes, but also students’ and instructors’ recognition of writing as an integral part of design. Writing is not seen as separate from design, but part of it, following the same sets of practices founded on principles of process and iteration. With this, writing can be seen simply as another language, an alternative format for designers to communicate through when they don’t yet know the right color, shape, or other tactile characteristics of their design. It is not a matter of “showing” with images or “telling” with words, but revealing with both the concepts and plans held in one’s mind.

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