

Writing for Beginning Designers

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Abstract

This paper concerns the integration of writing in the first semester of a beginning architecture studio course. I imagine my audience will receive this topic with considerable suspicion and resistance, if not flat out hostility. My purpose, then, is to assuage some of the doubt that surrounds writing in the studio, and for those who may be persuaded, to provide some clear direction for adopting similar practices in your own courses.

Writing in the Beginning Architecture Studio

The topic of writing in the architecture studio is not new. Writing across the curriculum is associated with educational movements of the early 1970s that stressed critical thinking and collaborative learning. These movements are still alive in the objectives of university-wide writing composition courses; nevertheless, they are typically championed by instructors outside the architecture studio and generally viewed as external and additional to the proper education of an architect. But what if this were otherwise? What if writing was taught by architects and viewed as foundational to their education? What would be the benefits and risks to students?

It might be necessary to delimit my authority in considering this topic. First, I am an architect who was taught—in the tradition of the Cooper Union—to see truth in the things we create. My confidence as a writer is a distant second, if that, and my special training to teach writing amounts to a mere five weeks in the summer of 2018.

In the previous fall—the fall of 2017—my colleagues and I had assigned our first-year students a project on architectural polychromy, largely in the spirit of Johannes Itten. Toward the end of the assignment, we were concerned about their retention of concepts and principles, and so assigned a short descriptive writing assignment intended to assess their learning and improve their chances of a successful final review. Upon seeing their responses, we immediately ushered the students to the University's Writing Center for assistance. With appropriate

charm and grace, the Writing Center returned the favor, asking instead if we—the instructors—would like to participate in a Quality Enhancement Plan to train us in the best practices for including writing in traditionally non-writing based courses. With the support of a university grant through the Provost's office, fourteen faculty members from across the university met every day for five weeks of intensive faculty development. The outcome of this development was the renovation of a course that included writing across the curriculum; in our case, the renovation of the first semester of the undergraduate architecture studio sequence.

Description of the Renovated Course

A brief description of the renovated studio course is warranted. Students enter the first semester of their architecture education from a wide range of backgrounds, with a wide range of beliefs, interests, and abilities. The goal is not to cull the herd, but rather to prepare as many as possible for the education to come. With this in mind, the semester is divided into five projects, in five discrete learning modules, with a progressively accumulating set of learning outcomes.

- Project 1 is dedicated to an inquiry into how and what architecture represents. It functions within the semester to prioritize interpretive and critical thinking. Technical knowledge is subordinated, although the project covers basic architectural skills through photography and collage.
- Project 2 is concerned with architectural polychromy. It functions to introduce intense formal training alongside humanistic considerations of meaning and material. Working in acrylic paint demands a particular ethos which is a prelude to their future commitments. Most students have very limited exposure to color theory, and so the project offers a degree of socio-economic parity as well.
- Project 3 takes up workshop practices through intensive training in woodworking, metalworking, and formworking (i.e., casting in plaster or concrete). Students gain firsthand

knowledge of the standards they are capable of achieving. While this project is more explicitly technical, it concludes with assignments that require the integration of things learned in the previous projects.

- Project 4 is synthetic, meaning it takes the first three modules and synthesizes them in an open-ended—some would say “ill-structured”—problem solving exercise. For the past several years, the problem has been to create a piece of equipment that transforms a place of circulation into a place of dwelling. In more common terms, the students work in teams of two to create a chair sited on a staircase.
- Project 5 is reflective. It consists of a digital and hard-copy portfolio, generally formatted according to the student publication of the School.

In each of these projects, students are assessed in three major categories: products, processes, and critical thinking. Products refers to the quality of their final artifacts and amounts to 40% of the project grade. Processes refers their attention to the phases leading up to the final artifact, and amounts to 30% of the project grade. The remaining 30% of the project grade is given over to critical thinking, which is where writing across the curriculum enters into the course.

For each of the five projects, students are expected to accomplish a short writing assignment that they hone and hand in with their final product. This is typical, but not the most important feature; more important are the short informal writing assignments the students accomplish by hand in their notebooks and throughout the duration of each project. At the beginning of almost every class, students are given a two or three sentence “critical writing prompt” that asks them to explore and free-write about a particular topic or concept. Engaging in this exercise, which is spontaneous and lasts no more than fifteen minutes, prepares students for a lecture or discussion by providing a “scaffolding” that anticipates specific aspects of the upcoming learning experience. These exercises are not aimed at improving their writing, but rather, at promoting critical thinking and deepening their engagement with disciplinary subject matter. The outcome of this integrative program, which was the major lesson of the faculty development workshop, and which has been well-supported by research in teaching and learning, is that deep and engaged disciplinary learning through writing does not depend on the quantity of writing, but rather on the quality of the writing assignments.

And what qualifies a writing assignment as good? Scholars are generally in agreement that a good assignment prompts a high level of critical thinking; initiates students into the big questions of a course; teaches disciplinary ways of making, observing, knowing, etc.; and promotes self-reflection or metacognition (Bean 2). To enjoy the benefits of integrating writing, instructors must design writing assignments as they would design any project or program—that is—with care. This is a daunting task, and it doesn't help that there are several widely-held negative beliefs that discourage writing in courses like the architecture studio. I will consider five of the most common.

Some Common Misconceptions about Writing

Misconception 1: Writing is not appropriate to an architecture course. Many of us believe that writing is suitable in literature or history courses but not in an architecture studio. Certainly writing has a place in the professions that are associated or allied with architecture, but the argument for its appropriateness in the studio is broader than professional preparation. What constitutes a writing assignment is always up for debate, meaning that we may dismiss our preconceptions about what a writing assignment should look like. Writing can take almost any form from bathroom graffiti to dissertation to building signage. Regardless of the assignment, writing is proven to challenge and condition a student's critical thinking. Furthermore, it provides teachers with tangible evidence of that critical thinking, which is necessary if this is to be part of assessment. For students, writing allows a direct opportunity to struggle with a specific concept or process from our discipline, or it may serve a metacognitive aim that helps students reflect on their own thinking and learning in the studio. Metacognitive strategies, including well-known strategies for reading comprehension and note taking (i.e., the Cornell Method), are appropriate to any course in which we ask students to improve ability to learn (McGuire and McGuire).

Misconception 2: Writing will take time away from learning required content. Consider the difference between how much is covered or introduced by a teacher versus how much is learned by a student in a meaningful way. Then consider the rapidly increasing amount of knowledge associated with any given discipline. Robert Zemsky argues that educators should prioritize some content over others and then teach the critical thinking skills that will allow students to acquire and apply new disciplinary knowledge. Other research suggests that writing—especially reflective writing—can increase the amount of subject matter students learn by highlighting their learning as personal and purposeful, and thereby motivate their learning outside of the classroom (Bean 11). Writing in this sense can help a student

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identify and articulate the value of what they have learned for themselves and for others, which prompts deeper engagement. Writing takes time, yes, but it also offers a depth of inquiry that quickens learning.

Misconception 3: Writing will bury teachers in grading. Adding writing to a course in which we are already attending to twenty hours of critique each week sounds overwhelming, but keep in mind that research has shown that deep learning is not dependent on the amount of writing but on the quality of the writing assignments. There are many ways to provide quality writing assignments and reduce the amount of student work to be reviewed. For example, many benefits of writing can be reaped by students even if the assignments are not graded, even if they are not read. In class free-writing assignments are an excellent way to scaffold key concepts and prepare students for a class meeting. Spending the first fifteen minutes of class silently writing takes nothing away from office hours and in fact improves the quality of discussion and retention of content.

Misconception 4: Writing requires special training or expertise to teach. Many of us believe that because we struggle with our own writing that we are not capable of teaching students to write. Furthermore, we do not know the intricacies of grammar, composition, or even the range of available genres. Research has shown that the best writing teachers are simply honest readers from within the discipline (Bean 13). And there is good news about grammar: First, grammar is entirely a matter of decorum—there is no universally correct grammar, there is only grammar that is appropriate to the circumstances. Second, instruction in grammar and spelling has been shown to have minimal impact on critical thinking, hence, in most circumstances we can ignore grammar so long as it is not an embarrassment to students.

Misconception 5: Students did not come to architecture school to be writers. No. Likely not. Nevertheless, they are not granted amnesty from engaging the most significant concepts of our discipline. Integrating writing can improve a student's engagement with subject matter of their discipline, which can improve the quality of their work.

A Plausible Approach to Course Development

In his seminal book, *Engaging Ideas: The Professor's Guide to Integrating Writing, Critical Thinking, and Active Learning in the Classroom* (2011), John Bean articulates an approach to course

development with the intention of integrating writing for critical thinking and deep engagement with disciplinary subject matter (2-10). This approach, supplemented and tested with a review of the relevant scholarship of teaching and learning, provided the premises on which the first-semester architecture course was renovated. Here I offer a sequential summary of the premises for adoption in future courses.

Step 1: Embrace the general definitions and principles of critical thinking. Simply put, critical thinking involves “identifying and challenging assumptions and exploring alternative ways of thinking and acting” (Brookfield 71). “In critical thinking... assumptions are open to question, divergent views are aggressively sought, and the inquiry is not biased in favor of a particular outcome” (Kurfiss 2). According to Richard Paul and Linda Elder (2009), a “well-cultivated critical thinker” is characterized by their ability to “raise vital questions and problems...; gather and assess relevant information...; come to well-reasoned conclusions and solutions...; think open-mindedly within alternative systems of thought...; and communicate effectively with others in figuring out solutions to complex problems” (2). While there is considerable agreement on the definition of critical thinking, there is little consensus on how it should be taught. One common approach is to focus on the creation of arguments in the response to open-ended problems. In this context, writing can be both a process and a product of critical thinking (Bean 21).

Step 2: Organize the course to emphasize critical thinking as a cognitive learning outcome. Critical thinking is learnable. It is a practicable—not theoretical—form of knowledge. In the renovated first-year architecture studio, the principle learning outcome is now for students “to demonstrate a basic ability to define, debate, and defend a project critically.” Scholarship on teaching and learning has identified several principles for promoting critical thinking in course development. Central to these are the notions that assigned problems should motivate sustained inquiry, emphasize “applying” rather than “acquiring” knowledge, and require students to justify their work in speaking and writing with discipline appropriate evidence. Furthermore, courses that support collaborative learning and nurture metacognitive strategies are shown to improve critical thinking in students (Kurfiss 88-89).

Step 3: Create a list of critical thinking problems and prompts. Open-ended problems that sustain disciplinary and developmentally appropriate inquiry are not easy to generate. Bean suggest keeping a list of questions and prompts ranging from perennial issues to highly specific questions. Scholarship of

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teaching and learning emphasizes that a variety of problems and prompts promotes deeper and more meaningful learning. (Bean 6). This supports the development of variety and distinctness in a course's learning modules and contexts (this will be discussed further below under the heading of *rhetorical thinking*).

Step 4: Develop a repertoire of ways to deliver critical thinking prompts and problems. Along with a variety of prompts, it is helpful to have a variety of ways in which these problems are presented or posed to students. These delivery mechanisms may include formal writing assignments; exploratory, low stakes, assignments; small group assignments; class starters, scaffolding, or free-writing assignments and questions; and practice exam questions. As mentioned above, group discussions in the first-semester architecture studio thrived when scaffolded by a variety of in-class writing prompts. When asked about the writing prompts in their end-of-semester course evaluations, student responses were that "the critical thinking essays challenged my way of thinking and writing" and "the writings, in my opinion, were critical to each project because it gave us the opportunity to deeply reflect on what we were expected to learn" (Fall 2018 ENDS 105 511).

Step 5: Create opportunities to include exploratory writing and talking. Kenneth Bruffee (1984), following the work of Lev Vygotsky (1978), has shown how writing is entangled with conversation. The collaborative nature of conversation promotes the search for divergent views and alternatives, and hence, fosters critical inquiry. When this conversation is specific to our discipline, this critical inquiry points students toward being experts in their field. One approach to this kind of conversations is to ask students to write about how they imagine talking about architecture at the end of the semester, year, or degree program. This gives them opportunity to reflect critically on their existing knowledge while projecting themselves optimistically into their future selves.

Step 6: Develop strategies for showing how our discipline uses evidence to support claims. Students are often baffled by the various types of evidence used by architects to support their claims. According to Bean, "Teachers can accelerate students' understanding of a field by designing assignments that teach disciplinary use of evidence or that help students analyze the thinking moves within an evidence-based argument" (Bean 9). Architects ARE particularly weak at acknowledging the circumstances of an argument and the need for appropriate kinds of evidence. Understanding when formalist evidence is appropriate requires understanding formalism in a meaningful

and accessible way, and furthermore, in a way that distinguishes it from other approaches to architectural argument.

Step 7: Develop a voice for coaching students in critical thinking. Aside from providing the opportunity for sustained inquiry, teachers need to develop strategies for nurturing, assessing, and modeling the critical thinking and behavior they imagine their students demonstrating. Architects are widely familiar with the modes of coaching demands in a studio, but Bean also stresses that learning improves within a generally "supportive, open classroom that values the worth and dignity of students" (10).

Step 8: Treat writing as a process. Writing can be both a product and a process of critical thinking, however, development of critical thinking takes time and practice and the refinement of a final product can often truncate an opportunity for deeper engagement with a topic or concept.

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