Architectural action is never disengaged. Although form is the product of any architectural action, study of the role of building in culture seems to indicate that ‘pure’ form is profoundly compromised by historical understandings, by the facts of contemporary culture, by nostalgia for the future, by the actual physical conditions of the realm that buildings find themselves a part of and contribute to, by perceptions of the collective, by prescriptions of the powerful, by aesthetic concerns, theoretical concerns, technical concerns, economic concern, political concerns, environmental concerns, by matters codified in allusion to the body, sexuality, and the city, by the burden of received meanings and their shadowy and shifting nature, by the possibilities and limits of reference, by the magic and the real, by a spectrum of information and sensibility that implies that form is in fact much more than just form, that it is mediated by arguments outside its pristine envelope.

-Michael Stanton, from Disciplining Knowledge: Architecture between Cube and Frame ¹

Incoming

As one of only two public undergraduate programs in architecture in California, virtually every student in California who commits to the Bachelor of Architecture degree will apply to Cal Poly, San Luis Obispo. Our notorious position within Design Intelligence ² and other rankings lures an increasing number of out-of-state and international applicants as well. ³ This is brought forward not so much to crow, as to establish we currently have the benefits of a pool of students with a strong record of traditional academic achievement as our freshman class. This demographic has major advantages as well as drawbacks however. In general, there is, due to past concerns over grade point average, an aversion to possible error or being wrong, or, in other terms, for testing the possible to discover or know vs. ‘objective’ forms of deduction. The students come to us with years of conditioning that grades are reflection of personal value, with students rarely earning a B grade, let alone a C grade. As a result, any mode of exploratory study at the university, whether studio based iterative learning, rife with trial and error, ambiguity, and leaps of faith, is initially only cautiously embraced.

Conversely, some forms of writing are typically modes students have excelled in, but here again, the idea of crafting an essay, where personal viewpoint is requisite in the piece, is almost a lost art. Exposition and rote description as factual devices are safe havens, but argumentation and developed opinion are harder to induce.

Concurrent with the development of our new Beginning Design curriculum, within our larger University accreditation process, reviewers looked at broad University Learning Outcomes [ULO] requisite for all graduating students, including outcomes in writing ⁴, which internal reviews showed to be a concern across the university. This included a rubric for considering writing assignments. ⁵
While the undergraduate architecture program flow chart of coursework prescribes associated university-taught General Education courses in writing, speaking and reasoning across the freshman year, their application within the first years of the architecture program was questionable. Writing in studio courses was elected on the part of a minority of faculty and non-existent in others, the requisite history survey, due to large lecture format, was an experiment-in-progress with some evaluation by writing, and the requisite history-theory-criticism seminar was often delayed by students until fifth year. As the new Beginning Design curriculum was formed, an appeal was made to the faculty-as-a-whole to reconsider the use of a former course still in the catalogue, ARCH101 Introduction to Architecture, as a beachhead for writing in the discipline, and to get students used to producing a writing portfolio as a reflective companion to a studio portfolio.

**Right Stuff = Write Stuff**

If the studio brings to mind the core strength of architectural education, perhaps nothing conjures up the stereotype of irrelevance and drudgery as does a large scale lecture. In attacking the problems of writing and lecture, obvious issues emerge, such as: what is the content that will be written about, what is the pedagogy, what are the outcomes to be measured, and what is the method of evaluation and feedback given scales of work to be monitored. The initial course answered this with the pun the right stuff equals write stuff; the phonetic write/right stuff as verb and adjective modifying noun. The primary outcome, easily agreed to, would be writing, and lots of it, but moreover, we hoped to develop an attitude toward writing that is another vehicle, another tool, in its many forms to aid student design growth and understandings. Initially, content remained the issue for some faculty.

When this type of course was initially proposed for freshmen several years ago, the idea of having a freshman theory course was greeted by then senior faculty by the question: which theory? Faculty concern over what theory obscured benefits of theory-as-open-topic where the student’s frame of participating with world was challenged and opened as natural to the way one explores. In this iteration the driving theory was also intended as stealth, in that it was not presented as theory, so much as a background of theories to topics-within-application. This was found to be ambiguous enough that it had buy-in to proceed.

The trick was really the pedagogy- to make the class meaningful. We sought the mode of writing application as needing to be varied and broken up as to not get too repetitive, and looked to vary from quarter to quarter in the nature of its complexity and rigor.

**Phenomenology of Content: More than Buildings**

I want to thank you for the course…I never had any understanding there were ideas behind buildings- Psychology major’s comment after ARCH 320 London, Architecture and Place

While some of our students have had the advantage of a European Grand Tour, or other travel outside their home culture, and some have interned with architects, the average entering freshman architecture student has little background in architecture beyond personal experience in the lifeworld. The true value of an Introduction to Architecture course is to provide a new form of understandings where self is not denied, or normed, but where the student is offered entry into a mapping of the broad spectrum of the networking of ideas within the discipline, allied fields of design, and important topical adjacencies. In this case, content is requisite based upon an underlying meta-theory of how all those components appear to the students, are subsequently related by guests and students, and finally engaged by guests and students. From a phenomenological point of view, this is literally what appears in the
curriculum, profession, and lateral world of design. The outcomes are required to be appropriate for their entry ability to have efficacy past the modest one unit credit/no credit class, help the concurrent studio process, and prepare the ground for future courses. The pedagogy sought to be careful to negotiate the minefield of large lecture format, to be seen as valuable by the student.

Part of larger new Beginning Design strategy was to acknowledge our 'asymmetrical learners', and carefully construct a studio culture around newly acquired visual-spatial learning, but not leave the documented strengths in verbal-linguistic capabilities behind or lie fallow. The idea explored with our faculty was that within an introduction to Architecture course, we could develop content within architecture in concert with, and at a faster pace than studio. The broad objectives were three fold: 1) to vividly illustrate the topics within the curriculum the students were a part of, demonstrate topic interrelatedness, and developing a common vocabulary, 2) expanding upon their reference base for ideation within a project based lateral survey where guests traced the arc of ideas in their own work, from influences, through concepts and development into realizations, and 3) that the act of architecture is interrelated with our sister professions in design, making, and thinking.

The course spans all three quarters, and since this is a huge period of growth for the students, it was determined that the content would change over the quarters as well. As a larger program of approximately 750 students and fifty faculty, it is important students see the value in negotiating a variety of viewpoints, so the majority of the lectures were guests from our faculty. We also wanted the students to see a crossection of people based on where they were in their own professional development, so recent alumni were also invited to share experiences in initial application and exploration of their design education.

Fall quarter lectures were based on a lateral set of topics that we wanted the students to consider about over each project they would have, and seed other ideas that would be subsequently developed in the curriculum. Several lectures were situated to have additional impact based on the project at hand in studio.

The very first lecture, delivered by the author, addressed the immediacy of the student thrown into the chaos of their first week in architecture school and was simply entitled A Map of the World, but the underlying theme was one of patience. It was built from Rilke’s prose of seeking questions vs. answers:

...You are so young, so before all beginnings, and I want to beg you, as much as I can, to be patient toward all that is unsolved in your heart and try to love the questions themselves like locked rooms and like books that are written in a very foreign tongue. Do not now seek the answers, which cannot be given you because you would not be able to live them. And the point is, to live everything. Live the question now. Perhaps you will then gradually, without noticing it, live along some distant day into the answer. Resolve to be always beginning to be a beginner! - Rainer Maria Rilke, Letter Four of Letters to a Young Poet

The lecture was a quick overview of the careers of Frank Gehry, Daniel Libeskind, Zaha Hadid, and Herzog and DeMeuron, with early work contrasted against contemporary work. While many California students know of Gehry via the Disney Hall in Los Angeles, they don’t know of the corrugated cardboard chairs or his own house of forty years earlier. Zaha was traced from her constructivist inspired drawings and the Hong Kong Peak competition. Libeskind was traced from Micromegas at Cranbrook. Herzog and
DeMeuron were traced from their individual roots. The idea of patience grounded that even in staritecture, all is not revealed at once; school is just a start, and that one has entered a career of continued growth and learning, and even reinventing one’s self. Sources, whether texts, art, phenomena, or built work, illicit attention, attention is subject to reflection, and reflection may lead to questions. Questions, with projects as necessary realizations of search/research, are merely provisional answers, and fuel a continued life of inquiry. Lectures following addressed history/ theory/ criticism, light [as they began 3D studies in studio], materiality, fabrication [as they began a shop safety sequence], a college based furniture competition happening in their midst, and concluded with programming, and idea of cultural construction as they field measured a local multi-use pier in studio.

Winter was set up as a series of guests whose realized work spanned the XSM-SM-M-LG-XLG scale. Guests traced their work from conceptual beginnings, settings/contexts, methods and techniques in development, modes of documentation, final steps toward realization, and reflection on occupancy or duration of the work. These began with temporary installations, proceeding through the pinhole camera and furniture projects, interventions in urban historic districts, houses, schools, wineries, and in 2010 a bull ring in Mexico and the Denver Art Museum. The focus on a primary work each week showed that process and method, as they were concurrently wrestling with in studio, helps determine the set of design outcomes and subsequently the success of any project.

Spring concluded the focused scalar realized project set and next brought in guests with broad interdisciplinary thinking, seeding the idea that the student may choose to pursue focus apart from the core discipline as conceived. This included a new way to conceive of their writing-as-design from faculty in English, the sharing and crossovers in landscape architecture, architectural engineering, and construction management, and ended with a set of recent graduates who had had immediate lateral impacts, as a consequence of their architectural education, in steel fabrication and international relief efforts.

Phenomenology of Writing / Pedagogy of Writing

The presentations were delivered in our Rotunda, a 1990’s faux-Mission, post-modern relic seating 200, with steep raked seating, awful acoustics, but wireless enabled and having a massive digital screen. Guests were asked to make the most of the moment, experimenting with forms of active learning during the presentations. It was suggested sessions be interactive with the 100 plus students, as opposed to lapsing into the kind of content that is able to be delivered on-line. This aspect included techniques such as simple pointed questions that engaged students in short answers and comparing answers with neighbors, asking students to internet search terms, people, projects, or locations in real time, and asking students to stand as a visible response to multi-choice questions.

Students were challenged, especially in the fall, to have their writing be quick, spontaneous, lean, and frequent. Students were encouraged to respond to each session via writing in all of its forms, but especially journaling, free responses, writing as discovery, and writing based on following a trail from the lecture. The deliverable was a weekly 500 word digital response submitted via Blackboard, with additional suggestion that writing be accompanied by embedded sketches, images from web sites visited, and end notes for sites or sources consulted beyond the lecture. Journaling asked the students to chronicle their real time thoughts and impressions from the experience in the room, with less emphasis on traditional structure as using words to note flow of ideas- an immersed, fleshed out version of note taking. Following-the-trail was focused on tracking down lateral references made that interested the student, at
the expense of a broad generalization or summary.

As a companion to the weekly quick writes, students were also asked to take on an entire text, Steen Eiler Rasmussen’s *Experiencing Architecture*. This was assigned at the beginning of the fall quarter, with a 1500 word essay due after the Thanksgiving break. Students were asked to explore the broad themes of the book, quote specific passages to support their opinion, and tie the themes to the flow of studio assignments to date. This more formal, and structured writing and book content bridged the active weekly writing and active studio learning, demonstrating as they discovered Rasmussen’s basis of embodiment, that it was the underlying theme for the quarter: to make ideas manifest to experience, reflection, and judgement.

Winter quarter brought similarly framed active presentations, but with writing now done in a comparative form across guest presentations. Writing was subsequently more bounded, but with new ability to track past lecture references, and a special challenge to bring in references from the quarters assigned text, Gaston Bachelard’s *The Poetics of Space*. Bachelard was referenced throughout the project briefs in studio, so a direct linkage was already established for development.

The spring quarter set of essays was also comparative across presentations, but included direct involvement of assigned essays from A. Krista Sykes’ *The Architecture Reader* for each lecture. Sykes’ broad survey allowed students to see a history of ideas at play as a continuing evolution and revolution in architectural concepts but with the immediacy of the application from the lecture.

**Output: Feedback Cycles**

In this kind of class situation, feedback flows in both directions between student and class coordinator. Given 100 weekly essays in fall and a slightly lesser number in winter and spring, the obligation on the coordinator for feedback to the students is massive. Feedback in a reasonable and timely manner is essential if the students are to feel their work is valued. This meant a disciplined regimen on the art of the author. The use of brief individual salutations to each student at their Blackboard assignment portal was seen as necessary. The use of a standard reference set of comments for writing basics, including numeric-symbolic marks tied into grammar, vocabulary, and basic communicative efficacy of the attempt was efficient for the occasional writing lapse, along with a holistic score for the piece as part of the record. Exceptional tactics or content received additional comment. If warranted, a set of common aspects of insight or lack of insight discerned from the papers was placed in a Blackboard announcement to all. Despite these efficiencies, evaluation constituted about an eight hour time commitment per week.

The reading of each work also brings insights into the way the Beginners see their world vs. the way faculty or guests assume it is entered or may conceive it delivered. This form of course feedback has been revelatory as we look at subsequent iterations for content and pedagogy. The most striking theme that has struck the author in the two fall iterations is the joy [there is no other word I can use to describe it] in the young women when they find Zaha Hadid as a role model. The sheer delight that a woman had received the Pritzker Prize [in itself which few had heard of prior to the talk] was a clear and frequent remark. It made the faculty aware of how to be sure to include gender and ethnicity in our examples to the students. This also led the author into bringing in more recent women alumni as guests. Students also related extremely well to the presentations of the young alumni as a group [typically 25-30 years of age]. The typical essay included some kind of reference such as ‘I never thought of this before...’, further cementing our opinion we are on the right track.
Each quarter each student further edited their essays into a single digital compilation with cover, author picture/bio page, and the complete set of essays revised/ formatted/reformatted as they chose. This writing portfolio is something the University will eventually require for each student, and the Beginners will have samples ready as that obligation evolves. The compilations frequently exceed 4000 words each, a staggering total for a one unit credit/no credit class, but also establishes a very tangible arc of growth in articulation of their start in design.

Recently, the author was approached by a 2011 freshman about the possibility of them editing their own corporate compilation of writing from the class. This was of course greeted by a heartfelt yes. It is another example of how the students, when liberated from mere response, may initiate and choose to make their mark.

Cal Poly, San Luis Obispo is going through NAAB accreditation as this paper is written, and we are anxious to see how the new curriculum, and the writing component, are received by the reviewers. Internally, in our curriculum committee, we looking at requisite expansion of writing as the students move through years 2-5, and optimistic that the pioneer class of 2014 will have a stronger and more nimble writing skill, grounded in professional and creative articulation.

Notes


3. The entering class of 2010-11 was almost 30% out of state students.


6. ARCH 320 London: Architecture and Place, taught by the author, was part of the Cal Poly, San Luis Obispo London Study program for summer 2009, and offered as an upper division General Education humanities class to non-majors.


