

## Online / On Target: Reflective Practice through Blogging

Claire Alyea and Nancy Yen-wen Cheng

University of Oregon

### Abstract

This paper describes how blogging in electronic portfolios can contribute to architectural education by strengthening reflection, collaboration and communication. Periodic writing can sharpen design intentions and cultivate awareness of the design process. Individual blogposts can be streamed into a class website, where contributions can be organized and contextualized. While honing online communication skills, students can develop a digital identity and cultivate a professional network.

Evidence is taken from University of Oregon Architecture, Arts Administration and Business students. Lessons learned are summarized from surveys, interviews and e-portfolio analyses.

### Introduction

Beginning students can get lost in searching for their personal design process. Design thinking is possibly the most important skill students should acquire in architecture school, as it is translatable to other forms of design and generates critical inquiry skills necessary to test design ideas<sup>1</sup>. Our search is for a method to teach this skill in a way that advances students' design communication abilities.

Successful design teaching uses learning by doing in the studio. At the University of Oregon, we have been integrating this experiential learning with online technology in the

Department of Architecture, School of Journalism, College of Business, Arts and Administration Program and the Honors College. Our students arrive on campus with a fluency in social media such as Facebook, Flickr, and Youtube that we can redirect towards professional education. In a June 2010 survey of \*\* students using our University's blog system, <http://UfoliO.uoregon.edu>, 37% of students reported using social networking websites, and 83% reported using Web 2.0 applications such as blogs, wikis and participatory websites for sharing ideas, photos or videos. 83% of students stated their level of comfort in engaging with online technology as minimally "comfortable," while 33% of students felt "adept" or "advanced." It is our intention to focus these skills and interests towards professional objectives. Our interdisciplinary research group has focused on implementing and evaluating the impact of online academic blogging systems on learning as part of the Inter/National Coalition for Electronic Portfolio Research. We have come to understand the results of this effort through surveys of student attitudes, interviews with students and instructors, analysis of student blogs, and resulting student work.

The written word has long been important in architecture: from Vitruvius to Alberti, Ruskin to Le Corbusier, Kahn to Zumthor. As great architects are great thinkers, it is important to encourage going inside the minds of designers, learning from other architects and designers based off the way the designer might think rather than how a design might look. We are introducing blogging in order to promote higher standards of work in

all phases of design, from concept to completion. Through writing, we promoting the development of the design concept, creating work that is valuable because of its meaning. Through interconnected writing, students can better understanding and absorb the meaning and importance of architectural design.

### **Class website as Info Hub**

For our main communication platform, we have been using Wordpress MultiUser, an accessible, open-source authoring system. Individuals create personal blogs with customizable URLs and web design settings. Within this personal sphere, students have an opportunity to share their progress in design thinking as well as create guiding narratives for their studio projects. Novices can post text, graphics and presentation documents through online forms. More experienced students can include multimedia and customize the interface.

Class websites collect or aggregate the individual posts in real time and display them along with shared resources. Students can contribute to the course website using Wordpress, Weebly, Blogger or other online platforms that can provide an RSS feed. In Wordpress authors can use categories and tags of posts to organize pages. Privacy filters, allow students to create dual zones of personal reflection and public presentation.

These class blogs become free discussion centers, promoting engagement past formal class hours and allowing the flexibility to share resources and related information beyond a set class agenda. Searchable and continually updating, these sites create living syllabi and active learning opportunities particularly in seminar courses or among shy or international students. The blog becomes the live hub for class information.

### **Value to Teachers**

An instructional website allows a teacher to more effectively tailor their teaching and present the class format in new ways. As a continually archiving implement, class blogs create new opportunities to monitor and document overall progress. One professor commented on the rewards of class blogs in a seminar course: "The blog(s) have extended the dialogue between "looking at" projects and having a point of view about their merits...[students'] observations and response (including images) take the average read into another realm of memory and access. This is a good process for all design, where everything comes together, including words. It also enhances [students'] communication skills which are so important to the field of architecture."

A main advantage for both professor and student is the new importance placed on demonstration of learning regardless of representation skills, allowing knowledgeable beginning design students to express their ideas without inordinate focus on their technical drawing facility. As the main goal of architectural education is improving the development of design thinking, the written word can open the door to new possibilities through a more complete dialog around formative design schemas. This method can be symbiotic with visual communication: as a student better comprehends how to design through critical reflection, a link can be created with how to represent their designs.

Blogs can also give professors a more robust idea of student abilities and new ways to evaluate work and provide feedback. Blogs can expose professors to ongoing insight into how students are experiencing the course.

### **Lifelong Learning**

Creating a compass for students to orient their entire curriculum, blogs can move beyond the goals of singular classes. By recording the design process, student progress from year to year becomes accessible, and the academic goals of a student can be more transparent through better organization. The availability of this documentation can allow professors to have a better understanding of incoming classes of students, and adjust instructional tactics accordingly. There is the ability to use student blog feeds for maintaining academic relationships and in future evaluation for scholarship applications, letter of reference background information, and academic advising (\*\*Blaine).

### **Skill 1: Written Communication**

Ability to write without syntax errors, development of the argument

As architecture is a presentation-based field, professional communication skills are essential in and beyond the design studio. Proficiency in this area can only result from well-rounded practice. Applying personal design processes to a written, public platform creates a necessity for well-developed ideas and cogent discourse. Over half of students polled desired that their blogs would create a connection outside of the University of Oregon. The cross-disciplinary connection provided by the internet's broad scope allows for the opening of doors to new audiences. In a 2009 poll of \*\*students from various majors, most liked the idea of writing in blogs (18 votes) more than other mediums: journals (14), essays (11), or tweets (6). Working online gives significance to the personal design process, particularly at the undergraduate level before affirmations of work have been solidified through more extensive office and studio experience.

While perhaps still developing presentation techniques, beginning design students can benefit from expressing their design ideas through written language. The written word can influence the way one conceptualizes design, when shapes and forms can be stifling in terms of fluid process. Words are more open to interpretation, giving an origin point and inklings of concept before a form can be derived. Innovative language exercises can create new ways for students to understand their own design processes. As one student explained, "Experiential narratives can really help you get your idea across, like a walkthrough. You write exactly what you want to happen and then you design it." Striving for professional quality work, blog assignments are tools for students to develop strong arguments for their designs, while perfecting grammar and communication skills.

As the final product of any studio is the formal presentation of design proposals, the blog medium creates an informal, intermediary step to develop inchoate thoughts with further complexity. One student commented, "...because I knew other people were going to look at it, I made sure all my thoughts and processes could be understood." Another student noted, "...I really enjoyed the whole exercise. It forced me to analyze my ideas and put it down on paper." Advancement of design thinking can be accelerated by making internal ideas external, concretizing thought into word. The sooner ideas and concepts are clarified, the sooner they can advance.

### **Skill 2: Connections / Contextualization**

Citing of external sources, discussion of influences, Connections between imagery and text

Design students and architects of all levels benefit from the study of architectural precedent, including resources of writing, representation, and built work. We want to bring efficacy to discussing connections between student designs and their influences. Researchers at Northern Illinois University concluded that students using blogs were able to organize their work while more effectively integrate sources of information (Day). One of the clearer upshots of an academic blog is the ability to form well-researched arguments corroborated through imagery, external resource links and quotes available through the internet. The goal is to create a space for having comprehensive discussions on the topic of design, preparing students for professional inquiry and discourse.

When asked what skills were learned, if any, that are applicable or transferable even without continued use of blogs, one student replied, "Good writing skills, how to be short, concise and to the point. Also, choosing the right image is important, and organizing the text and image so they make sense together." This highlights the importance of presentation skills in design fields, and how blogs can be an supplemental source of preparation. Students understand this necessity and begin to use blogs as precursors to the portfolio: "...people would put up their whole boards in a way that could act as a sort of digital portfolio," one student noted.

As the internet becomes increasingly integrated in the classroom as a research tool, there is an opportunity to use this equally accessible medium as a collaboration tool. We have been implementing and encouraging collaborative research through interconnected blogs. One student observed, "...it is a nice way to organize things...it was really good for

precedents, I don't think I've ever had everything together in one place - all the precedents and references, that was helpful." A majority of students polled (54%) agreed that their blog helped them "better organize information, resources, tools and coursework." As students accumulate their background research, an interconnected blog system can help provide easier, faster dissemination of this information to students with similar interests, especially when organized with the appropriate tags or categories. We can take advantage of the boundless quality of digital space to stimulate profound connections between precedent and student response (Greenberg).

### **Skill 3: Personal Reflection**

Evaluation of performance with regard to learning objectives, AHA moments, Individual progress measured against self, comparison of past and present work

As students develop higher quality written communication and research skills, students also progress in self-evaluation, metacognition, and developing a strong design process. Beginning design students often have common faults: clinging to overly simplified design ideas, erroneous preconceptions of how architecture should be, and lack of iteration and inquiry. A common complaint of beginning design student work is the uninspired and unconscious approach derivative of problem solving, leading to the creation of underdeveloped projects (Maher). These problems can best be ameliorated through improved process and design thinking skills. Projects with strong, clear concepts have a greater chance of fulfilling their intentions. We are interested in creating a framework for design through writing.

We argue that design is about how one develops ideas. Without strong process skills, one can never arrive at a strong, well-executed and developed design. Choosing to focus on process helps students understand what is valuable about their work in a holistic sense. By educating students to be well-rounded thinkers, increasing the thought process can help create more well-rounded designs.

In order to expose the value of process as more than the requisite period before product, the merit of process needs to be recognizable. As a chronological record, a blog provides a way for students to understand their learning and the progress that may not be visible without archiving. Blogs can help students connect what they did with what they want to do, as a past, present and future time-marker. A student design blog is a portal into the mind of the designer, pushing past the limitations of a strict portfolio or resume, and creating an accessible personality that can be carried past academia. It can be a way to select a personality on the internet that appropriately represents one's ideas, proficiencies, and experience.

Blogging provides a medium for in-depth personal critical review, superseding verbal emotions and simple thoughts, and using the written word to go beyond superficial examinations (Blaine, 17:19). When asked if there is value in reflective or descriptive writing, one student commented, "It's beneficial because it makes you think about what you did. You think about your process and how you got there. If you like it, you can do it again, and if you didn't you can modify your process." Students are able to reflect upon past assignments and how one

might adjust their projects given the opportunity to redo them. Student design blogs begin to give exposure to the process work of individuals before professional practice, providing a platform for understanding process, improvement, and evaluating the quality of their work. One student reflected, "I like posting work from my process. I like showing what I did, how I achieved it: sometimes you don't see that in the final." When asked what the best use of their blog has been, 70% of students mentioned themes of presentation, including recording process, and critical reflection. Increasing tangibility of process work provides unique methods for assessing one's own aptitude and deficiencies (Hakel).

When asked if there was value in archiving work, one student observed, "Yes, I think there is, because it shows more of the process. You have the opportunity to show others more of your work. You end up archiving more of your process work too, otherwise trace just gets thrown away." Another student answered, "Its just another skill set you can bring to the table. It forces you to archive [photodocument] early on and then its already set aside. Like a model, for example, if it sits around and gets banged up, and then it's too late. Its an important skill to teach students because at the time you don't know what you are going to want to have documented later on, so its a good habit." Responses also reflected a broader view: "When you look back on your beginning work you see how far you've come and what you've learned." Due to the specific nature of individual blog posts, details in process are recorded, allowing access to past decisions as a way to evaluate process (Greenberg).

A student blog also allows one to explain and share the frustrations and the

accomplishments of the design process. It is a communal forum for expressing thought about the meaning behind what one designs. As an internet-based tool, a blog allows for spontaneity to publish developing thoughts, edit them, and receive feedback in almost any environment, while compelling one to create presentable and understandable process work. One student reported "It [the blog] made me think about myself and my opinions, think about my future." It is these exercises which provide for student exploration to the larger picture of their work and motivations.

#### **Skill 4: Cross-fertilization**

How much does the student comment on or make reference to other students' work, how much does the person get feedback from others

As students prosper from improvement in process and design development, we encourage them to understand the broader scope of their work in relation to other designers. Through contextualization, relation to precedent, and gaining feedback, students can produce stronger, more professional-quality work. "One-stop access to my work, my community and feedback from anywhere" was the second-highest ranked reason to blog in a June 2010 survey of architecture students at the University of Oregon. The instantaneity of the connection between personal design and the web creates new avenues for potentially expeditious and diverse feedback. This is critical for the novice designer, providing a litmus test for the rationality of one's process.

A robust blog environment can facilitate cross-exposure to new ideas, ways of thinking

about a subject, presentation techniques, and an introduction to discussing design in written form. In a survey from June 2010, students ranked "being able to see other students' work and comment on it" as the top reason to blog. One student reflected, "I liked being able to see other students sites - to see different interpretations and get ideas. I actually looked quite a lot. It raises the level of the work and you see who has the skills. You also know if you need more help and you can go to a help session." Based on a 2009 assessment of student pilot blogs, as the quality of personal reflection and creation of connections to external work improves, the more likely a student is to receive feedback. Errors in written communication and changes in development in design had little effect on peer feedback.

One student felt the blogs allowed more open communication: "I like how classmates can comment. In crits it's not concrete or written down and it can be uncomfortable sometimes to talk out loud." As a public mechanism, the easily-accessible blog format allows for external discourse, providing a new vehicle for constructive suggestions or compliments.

It is an important and easily-accessible tool for students to view and compare work of the same level as their own. One student noted, "I would look at others work and reference and learn from it. And I feel like the work I put up is better because I know that others will be looking at it." When asked what they liked best about the blog system, one student remarked, "From a remote location you could pull up others or your own work for easy reference." The instant connection to the work of other students can provide a network within broad academic groups, facilitating a link from the work of one classroom to another. This confronts the old

standard of privately turned in assignments. Design curriculums have long embraced the idea of the critique, formal or informal. Blogs only catalyze this concept into a more extensive context, making these designs relevant to and approaching broad scale standards. The canvas of the internet creates interesting juxtapositions and comparisons not available through an idea presented entirely within academia.

### **Skill 5: Collaboration**

Architecture students benefit from cross-fertilization of ideas on a personal level, but the ultimate advantage of these skills relates to the development of 21st century professional skills. The milieu of successful architecture offices and studios is a collaborative one, and as the building industry becomes increasingly specialized, the effective cooperation between architects, engineers, contractors, and consultants is essential. We are advocating the use of blogs to encourage student development in this area.

As the internet continues to become structured by Web 2.0 principles, students are increasingly familiar with and utilize these features. There is an opportunity to direct this interest in digital collaboration and connection towards professional goals. Academic blogs have been used as a collaboration tool to create connections in seminar classes, design studios, and group projects. Outside of the opportunities present in one classroom, blogs have been used successfully to connect students between campuses at the same school, to foster cross-program interest, and to connect classrooms across the world.

When utilizing academic blogs it is possible to structure student teams to focus on action, feedback and reflection that creates valuable process and valuable learning experiences. Blogs provide the ability for teamwork to be divided into categories that highlight the strengths of each member, yet aggregate for a complete analysis. Task assignment can derive from student self-identification of personal abilities, or from the evaluation of the team members' blogs (Blaine). In this way, it is possible to create student groups that collaborate efficiently, while learning from each other.

The value of blogs for developing collaboration skills extends beyond group exercises. Architects and architecture students are increasingly computer-focused in the creation of design documents. We are hoping to take advantage of this update in process in a way that can increase possibilities of collaboration. Describing the utility of blogs in a computer modeling class, one student noted, "its great because you can see how they did something, or read what they wrote about it if they are having the same problems." With class blogs, students practice collaborative learning and contributing to a knowledge bank. Resources are contributed communally throughout and beyond a course, permitting new opportunities to share precedents, research, or information. As readily searchable interconnected documents, blogs and aggregate blogs further this ideal.

### **Benefits and Challenges**

The benefits of design writing and enhancing conscious design process are

unquantifiable. Students and designers of any level can learn and grow from this process. Presentation and effective communication skills are undoubtedly essential for successful professional development, especially in the design field. Developing these skills for the 21st century is a worthy focus, fundamental to the potential growth of students in the future. With these benefits in mind, the path to successful implementation of academic blogs, like anything, is not unblemished.

The technological facility of the blog system is one of the most crucial factors for fostering positive results. 66% of students rated interacting with their blogs at least "somewhat easy" while 16% describe it as "easy." Even with these responses, 37% of students reported technical problems as their main source of frustration with the blog system. When asked which type of tech support they would prefer, students overwhelmingly chose hands-on workshops (73%) and online guides (70.3%). A smaller amount of students chose peer forums (40.5%) and printed guides (37.8%), with a little interest in phone support (16.2%).

The topic of privacy quickly becomes a factor when implementing blogs as an academic tool. As one student noted, "I'm a pretty private person and I wouldn't want my process thoughts published all over the internet." While some students will enjoy a larger, public audience, it is important to understand individual concerns with the process, and the legal implications of blogs as a graded requirement. We have decided to take the view that the blogs are voluntarily public, allowing students to choose the level to which they implement privacy filters.

Not all students agree with the usage of class blogs, particularly if no previous predilection for writing exists. One student commented "I think it would be more enjoyable if everyone liked writing, but I guess that is just not realistic." Other students addressed the requirement of an engaged audience for a class blog to be successful (4 students). Some felt the requirement to blog was detrimental to impetus (4). Others reported that the blogs necessitated a larger portion of time than they would like to spend (2), or lack of interest (3). One student suggested "I don't think it would, or should, be the only way to communicate, because in-person dialogue is very valuable," highlighting that blogs are only one component of process. Other suggestions offered included incorporating the formatting and writing process into allotted assignment time, increasing incentives for blogs that excel, and increasing readership through broader exposure and connection between class blogs.

This study was based on test blogs from a variety of seminars and studios and commitment from varied faculty members. In the future, a more specific way of quantifying successes and weaknesses of student blog usage would be needed. This would involve a large number of participants in similar courses, as well as a control group of students without blogs. Instead of a simulacrum of the typical architecture presentation on paper, student blogs require high quality standards and appropriate utilization of multimedia to be successful, creating digital designs which truly bring the architecture to life.

## **Conclusion**

Ultimately, academic blogs are providing new ways for students to understand and experience their learning, while pushing students to new levels of achievement. Researchers at Alverno College profess: "Current practice and research reveals that the more the learner takes charge of the format and process, the deeper the learning." Blogs have great potential for increasing students' ability to navigate themselves throughout their academic path by introducing deeper levels of thinking into the design process. Blog researchers at Concordia University define this type of learning as "metacognition by self-regulation," highlighting that the benefits include greater focus, and understanding of how to create steps toward progress.

Research on the effectiveness of student blogs has largely been concentrated in the liberal arts and sciences or focused generally on student growth. Independent of these areas, architecture and design curriculums justifiably focus on the making process and visual rather than verbal communication. Meanwhile, architects consistently present to a wider audience – design review boards, planners, city governments, clients. While these proceedings require a diverse skill set, pedagogical emphasis typically remains on one side. Selectivity in presentation and focusing ideas to concisely present whole, complex, projects can be challenging, especially as contextualization is always necessary. The blog format promotes reliance on specificity, brevity, and thoughtful presentation, potentially bridging the visual-verbal as well as external-internal gaps.

As we work towards understanding design student development, one approach has been analysis using the Kolb learning cycle. This method of quantifying sequential cognition relies

on viewing process as four key steps: concrete experience (doing/having an experience), reflective observation (reviewing/reflecting on the experience), abstract conceptualization (concluding/learning from the experience), and active experimentation (planning/trying out what you have learned). These are the steps necessary to achieve overall progress in a given field. While writing can organize and clarify this learning cycle for some, architects work between the mediums of sketching, writing, parti, scaled architectural projection, and model making (among other options), possibly complicating a student's view of progress. These students reach abstract conceptualization differently than other academic programs, through iterative development. Through the collective, chronological, and multimedia nature of blogs, these methods of process can be archived together as one item. This synthesis of unique items, typically seen through a portfolio, can be an archive of process as well as product through a blog.

A 21st century skill set requires the ability to be project oriented, ready to collaborate, receive direction, and possess adequate self-assessment skills. As the nature of information flow continues to move forward, digital self-presentation is a challenging new requirement of all designers. As teaching and learning increasingly happen online, we seek to engage more meaningful actions of publishing and processing. Blogs encourage moving beyond tentative steps and towards making something bigger through strengthening written communication, connections and context, personal reflection, cross-fertilization of ideas, and collaboration skills. Engaging students to consider their work in new ways, blogs can increase aptitude in these areas, forming stronger designers, focused on target.

**Works Cited**

- Abrami, Philip C., C. Anne Wade, Vanitha Pillay, Ofra Aslan, Eva Bures, and Caitlin Bentley. "Encouraging Self-regulated Learning through Electronic Portfolios." *Canadian Journal of Learning and Technology* 34.3 (2008).
- Blaine, Mark, Ron Bramhall, Nancy Cheng, and Lori Hager. Proc. of Blogging and Instruction: A Panel Discussion, Eugene, Oregon. University of Oregon Teaching Effectiveness Program, 20 Nov. 2010. Web. 21 Nov. 2010. <<http://contentserver.uoregon.edu/tcs/?id=AAAA6984-73E8-40D4-ACE5-468FDFB91AAC>>.
- Cambridge, Darren and Barbara Cambridge, and Kathleen Blake Yancey. *Electronic portfolios 2.0: emergent research on implementation and impact*, Stylus, 2009.
- Chen, H.L., Cannon, D.M., Gabrio, J., & Leifer, L. (2005, June). 'Using Wikis and Weblogs to Support Reflective Learning in an Introductory Engineering Design Course'. *2005 American Society for Engineering Education Annual Conference & Exposition, Portland Oregon. 2005 ASEE Design in Engineering Education Division Best Paper.*
- Clark, Elizabeth and Bret Eynon, 'E-portfolios at 2.0—Surveying the Field' in *Peer Review*, Winter 2009, 11 (1).
- Day, Michael. National Coalition for Electronic Portfolio Research Northern Illinois University: Research Findings and Evidence. National Coalition for Electronic Portfolio Research. Northern Illinois University, INCEPR, 2006. Web. 30 Jan. 2011. <<http://ncepr.org/finalreports/NIUfinalreport.pdf>>.
- Greenberg, Gary. "The Digital Convergence: Extending the Portfolio Model." *EDUCAUSE Review* 39.4 (2004): 28-37. Web.
- Hakel, Milt. National Coalition for Electronic Portfolio Research Bowling Green State University Preliminary Finding. National Coalition for Electronic Portfolio Research. Bowling Green University, INCEPR, 2006. Web. 10 Dec. 2010. <<http://ncepr.org/finalreports/BowlingGreenfinalreport.pdf>>.
- Kuh, G. D. High-impact educational practices: What they are, who has access to them, and why they matter. Washington, DC: Association of American Colleges and Universities, 2008.
- Kolb, David A. *Experiential Learning: Experience as the Source of Learning and Development*. Englewood Cliffs, NJ: Prentice-Hall, 1984. Print.
- Maher, Michael T. "Trickery and Treachery: The Labyrinth of the Introductory Design Studio." *Proceedings: Quality, Origins + Foundations: Beginnings at the End of the Millennium*. 16th National Conference on the Beginning Design Student, UNLV School of Architecture, Las Vegas, NV. Las Vegas: UNLV School of Architecture, 2000. 10-23. Print.

---

<sup>1</sup> Maher, Michael T. "Trickery and Treachery: The Labyrinth of the Introductory Design Studio." *Proceedings: Quality, Origins + Foundations: Beginnings at the End of the Millennium. 16th National Conference on the Beginning Design Student*, Las Vegas: UNLV School of Architecture, 2000. 10-23.