One-on-One with iPads in a "Vertical" Graphic Design Studio Course

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Abstract: The vertical model, as a strategy for structuring a studio-based course, has, until only recently, primarily seen interest and use in undergraduate architecture programs. Rather than segregate students by academic level—into sophomore, junior, and senior-level studio courses, for example—the vertical studio combines students at different levels. This means that students at different points in their academic careers have the opportunity to engage and interact, offering each other varied perspectives and bases of knowledge to work from. This acknowledges that students learn much more from seeing what others around them are doing, rather than from an instructor directly feeding them information. The vertical studio also offers a myriad of advantages related to curricular planning, such as effectively accommodating larger class sizes and integrating non-major students into what are otherwise typically core major courses. ¶ This paper presents a case study of a preliminary implementation of the vertical model into a graphic design curriculum. As a trial run for a more comprehensive future implementation, this study examines the creation of discrete vertical studio modules within an existing structure of sophomore and junior graphic design studio courses. In particular, one such vertical module involved a three week project investigating issues surrounding digital publishing and design for on-screen media through leveraging a newly-acquired class set of iPads. Students received unfettered, individual access to an iPad for the entire length of the project, affording them the opportunity for deep engagement and experimentation with the medium. This combination of a new pedagogical approach with key emerging design-oriented technology presents a unique opportunity to reflect on the roles of and relationships between instructors and students, as well as on the direction of contemporary design education in general.

ONE-ON-ONE WITH IPADS IN A "VERTICAL" GRAPHIC DESIGN STUDIO COURSE

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INTRODUCTION

Design curricula are ever subject to dramatic changes in practice, and educators must constantly remind themselves that curriculum and pedagogy must prepare students for certain realities (Davis 1). Among these realities are three most relevant to this paper: new media platforms, which require sensitivity to media affordances and limitations; new models of audience engagement precipitated by social media and open, accessible publishing; and the complexity of design problems, which increasingly requires team-based, rather than individual, project engagement. While addressing these issues, faculty must also deal with internal pressure to increase class size. This paper details an iPad-based project that addresses these issues of authorship, technology, and teamwork through a preliminary implementation of the vertical studio model within the undergraduate graphic design curriculum at the University of Illinois at Urbana-Champaign.

THE VERTICAL MODEL

Rather than segregate students by academic level—into sophomore, junior, and senior-level studio courses, for example—the vertical studio model combines students at different levels. This model itself is not new, as it has seen use in some form in a number of architecture and interior design programs since at least the late 1970s (Barnes, Layden, Parry 21). However, the vertical studio model—as a functional and deliberate strategy for curricular planning—is relatively new to graphic design.

At its core, the vertical studio recognizes and seeks to maximize peer-to-peer learning. Sophomores can learn standards from seniors, but they can also contribute to the development of seniors by offering fresh and varied perspectives. For the same reason, the vertical studio can also be ideal for reaching out to non-graphic design students. This is due to the fact that the vertical studio environment benefits from maximizing the range of work produced, as students are seen to learn from the work of others. Since much of the "work" of instructing is meant to be done by students, and the maximizing of the amount of work they produce, it is desirable for a vertical studio to have a large class size of up to 40 participants. This is, of course, of great appeal to administration.

Typical vertical studios are treated as standalone elective courses. A core vertical studio is a different matter, as any core curriculum represents a progression. This type of implementation creates difficulties in terms of conceptualizing a progression for students earning a degree, as students might take the course—with unique projects each time—one term each academic year. Such a model cannot constitute a full curriculum; rather, it is best suited to form one aspect of it. The graphic design curriculum proposed at the University of Illinois at Urbana-Champaign positions the vertical studio as an exploratory component, where specific project deliverables are loosely defined in order to accommodate the differential expertise of the students involved. The other, complementary components of the curriculum involve knowledge-oriented courses (like Introduction to Typography and Digital Interaction) and praxis-oriented courses (like Graphic Design Problems and Graphic Design Practicum).

THE PROJECT

The authors/instructors taught two sections of 30 mixed-level sophomore and junior graphic design majors in a mid-semester 3-week vertical studio test module on design for the iPad. Students used strategic groups to develop fully-functioning iBooks, using

Apple's free iBooks Author software, that were ultimately made available for free on Apple's iBookstore. This served as an introduction to a more direct form of true publication than students usually experience, engaging them in a higher level of authorship (though the content itself came from Project Gutenberg's free-use texts).

TECHNOLOGY

Access to a digital device, like any medium, is essential to effectively designing for it. With only intermittent access to iPads through a school equipment checkout window, students are limited to prototyping on a laptop and only infrequently previewing results on the device for progress critiques. While this is not without value, sustained access to the device permits a far greater degree of natural feedback. To address this, the authors negotiated the purchase of 30 iPads by the college's IT department, with special access for the graphic design program, and found that this use of newer technology was enthusiastically supported. Using iBooks Author and with an iPad checked out for a full 3 weeks, it was easy for students, with the click of one button, to load files onto the device itself for a fully-interactive preview. The rapid back-and-forth of input and feedback is integral to design learning: this is a key component of the direct manipulation aspect of digital craft (Kimbell et al.; McCullough 23). While instructor and peer critiques can be informative, a student's own responses are most critical to development and ultimate self-regulation.

iBooks Author is relatively new software, and is far more "controlling" of design decisions than the more familiar (to these students) Adobe InDesign. Students carried expectations based on their previous experiences with InDesign—learned one or three semesters previously, and used for the bulk of assigned projects. iBooks Author is "templated"; the easiest way to work with it is to accept some level of underlying design structure, and then modify it. InDesign, on the other hand, does not feel as restricting (though it certainly has its own constraints). Students were required to watch Lynda.com's iBooks Author tutorials and problem-solve within their 4–6 person groups—the class was large enough to prohibit in-depth instructor-to-student technical support.

During the project, the instructors stressed the value of working and innovating within software constraints. The very constraints that seemed so limiting were what allowed the software to be learned in such a short time, and made it possible to publish an interactive iBook as novices. At the close of the project, students were still expressing frustration with the software. However, a level of appreciation began to develop: two juniors who participated in a professional portfolio review remarked that reviewers were especially impressed with the iBooks—a form of validation the students recognized.

An ongoing challenge related to engagement with emerging technology is the need to discover and capitalize on the new capabilities of the medium. E-books are particularly difficult in that they are defined by their relationship to a conventional print medium, yet they exist within an entirely different technological context. One objective of this project was for students to leverage the unique media and platform affordances of the iPad and iBooks Author, and not simply create a digital translation of their assigned text content. Several key opportunities to do so included:

- *Incorporating iBooks Author Widgets*. Unlike a print book, an e-book holds the potential to respond dynamically to user interaction. Widgets represent a range of interactive functionality, such as quiz questions, annotated images, pop-ups, video, and audio clips. The most interesting iBooks were often those that combined multiple widgets together to create a new or unexpected experience.
- *Controlling and designing for dynamic device orientation*. The iPad can operate either in portrait or landscape orientation, and thus iBooks are typically designed to be readable in either. For this project, students chose only one orientation to design for, but they had to carefully consider the implications of each layout format.
- *Appropriately designing iBook covers*. The cover of an iBook is visible at full size for only a fraction of a second upon tapping a title in the iBooks library. Thus, designing an iBook cover shares more with designing an icon than it does with designing a print book cover—students needed to pay close attention to issues of hierarchy and legibility on a small scale.
- *Developing effective iBook navigation systems*. Besides simply swiping to turn the pages of an iBook, using hyperlinks in addition to the built-in iBook navigation system can help readers to traverse a book's content more intuitively.

TEAMWORK

The success of the vertical studio model relies on collaboration of some sort; however, collaboration is not necessarily synonymous with group work. Students seem to recognize the importance of collaboration, just as they loathe group work. Group work can be an impediment to learning, too often devolving into one or two students covering for others—some are overworked and resentful, while others simply learn nothing. Often, the problem in group assignments is a failure to define roles. Collaboration in practice

rarely involves "flat" groups, where everybody has the same expertise and there is no differentiation of roles. If students are simply "sharing the mouse," doing something a single person could do, then there is little to no benefit in collaboration. For these reasons, in-class group work usually represents an inauthentic simulation of professional practice, and thus attempting to emulate such an experience should be avoided. Pedagogy must establish conditions under which classroom-based collaboration can be meaningful and productive.

For the development of the iBooks in this project, students were directed to sign up for one of a number of pre-selected texts available on Project Gutenberg, ensuring that each team was balanced for sophomores and juniors. Texts were pre-selected on the basis of potential interest to students and on appropriate length. The team was leveraged for what groups do best: discussion. The teams shared a text and strategized on design direction. The teams then divided the text up into separate volumes. Each student was responsible for his or her own volume, but did all the work around a shared table. Furthermore, teams established loose standards that all individuals had to address within their designs. The teams were responsible for ensuring that the divisions of the text—their volumes—were unified enough to read as a set, while still preserving unique characteristics per volume. Specifically, each team was asked to work closely on unifying the covers, the internal typesetting (as a general rule), and a "series contents" page that indicated the material available within the other volumes of the entire text. This structure guided individual design decisions, while still leaving a great deal of control up to individuals. Instead of making arbitrary comments about aesthetics, discussion was both on how an individual's work addressed the team's conception and on how it deviated away from it (as an innovative response).

One mistake was made in encouraging select groups to produce a single-volume work as a team. This led to "sharing the mouse" and an unequal division of labor, often with sophomores marginalized. The expectation was that only groups who were working well together would opt to produce a single-volume iBook, but many groups did so simply because they thought that breaking up a text into volumes was awkward. It is, in fact, awkward, but it makes good pedagogical sense.

CONCLUSION

The vertical studio model has great potential as a deliberate strategy for addressing a number of contemporary issues facing graphic design pedagogy. From effectively accommodating larger class sizes and integrating non-major students into what are otherwise

typically core major courses, to leveraging peer-to-peer learning as an approach to broadening students' bases of knowledge, a carefully designed curriculum that incorporates the vertical model serves to benefit students, instructors, and administration alike. The structure of the iPad-based project outlined within this paper represented an ideal opportunity for testing aspects of the vertical studio model in preparation for a full implementation in the near future. However, many of the lessons learned and realizations made helped to clarify that the effectiveness of a vertical studio-based project is highly contingent on its minute details (and careful consideration thereof). The authors are both excited and optimistic about what the future holds for the comprehensive integration of the vertical studio model within their program's curriculum.

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STUDENT WORK

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Bygone Punishments, Volume VI by William Andrews, designed by Lauren Blackburn: https://itunes.apple.com/us/book/bygone-punishments/id630694757?mt=11

Clairvoyance and Occult Powers by Swami Panchadasi, designed by Taylor Carlson, Chelsea Choi, Elaine Palutsis, Charlotte Petertil, and Heather Stickney: https://itunes.apple.com/us/book/clairvoyance-occult-powers/id610529041?mt=11

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Your Mind and How to Use It by William Walker Atkinson, designed by Eddie Diazmuñoz, Grace Jeong, Hyo Ri Nam, Alex Resendiz, and Michael Zhang: https://itunes.apple.com/us/book/your-mind-and-how-to-use-it/id614664185?mt=11