An Update on the Vertical Studio Implementation at the University of Illinois

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REVIEW

The vertical studio creates a shared experience for students at different levels within a given curriculum. It promises certain benefits while presenting significant challenges. The authors presented a pilot test of the vertical studio at the 2013 UCDA Design Education Summit, documented in the conference proceedings (Tober & Peterson, 2013). This earlier paper should be consulted for further detail on the pilot study and the impetus for the development of the vertical studio model.

In summary, the vertical studio seeks to maximize the benefits of peer-based learning. It begins with an acknowledgment that one of the major aspects of a design education is the development of a community of peers with which one shares work and life experiences. The vertical studio promotes a larger community—breaking through the standard segregation of levels—and thereby increases opportunities for learning in ways that are not directly controlled by faculty. Larger class sizes become a virtue. More experienced students are positioned to model best practices by example, without having to directly co-teach less experienced students. Team-based project components provide better collaborative training when team members’ experiences aren’t all equivalent to one another. The incorporation of non-majors holds promise for further increasing the range of work, broadening what is essentially the major engine of learning in this model: work product.
REPORT

A fall 2013 institutionalization of the vertical studio followed the pilot test outlined in the 2013 UCDA Design Education Summit proceedings. This was presented at Connecting Dots, a 2014 AIGA Design Educators Conference, and is documented in the conference proceedings (Peterson & Tober, 2014). The core vertical studio included 90 participating students, split into 3 vertically balanced sections. One of the sections included non-majors.

The tentative incorporation of the vertical studio into the core curriculum coincided with the acquisition of new and dedicated studio spaces for the program. Previously the program held 3 dedicated studios, one apiece for sophomores, juniors, and seniors. Consistent with the ethos of the vertical studio, the Graphic Design faculty wanted to promote mixing across levels, especially in off hours. To that end two larger spaces were secured, and graduating classes (seniors, etc.) were no longer segregated. These improved facilities were an easier argument to administration with the vertical studio: there was the promise of both a larger average class size (impractical in the smaller rooms) and the inclusion of non-majors.

Beyond securing larger class rooms, the increased class size of vertical studio meant fewer instructors were required to teach the program’s 90+ students in the incorporated core classes. The Graphic Design program was able to utilize these saved faculty assignments to expand the core curriculum. This is the most beneficial and immediate result of the institutionalization of the vertical studio.

The three instructors—including the authors—each prepared coursework for a third of the semester and rotated through the sections, teaching the same project three times. Each section of students thus received projects in a unique order.

The instructors did not coordinate their coursework aside from ensuring that there was no significant overlap of coverage. The vertical studio is meant to provide a range of experience, after all. Instructor K. T. Meaney invited scientists into her class and students studied the behaviors of different animal species in a local natural prairie park (one species per student). They documented these behaviors in image making studies, selecting production techniques from a supplied list to ensure extensive engagement and variety. These studies, which culminated in posters and patterns, were collected into binders and served as the source material for individually defined outcomes: each student proposed fictional promotional or informational materials for the park.

Meaney’s structured image making explorations served as an equalizing entry point for the students. The sophomores were guided in their studies and only had to focus on imagery that was descriptive of behavior at first. Once they were faced with typography and layout, they had imagery in hand. Instructor Matthew Peterson utilized a similar approach.

Peterson’s major project involved complex information design. Students watched Errol Morris’ documentary *The Thin Blue Line*, which covers a crime in great detail (the murder of a police officer at a routine traffic stop), largely through re-enactments based on conflict-
ing eyewitness testimony. Students were organized into teams, selected a possible thread or theme within the film (while ignoring the rest), and supplemented information from the film with research. The film itself became an information source: the project was not ultimately about the *The Thin Blue Line*. Teams of six conducted shared mapping exercises, devising basic schematics for organizing their negotiated information. Individuals subsequently produced informational posters based on those schematics, but through iteration many of the solutions became differentiated to the point that somebody unfamiliar with the development would have difficulty identifying team membership.

The first stage of poster development was image making. Students had to create descriptive imagery through constructed sets, made “graphic” by virtue of photographing the set as the base of the poster. This was an entry point that was truly accessible to sophomores, while also serving as a novel prompt to seniors (few of whom had worked in this manner). In the first iteration, sophomores were not permitted to use any typography. They had to construct a space and visualize characters, evidence, or concepts therein. Seniors had to produce complete viable posters in the first iteration, with a base “layer” equivalent to what the sophomores produced, and with all typography incorporated digitally. The sophomores thus saw how the more advanced seniors incorporated typography into their work before attempting the same. Reflecting Meaney’s project design, they also had compelling images established before the task was complicated with typography. (In the first iteration, juniors chose whether or not to incorporate typography.)

Throughout the process, even when individuals were designing their own posters, teams served as the primary feedback mechanism. Since team members shared content that they all understood intimately (more so than the instructor or students in other teams), they were able to address each other’s work without extensive explanations. They also sat together in each class session, making them aware of each other’s process.

Tober’s project tasked students with producing a sixteen episode web series (with each episode 15 seconds long) using Instagram. This project emphasized process over product, as the scale and media-based technical limitations imposed by the assignment were to be negotiated through detailed narrative planning and plot development, structured writing, and a system of formal storyboarding—offering students the opportunity to practice skills applicable to a wide variety of design contexts. The approximately 9 in-class sessions leveraged the team-based structure for peer review and guided assessment of students’ work, which was produced largely outside of class time.

The project began with students developing three unique written series proposals (pitches), each taking form in 320, 80, and 20 words. This provided an initial opportunity for students to acknowledge the time and content restrictions of the narrative medium with which they were engaging. Teams used a lateral thinking critique model to evaluate these proposals and direct each student towards the one he or she should ultimately pursue. The subsequent class sessions were structured around team evaluation of the two to four episodes that each student produced for a particular meeting. Alongside actual video production (collaboration in production—cast, crew, etc.—was left entirely to the
individual students), students were required to develop a script and storyboard for each episode. A close attention to planning was critical to recognizing the balance between what can actually be told verbally versus what needs to be shown visually in a mere 15 seconds. Teams evaluated these materials (video, script, and storyboard) using a report form that posed questions specific to the current stage of the project. Discussing this report—and not the work directly—then served as the focus of team interaction with the instructor, providing one way to help manage limited class time.

These projects all sought to equalize tasks for sophomores and seniors, either in one phase or more fundamentally. For instance, Peterson utilized strategically based teams and a differentially phased process, whilst Tober utilized a technological format that flattened out expertise levels. These curricular manipulations, in response to the vertical studio model, can be visualized on an axis of expertise dependence.

A project with the highest level of expertise dependence (e.g. a service design suite of functioning interactive media) at A would be inappropriate for a vertical studio: only the most advanced designers could handle the variables. At some point, B, a project becomes manageable in the vertical studio, though the outcomes will be stratified: seniors will consistently produce stronger work than sophomores, not surprisingly so. Peterson’s project (x) approaches this boundary. However, projects can also be designed such that seniors are not much more qualified than sophomores, at C. Tober’s project (y) is near this extreme. Minor manipulations can move projects along this axis. If Tober’s project required typographically based animations, it would shift left.

Projects that are less expertise-dependent are likely targeting fundamental aspects of design. For instance, Tober’s project is more about the process than the physical outcome, in terms of how class activities are framed. A major learning outcome in this example is related to process itself, which ideally students will apply to future work. Low expertise-dependent projects run the risk of alienating seniors. A major challenge for the instructor is in framing the class activities so that students understand their applicability.

Projects that are more expertise-dependent are likely more applied (though not to the point of simulating professional practice). Work must be structured so that sophomores need not manipulate too many variables at any given time, but still succeed in producing integrated work in the end. High expertise-dependent projects run the risk of alienating sophomores. A major challenge for the instructor is rendering outcomes attainable for less experienced students through a variegated process. The question becomes: how far can a project shift towards B and still work for mixed-level students?
The authors believe that both low and high expertise-dependent projects are valuable in a vertical studio. In fact, it may be advisable to ensure that projects in any given year vary along the expertise dependence axis. A particular sophomore may find a high expertise-dependent project overwhelming and discouraging, despite the best efforts of the instructor. Such a student can still feel supported in the vertical studio if another project is low in expertise dependence.

**CONCLUSIONS**

The Graphic Design faculty at the University of Illinois determined that the only way to test the efficacy of the vertical studio was to implement it for at least three years, so that one full graduating class would progress through it, participating in each of the sophomore, junior, and senior years. Some of the early conclusions the authors have made from the experience thus far are particular to their situation and are not necessarily inherent to the vertical studio concept:

- Teaching the same project 3 times in one semester was tedious for faculty. The second vertical studio implementation (in the fall of 2014) is being split into a total of 4 sections. Each instructor will teach in only two of the sections, with one half of the students executing different projects than the other half.
- This solution also addresses a reconsideration of ideal class size for the vertical studio. The first year targeted classes of roughly 35 students. The second year will decrease class size to 25–30 students.
- There are growing pains. Seniors, who were aware of the different experience of those ahead of them, proved resistant to the vertical studio model. The authors received their lowest course evaluations to date. It appeared that sophomores were not critical of the format. It remains to be seen if they will remain receptive to the vertical studio as they progress through the curriculum.
- The non-majors provided no measurable benefit. For non-majors, the vertical studio was an elective, and enough of them dropped the course that there was no critical mass of non-majors. It is suspected that this is largely a response to the Graphic Design program's strict attendance policy, which appears to conflict with the conception of electives held by non-majors in the School of Art and Design.

Other conclusions, which were no particular surprise to the authors, are definitional of the vertical studio:

- Social learning occurs through observation, imitation, and modeling (Ormrod, 2011). The vertical studio provides the raw material for social learning: a richer social group of individuals in a shared experience. The more there is to observe, imitate, and model, the more learning opportunities will present themselves.
Projects should utilize teams to train the students in collaborative practice and provide an immediate environment conducive to peer-based learning.

Flat group work, where classmates create one product without any differentiation of responsibilities, is not representative of team-based practice, and is thus not desirable. Teams should do what teams do best (research, strategy, critique, etc.) and individuals should remain responsible for their own outcomes.

Seniors model best (or better-than-sophomore) practices, and project design should render the progression of expert student work visible to novice students. If seeing senior performance makes sophomores more advanced, then the benefits should amplify over sustained offering of the vertical studio. (A sophomore group that observes seniors becomes a more advanced group of seniors, whom a subsequent sophomore group learns even more from, etc.)

The authors have found that the challenges of the vertical studio encourage pedagogical innovation, and increase faculty dialogue. The institutionalized vertical studio is thus a productive problem. The expertise dependence axis is one initial finding of the vertical studio, a way to classify and understand projects that emerged out of the struggle of accommodating the vertical model in project design. The vertical studio, in all its difficulties, may prove to be a kind of blast furnace for pedagogical considerations that are generally applicable to design education, in either vertical or "horizontal" situations.

WORKS CITED

