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Design Studio Involvement of Real-World Stakeholders in the Fay Jones School of Architecture, University of Arkansas

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DESIGN STUDIO INVOLVEMENT OF REAL-WORLD STAKEHOLDERS IN THE FAY JONES SCHOOL OF ARCHITECTURE, UNIVERSITY OF ARKANSAS

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Abstract

There is evidence that architecture students are increasingly unprepared to enter the architectural workforce upon graduation. Some research has identified a growing gap between architectural education and architectural practice in terms of real-world concerns as the reason for students' unpreparedness. By involving real-world stakeholders in architectural design studios – by which I mean individuals drawn from outside the academy with a professional, financial, or emotional investment in a project – educators may be able to create a more authentic learning environment that will better prepare students for architectural practice. This study describes my personal experiences as a student working on design projects involving real-world stakeholders, including both benefits and drawbacks. My experiences are set into context by relating the outcomes of six semi-structured interviews with current faculty, current students, and a recent graduate of the Fay Jones School of Architecture at the University of Arkansas, all of whom have participated in school projects involving real-world stakeholders. Generally speaking, students were more engaged when real-world stakeholders were involved in their studio projects, though professors often faced additional challenges in coordinating the stakeholders' participation with the academic schedule. Ultimately, the students interviewed expressed a preference for projects involving stakeholders, believing that such projects bore greater resemblance to projects in architecture practice. Professors, on the other hand, tended to have mixed thoughts regarding the value of such projects. The paper concludes with tentative recommendations about how to best accommodate stakeholder participation into architectural school design projects.

Introduction

As far back as 1954, an American Institute of Architects (AIA) report called for closing a growing gap between educators and practitioners (Bannister, 1954), and many academicians and practitioners alike have commented on not only the disconnect between architectural education and architectural practice but also a similar disconnect between these and real-world concerns. For example, through extensive interviews with practicing architects, Harvard University Education Professor Lee Bolman found that 22% of interviewees regretted that they had not learned to deal better with other people while in architecture school (Porter & Kilbridge, 1981, pp. 293-94, 326). Similarly, in a 1995 speech to the American Institute of Architects (AIA) National Convention, Robert Geddes spoke of the importance of ending the architecture discipline's isolation from non-designers, particularly those who participate in the making of built environments (Geddes, 1995). A 1996 report by Ernest L. Boyer and Lee D. Mitgang adds that architectural education should "foster a climate of caring for human needs" by *inter alia* interacting more frequently with clients and communities (Boyer & Mitgang, 1996).

Some of the quotes from the Boyer and Mitgang report remain relevant to architecture education and practice today. For example, a faculty member of a public Midwestern university wrote of the importance of architects' recognizing their role as designers for people, saying: *"…more knowledge should be gained about the physical needs, emotional needs, and broader social requirements to ultimately make the architecture successful for the users"* (*ibid,* p. 39). A professor at North Carolina State University added that it was critical to teach students the *"importance of group dynamics, interviewing, and listening skills in developing designs that respond to human needs"* (*ibid*, p. 39) and that *"in the end, building to meet human needs means helping architecture students become effective teachers and listeners, able to translate the concerns of clients and communities into caring design"* (*ibid*, p. 40).

Creating a more authentic classroom experience in the design studio has been shown to promote student acquisition of a broader range of professional communication skills, thus helping close the gap between school and practice and, ultimately, practice and public. Historically, a major student complaint in typical architectural design studios has been *"a lack of realism in… scope, economic considerations, and client input"* (Clay, 1974, p. 23). The problem continues today. According to Challis (2002, p. 109), this problem can be resolved by creating an authentic learning environment where "activities represent the types of complex tasks performed by professionals in the field, rather than decontextualized or contrived activities." Authenticity can be added to class projects by giving students more realistic design problems and by providing an audience that has a stake in the project – a 'stakeholder' (Martin-Kniep, 2000). In this context, a stakeholder may be thought of as an individual who is not of the academy but who has a financial, professional, or emotional interest in, or attachment to, an architectural project. A stakeholder may be, for example, a landowner, a neighbor, a community representative, or a consultant engaged to deal with the project professionally in parallel to the students' efforts. Irrespective of whether they are strictly 'the client' (i.e., would be paying for an architectural intervention if the student work were a professional commission) or not, these individuals offer advice, practical assistance related to site information, and a set of views, needs, and aspirations that the student must address while meeting the pedagogical goals of the professor. They are *de facto* stakeholder-clients.

According to Press (1998, p. 236), including stakeholders in the design process can help students make better design decisions while also providing them with experience in effectively communicating with people that are unfamiliar with architecture. In addition, such projects may give students a more realistic experience of what happens in a design office (Clay, 1974). Students have said that these types of projects made it easier for them to imagine themselves working on similar projects in future practice (Roberts & Roberts, 2007) and have commended such an approach for effectively linking theory with practice (Martin-Kniep, 2000). Students have also reported that these types of projects hold their attention well, create discussion, engage them with the topic, and encourage them to take a more active learning approach (Roberts & Roberts, 2007).

Nevertheless, instructors have noted some potential drawbacks to such an approach to architectural education. University of Illinois faculty spoke of the potential conflicts that may arise among students due to differing expectations among professors and stakeholders (Clay, 1974). In Clay's study, the faculty recognized that, in a design office, the final solution was mostly shaped by client input and economic constraints; in contrast, in an educational setting, these factors are not a generally preferred basis for making design decisions.

The existing literature, although scant, seems to be positing two points: first, gaps between architectural education and practice and the general public exist, are potentially problematic, and need to be closed. Second, one approach to meeting this challenge involves the inclusion of real-world stakeholders within architectural schools' studio projects. At first glance, this seems sensible. But what are the actual experiences of undertaking this approach? The literature *does* identify some potential problems. This paper adds to the existing literature by providing a first-person account of one student's experience with stakeholder participation in architectural studios and then placing that account within the context of the experiences of fellow students and professors within the Fay Jones School of Architecture at the University of Arkansas.

Personal Experiences as Research Base

During my studies in the five-year Bachelor of Landscape Architecture degree (BLA) program, I worked on three studio projects involving real-world stakeholders. The first of these involved redesigning the historical business core of a small town (population 1,300); the second focused on the redevelopment of the waterfront of a large city (population 80,000); and the third and most recent project involved a downtown park master plan for a small city (population 14,000). For the business core, the class met members of the local community, the mayor, and board members of a historic tavern museum – the centerpiece of the downtown. For the waterfront design, the class met with the city's parks director, several landowners on and near the waterfront, and the local museum management. The park master plan involved the city's cultural tourism director and its planning and development director.

The business core redesign project was my introduction to working with real-world stakeholders; the class professor had been approached to design an herb garden for a historic tavern. Upon visiting the town, the professor recognized that the entire business district adjacent to the tavern, as well as a nearby park, had potential for a studio design project. The professor organized the initial project brief, where community members – the stakeholders – showed the class around the main street and some of its important buildings, explaining their vision for the town's future redevelopment. Several other students and I then maintained contact with the stakeholders throughout the inventory, assessment, and design phase of the project, using the stakeholders as resources on subjects such as site history, existing uses, and desired program elements.

The stakeholder involvement in this project gave the project a depth that would otherwise have been difficult to achieve. Much of the site's history had been passed down orally and would have been nearly impossible to research through other sources. Moreover, the added pressure of having to present to a large audience of the town's residents inspired me as well as many of my classmates. The project's community service was also a major motivational factor since many of us were from other struggling small towns that faced similar issues. Nevertheless, it seemed to me and some other students that the project's focus was rather confused, as many of the stakeholders were more interested in the design of the herb garden (the initial design they had sought out) than in the design for a downtown master plan, which the professor had suggested. During the final presentation in the town hall, and despite the breadth of scope of the studio output, many of the stakeholders were still inquiring, *"Where is that herb garden?"*

The next project, involving the riverfront redevelopment for the larger city, was initiated as a studio exercise by a visiting professor from a professional design firm. The fact that an architect from a professional design firm was involved probably helped generate stakeholder interest in the project. The stakeholders were the city's parks director, several landowners on and near the waterfront, and the local museum management. As in the small town redevelopment exercise, student involvement in the project started with the stakeholders. Each class member was assigned a specific stakeholder contact and was supposed to use that contact to work on the corresponding component of the site inventory and assessment. My contact was the director of a major national museum which was relocating to the project site. However, this individual did not return telephone calls. The project's visiting professor did incorporate some of the atmosphere of a professional design office into the classroom, much to the delight of the students. In addition, the professors and the students had several discussions about effective communication and presentation techniques with stakeholders, which proved helpful during the final presentation. Perhaps this fact emphasizes the importance of the real-world experience of design professors who can go beyond technical competency and draw on other skills honed in practice. During the final presentation of the project, the stakeholders who were present at the original introduction of the project were also present, and for the most part their comments on the project were very courteous, though it was clear that one of the landowners was unhappy with the proposals (see Figure 1 for master plan developed).

Finally, the project involving the master plan of a small town's downtown park was initiated by a regional cultural tour-

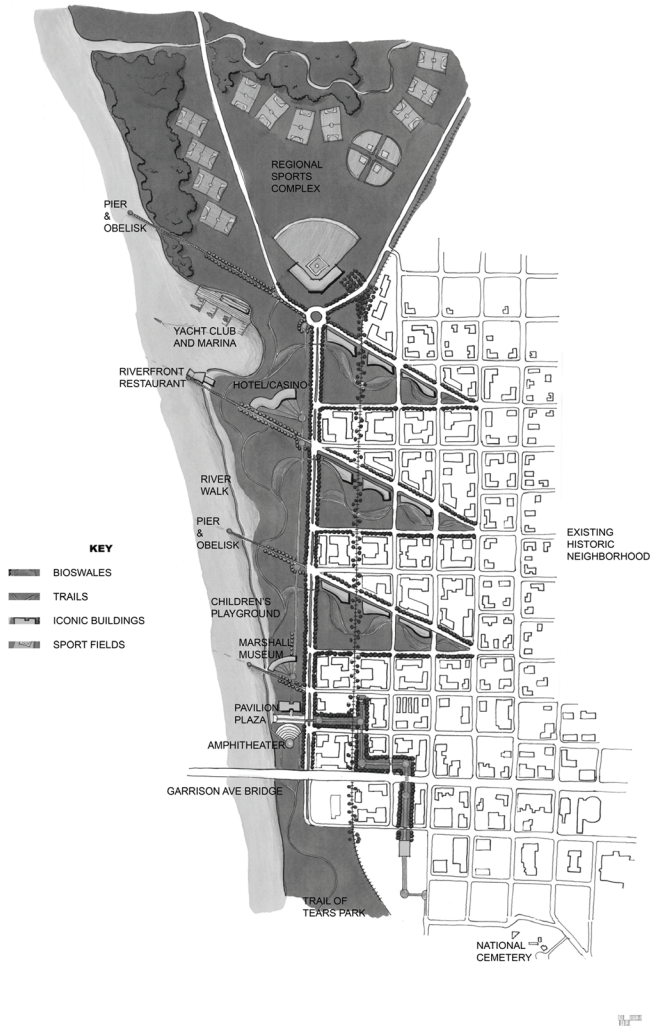

Figure 1. A riverfront redevelopment master plan resulting from stakeholder involvement.

ism director for northeastern Oklahoma who had contacted several nearby landscape architecture schools with his plans for the town's redevelopment. I chose this initiative for my senior design project, which called for minimal stakeholder-professor interaction. Instead, I was the one responsible for taking the initiative in any stakeholder involvement that the project might entail. The initial advice from the tourism director was very helpful as he outlined his desires for the scope and nature of the project. When it became apparent that the part of the project I was most interested in was actually a park owned by the city, the tourism director referred me to the city's planning and development director, who also proved to be very helpful. This individual showed me the park and described in detail her vision for its future, as well as its uses and connections to the surrounding city and what she envisioned its future context would be. Unfortunately it was subsequently difficult to keep in contact with the planning and development director. For example, she did not reply to emails, was not familiar with the project's timetable (discussed on site), and was unable to attend invited presentations and critiques. Apparently, the student project moved at a speed and intensity that made coordination with the planning and development director's time schedule difficult.

Involvement with these real-world stakeholders improved the quality of my work and approach to design. For example, based on my experiences, I made additional efforts to clarify and explain design ideas verbally since many stakeholders are inexperienced at reading drawings. In addition, the projects seemed to take on a new meaning and a higher level of importance since the audiences were not solely professors or peers but members of the community at large.

Additional Research Data

In order to add to the existing literature and set my experiences into context, I collected the experiences and observations of faculty and students within the Fay Jones School of Architecture who had been involved in school studio projects involving real-world stakeholders. A semi-structured interview was selected as the best method of collecting this information from the faculty members and students. This type of interview, which allows respondents to speak freely about a series of themes or topics, is a highly effective and efficient method of gathering information (Smith *et al*. 2009).

Upon approval of the project by the IRB, six subjects were selected to participate in the research project: three professors, two students, and a recent graduate of the school who was working with one of the aforementioned professors as a teaching assistant. The six participants were selected based on their experience involving real-world stakeholders in school projects. Descriptions of the participants and their stakeholder project involvement are provided in Table 1.

Table 1. Research participants and their stakeholder project involvement.

Research interview participant	Project type	Stakeholder(s) involved	Stakeholder involvement
Landscape Architecture Professor	Community master plan for small AR town	Local museum board, Mayor, community volunteers	Initial brief, final review
Architecture Professor	Design/build restaurant project for post-Katrina development in LA.	Restaurant owner	Initial brief, entire design and construction phases
Architecture Professor	Design/build outdoor classroom for elementary school, AR.	School principal	Initial brief, interim and final reviews, all of construction phase
Recent Graduate and Teaching Assistant	Design/build house in impoverished, tornado-damaged neighborhood, AR.	Non-profit, low-income housing organization, future inhabitants	Initial brief, some interim reviews, all of construction phase
Fifth –Year Landscape Architecture Student	Park master plan for large city, AR	City's parks director	Initial brief, site analysis, throughout design process, final review
Fifth –Year Landscape Architecture Student	Park master plan for large city, AR	Director of a non-profit organization	Initial brief, site analysis, throughout design process

Upon agreeing to participate, the participants were each given a list of research topics, giving them a better understanding of the research project and preparing them to formulate answers for the interview discussion. These are shown in Table 2.

I then conducted the interviews in the location of each participant's choosing, following best practice guidelines for semi-structured interviews as outlined by Oppenheim (1992). The interviews were tape recorded, transcribed, and combined into a written discussion of results in collaboration with my research mentor. In the event that a participant did not want his or her interview taped, the interview notes were handwritten.

Discussion of Interview Responses

The students and faculty interviewed held a variety of opin-

Table 2. Research topics discussed during participant semi-structured interviews.

Initiation of the design project – student, professor, or real-world stakeholder.
The nature of the project(s) involving real-world stakeholders and the reasons for the stakeholders' vested interested in the project.
Experiences regarding the stakeholders' interest and enthusiasm in the project(s) and in aiding the students and professors.
Real-world stakeholders affects on the outcome of students' projects.
Points during project(s) where contact was made with real-world stakeholders.
Effectiveness and techniques of communication with the real-world stakeholders.
Student and faculty attitudes toward working with the real-world stakeholders.
Effect of involving real-world stakeholders on a project in terms of student morale.
Conflict of students' obligations to professors and to the real-world stakeholders.
Views on recommending further integration of real-world stakeholders in the student design studio.

ions on the merits of real-world stakeholder involvement in school design projects. Some felt that the benefits to the students and the stakeholders were well worth the added effort. Others, however, noted drawbacks to such projects, some of which they felt were significant. The following discussion addresses the benefits of stakeholder involvement first.

Projects involving real-world stakeholders can provide students with situations in which they may learn skills useful in professional practice. In fact, one reason one of the fifth-year landscape architecture students gave for her added interest in such projects was that she believed it resembled more of what would take place in a professional design office. She also said that the addition of real-world stakeholders in the design process helped her with her presentation skills, especially with regard to building confidence in dealing with people. In addition, she indicated that she received much helpful guidance from her professors on interaction with real-world stakeholders, specifically presentation techniques, meeting etiquette, and response to criticism. The other fifth-year landscape architecture student expressed the opinion that working with real-world stakeholders had helped him be less intimidated by clients. He also commended the professors' instruction over the years on effective practices for dealing with real-world stakeholders on such issues as email versus written letters, public speaking, email etiquette, and other communication skills.

One of the architecture professors also mentioned some of the skills and insights he believed students had learned in his design/build classes for a restaurant in New Orleans, Louisiana. The backgrounds of most of the students in his classes were dramatically different from that of the stakeholder (a restaurant owner from an impoverished inner-city neighborhood), so before meeting with the stakeholder, the students and the professor had discussions about sensitivity to the situation. Ultimately, no conflicts arose between the students and the restaurant owner. In fact, the relationships worked so well that even the marginal students "blossomed," which the professor found empowering.

Yet another skill that students learned through these types of projects was the ability to process the additional outside input from real-world stakeholders. In professional practice, the designer may have to make decisions that run contrary to the client's wishes (if they believe the decision will ultimately be to the client's benefit), and it was the landscape professor's belief that students must be introduced to such dilemmas in a classroom environment under the guidance of a professor. In fact, this professor said that the ability to factor into a project what the client said was one of the most important skills a student could learn from client interaction.

Real-world stakeholder input also provides other benefits to students. One of the interviewed landscape architecture students highlighted the chance to get additional feedback on projects. Specifically, she said involving real-world stakeholders in projects helped her to understand how people were going to move and otherwise interact within the space being designed. In fact, this landscape architecture student believed that the extra feedback was one of the more important parts of real-world stakeholder participation in studio projects. The landscape architecture professor added that, during the final project reviews, she had always found the client feedback to be excellent. *"The clients are going to be nice to the students, they're going to accept the presentations, and they're going to be wowed by the pretty drawings."*

Moreover, during the course of these projects, clients saw the range of possible design solutions that students had proposed, gave valuable feedback during interim critiques, and helped guide the design outcome. A well-done project, said one fifth-year landscape architecture student, is an opportunity to expand the client's thinking. The other fifth-year landscape architecture student referred to this opportunity to educate stakeholders about the landscape architecture profession as a major motivational factor present in such projects. He said that the client would never have even considered that many of the design options proposed by the students were possible. Even though they would never be built, at least they had become a part of a discussion about the possibilities of the site. In fact, both students and professors mentioned that involving real-world stakeholders can enlighten stakeholders on the professions of landscape architecture and architecture. One architecture professor said that these projects *"help people understand the value of what you do* [as an architect] *and help develop a culture of people who know what you do, therefore increasing demand for architectural services."*

Both of the interviewed landscape students cited the community service component in many of the school's student landscape architecture projects as a major reason for their extra interest in such projects. The drawings that result from these projects can be used to help the real-world stakeholder 'clients' obtain grants for capital works and the fees for a practicing landscape architect to realize a project. Similarly, the school's architecture design/build projects also have had a strong service component, which one of the architecture professors believes leads to a stronger student interest in the projects: *"Architecture has such a potential for positive impact on the community,* [and] *the students involved in the* [design and build] *project continue to have a lifetime commitment to community service."* This architecture professor believes the students seem more interested in and content with stakeholder projects compared to typical studio projects that are confined to an

academic setting within a classroom.

Students also indicated they felt additional accountability in projects involving stakeholders, stemming mainly from the involvement of additional people in the project besides their professors. According to one of the fifth-year landscape students, when a professor was the only figure of authority in a project, students tended to focus their efforts on merely earning a good grade rather than striving for good design. She believed that the involvement of stakeholders, on the other hand, drove students to push harder to make people believe that the student was a good designer. She also believed that these types of projects often resulted in design solutions that were more complex and at a larger scale than the client's initial expectations. However, this student still acknowledged that professors were an integral part in helping drive students to exceed client expectations. In fact, during her senior design project, she was encouraged by her professor to almost completely eliminate the client's program and develop another that was deemed by the professor as more ambitious and appropriate for the site. Though perhaps not always the case, in this situation the client was satisfied with the project's outcome.

What then are the drawbacks of stakeholder projects as experienced by the interviewed students and professors? All the interviewed professors agreed that a great deal more work is involved in these real-world projects as compared with contained projects. Even finding appropriate projects where stakeholders can be involved takes considerable effort on a professor's part since the project has to fit into the curriculum's pedagogical objective (in terms of scale, complexity, intrinsic design challenge, etc.). Further, the professor and stakeholder must undergo the often difficult task of finding supporting documents such as base plans, if they exist. Such projects may also require a careful delegation of tasks to the students, again increasing the organizational challenge to the professor. The professor's role regarding task delegation is particularly important in design/build projects since the project must belong to everybody involved in the designing and the building. To this end, a design/build professor said that he made students rotate tasks frequently in order to maximize student involvement and commitment to the project.

Another major issue is the different time schedules of the classroom and the participating stakeholders. The landscape professor recalled a recent project where the client asked to reschedule the review with little notice. Unfortunately, a reschedule was not possible, and the reviews took place without the client, rather undermining the client's role.

Yet another drawback from the real-world stakeholder approach is the confusion that may arise from involving large numbers of additional people. In this regard, the landscape architecture professor believed that the breadth of stakeholder participation needed to be limited. In other words, the general public can rarely be involved simply because getting such a large number of people together at once is a difficult task. This same professor stated that students should consider outside input *"with a grain of salt."* The professor said, *"Keep client contact to a minimum. They can muddy the water so much."* In addition, the professor cannot be present for all student-stakeholder interaction, and as a result the professor can never really know all that has been said and the extent to which a student has been influenced by a stakeholder's statements.

Students also recognized similar drawbacks of stakeholder input. The recent graduate of the architecture program agreed with the landscape professor: instructors should try to limit or completely avoid interactions between students and real-world stakeholders as it can stifle creativity. While working on their design projects, he said, students can use the realism of real-world stakeholder input as an excuse to leave creative ideas unexplored. The graduate had not realized the extent to which real-world stakeholders could constrict the design process until he himself had worked on a school design/build project with a real-world client. However, he did mention that the faculty had eased the situation by making the students realize that real-world restrictions were not the primary concern within this academic setting. The students were encouraged to focus at least equally on creative exploration. At the same time, however, the recent graduate acknowledged that there was still some merit to introducing students to real-world stakeholder interactions before entering professional practice simply because of the added challenge of a new element in the design process.

Another potentially serious drawback with projects involving real-world stakeholders is the conflicting interests between the professors' and the stakeholders' desires for the project outcome. In all cases, the interviewed professors intended that the students should adhere to their project statement (the set of rules, guidelines, and other criteria set by the professor that students must fulfill in order to satisfactorily complete the project). In the case of a conflict between the professors' project statement and some wish of the stakeholder, all of the professors expected the student to respect the primacy of the project statement.

None of the students interviewed, however, seemed to hold the same view as their professors. In fact, the interviewed students generally said they were more apt to follow the stakeholder-client's desires rather than their professor's. One of the landscape students gave a possible explanation, stating that these studio projects were designed primarily for the client and that the professor was merely helping in achieving that effort. Yet another landscape student said that he felt more loyalty to the stakeholder-client than to his professors. He believed that his chief responsibility in the studio project was to devise a solution for the stakeholder-client that was realistic and practical and that fulfilling the project statement for the professor was only a secondary concern. However, the student did mention that typically, if a student fulfilled the stakeholder-clients' wishes, the project brief was fulfilled as well.

All the professors and students interviewed agreed that another critical issue with these types of projects is that stakeholders should be genuinely interested in the project outcome. In projects dealing strictly with design (rather than design *and* build), experiences with stakeholder interest seemed to vary widely. Fortunately, professors and their students had worked together to compensate for a lack of stakeholder interest in their projects, mainly by simulating the input of an imaginary, more involved stakeholder. Based on professors' and students' experiences, though, if the stakeholder initiated the project, he or she was more likely to be

interested in participation.

Design/build projects, on the other hand, seem to require an enormous amount of stakeholder interest from the outset. Without stakeholder interest, most of these types of projects are not possible. As a result, most design/build projects that proceeded beyond the planning stage had sufficient stakeholder interest, and a lack of interest rarely became an issue later in the course of the projects. An example would be one of the architecture professors' recent design/build projects, located in an impoverished, hurricane-damaged neighborhood in New Orleans. Given the gravity of the situation in one of his project sites, he said, *"Everyone was interested in being helped."* As a result, a lack of client interest was never an issue.

Yet another drawback, mentioned by one of the fifth-year landscape architecture students, is that sometimes the stakeholder has an inaccurate vision of the profession's capabilities. Despite help from professors, there is the very real possibility that the client will shrink the student's vision of the project in order to meet the client's expectations. In other words, he said, a student must stay focused on completing a full landscape architectural project rather than merely drawing a horticultural planting plan.

Conclusion and Recommendations

For the interviewees drawn from the Fay Jones School of Architecture at the University of Arkansas, the involvement of real-world stakeholders in projects created a more authentic learning environment. That being the case, and consistent with current literature, stakeholder participation is a way to address the gap between architecture education, architecture practice, and real-world concerns. Students tended to prefer this more authentic approach and believed that they had learned skills that would be of value in a professional office. The professors also noted the benefits of real-world stakeholder projects for students as well as the architectural professions. However, such projects are not without their challenges. Project preparation can require a considerable amount of time and effort for the professors, and the stakeholder-student interaction can result in outcomes contrary to the professor's pedagogical goals. Again, these findings are consistent with the broader conclusions of the existing literature.

Based on personal experiences and the semi-structured interview data gathered in this study, a series of recommendations can be made to make stakeholder projects run smoothly and to ensure that there is a better educational return on a professor's time investment. The professor should consider choosing projects with a strong community service component, which could increase students' interest and emotional investment. Choosing an appropriate, enthusiastic, and engaged stakeholder is also an important factor in a project's success. Ideally, stakeholders should have an interest in both the project's design and the students' education. Ensuring that the students and the stakeholders share the same expectations for the project outcome as the professor is also important. The professor must be aware of the influence that stakeholders can have over the project outcome and must make the students aware that the professor's project brief and pedagogical goals take precedence over any statement or desire of the stakeholder. Of all possible points within the design process in which the stakeholder may be involved, the interim reviews may the most vulnerable in terms of potentially conflicting advice from professor and stakeholder. Prior to these reviews or any other interaction with stakeholders, professors may wish to review communication skills with the students and reinforce the above hierarchy of authority. Finally, students and professors alike must take initiative in stimulating their own creativity and not rely on the stakeholder as a dependable source of design ideas.

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Mentor Comments: Professor Carl Smith describes the unique perspective Robert brought to his examination of learning experiences within the Fay Jones School of Architecture:

Robert's research work was undertaken in fulfillment of a Special Topics class with me in the Fall Semester of 2009. At this time he was also completing his Senior Design Project which had involved collaboration with real-world stakeholders. I understood he found this process rewarding but challenging, reflecting closely the experience of collaborative working in architectural practice. Such exercises have an important role in architectural education: the facilitation of specific project goals; the development of important and transferrable interpersonal skills; and a window on professional practice. That said there are drawbacks to stakeholder collaboration. The literature reviewed here, and the findings of the paper confirm that stakeholder involvement in a design project can muddy the logistical and pedagogical waters.

Robert has gone beyond simply recounting experiences within the Fay Jones School of Architecture, by formulating some well-needed suggestions on how stakeholder projects can be undertaken more successfully. Although his paper chimes with, and modestly reinforces, the scant literature in this area its greatest value (I believe) is in the closing few lines; gems of advice for future architectural professors who want to exploit the benefits of stakeholder involvement while avoiding the potential pit-falls.

Although Robert and I were jointly responsible for the seminal idea as well as the structure of the paper and the research methodology, he undertook the data collection and primary writing responsibility on his own, working diligently and enthusiastically over the best part of two semesters. He gathered his interview data professionally and efficiently, and his writing was concise and well-structured. Within our small department, Robert has made a not insignificant contribution to our burgeoning undergraduate research culture while guiding the future practice of our faculty. Robert Jackson graduated in 2010 as the School's Senior Scholar – achieving the highest G.P.A. in his peer group. This paper, as well as the numerous accolades gathered during his time with us in Fayetteville, stands as testament to a remarkable young man, who has the potential to be an outstanding professional and a credit to his alma mater.