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PEDAGOGY AND COMMUNITY ENGAGEMENT IN ENVIRONMENTAL DESIGN COURSES

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This article describes an evaluation of student experiences in environmental design courses with a community engagement focus. It aims to identify pedagogical approaches that minimize obstacles faced by students while maximizing learning opportunities. Focus groups composed of undergraduate students in seven classes generated three major findings: (1) learning how to effectively engage with community partners is one of the most beneficial challenges of this type of course; (2) logistical hurdles and course characteristics that limited students' ability to connect with the community partners or synthesize the social, emotional, technical, and theoretical aspects of the course were perceived as learning obstacles; and (3) social and emotional connections with community partners are the most educationally significant part of the experience for students. The conclusion discusses recommendations for how environmental design instructors can take advantage of the unique social and emotional connections with community partners that facilitated community engagement can foster, while limiting the learning obstacles that students may experience. Areas for future research are also discussed.

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INTRODUCTION

Community engagement in the form of service-learning reinforces experientially what students learn on a cognitive level and enables them to apply their acquired knowledge in a meaningful way (Weinreich, 2003:182). Service-learning also offers university students opportunities to serve a community need while experiencing real-world challenges outside the classroom (Hamner, *et al.*, 2007:106). These challenges can provide students with a realistic appreciation of the complexity encountered in community settings and enable them to develop the skills and confidence needed to work effectively in community contexts after graduation (Hamner, *et al.*, 2007:109; Roakes and Norris-Tirrell, 2000). In addition, community engagement through a university course may create more engaged practitioners since research has shown that youth who were engaged in their communities often grow up to become adults who are more engaged citizens than the adult counterparts of comparable youth who were not involved in their communities (Beane, *et al.*, 1981).

For students in an environmental design program, skills needed to work in a community setting, such as community organizing, consensus building, and facilitating participatory processes, are particularly relevant and useful considering the community-oriented nature of professional design and planning (Forsyth, *et al.*, 1990:168; Horrigan, 2006:133). Planning education has a rich tradition of community engagement, but recently there has been a growing interest among architecture faculty as well. Further, in a national survey of students enrolled in accredited architecture programs conducted by the Carnegie Foundation for the Advancement of Teaching, 40% of students indicated that their primary motive for entering the profession was not salary or prestige but to improve communities and the built environment (Boyer and Mitgang, 1996:149). This frequently cited report concluded that the time has come to elevate the place of architecture in the daily lives of communities (*ibid.*:145) and that educating architects not only for competence in technical and creative design skills but also for civic engagement should be one of the highest priorities of architecture schools (*ibid.*:xx).

However, although there is a significant amount of literature on service-learning, most studies do not address its pedagogical aspects in the design and planning fields. A smaller body of research, including the edited volumes *From the Studio to the Streets: Service-Learning in Planning and Architecture* (Hardin, *et al.*, 2006) and *Service-Learning in Design and Planning: Educating at the Boundaries* (Angotti, *et al.*, 2011), focuses on design and planning but offers limited pedagogical recommendations to improve students' experiences. In a paper published in this journal, Forsyth, *et al.* (2000) explored the challenges and benefits of service-learning courses in planning, landscape architecture, and architecture programs. They recognized the additional demands that such courses place on faculty, as well as the constraints often faced when students with limited professional skills work with disadvantaged population groups in a community engagement capacity (*ibid.*:249). Despite the many challenges they identified and their focus on the benefits for community groups and university programs, they also recognized the potential educational benefits and possible life-changing experience of community engagement for students (*ibid.*:251). Yet, they did not go further to explore the impact on students in greater depth, nor did they consider pedagogical implications.

This paper focuses on the potential impact of community engagement on university students in a large environmental design program. It describes an evaluation conducted over three consecutive semesters in the College of Architecture and Planning at the University of Colorado Boulder (USA). During facilitated focus groups, undergraduate students from seven community engagement classes discussed their experiences and recommendations for improving the course. Content analysis of the transcripts using NVivo analysis software revealed that many of the beneficial challenges mentioned by students relate to the social and emotional aspects of working with a community and applying theory in a real-world context. In addition, students reflected on many frustrating challenges of community engagement that could potentially be avoided with alterations to the

course design. These findings led to good-practice recommendations, which we organized into two categories: (1) incorporate beneficial challenges that enable students to learn the social and emotional skills needed to effectively work with a community group and better integrate theoretical and technical course content with students' service experience and (2) avoid obstacles that hinder positive learning experiences and lead to dissatisfaction with the course experience.

OVERVIEW OF EXISTING GOOD PRACTICES

The literature contains extensive research on how to teach community engagement courses. Although, generally, this research broadly focuses on pedagogical techniques, much of it also applies to design and planning. An incomplete list of suggestions includes the following:

- Engage students in responsible and challenging actions for the common good (Honnet and Poulsen, 1989);
- Provide structured opportunities for reflection and integration (Bringle and Hatcher, 2003:84; Eyler and Giles, 1997:63; Honnet and Poulsen, 1989);
- Provide clearly defined goals and objectives for each stakeholder while working directly with community partners to allow them to define their needs and goals (Honnet and Poulsen, 1989);
- Recognize the complicated and ever-changing process of service-learning (Honnet and Poulsen, 1989; Howard, 2003:102);
- Do not compromise academic rigor (Howard, 2003:102);
- Establish purposeful community partners for service placements that match learning goals and work closely with the chosen community partner to communicate clear expectations and establish a sense of commitment (Eyler and Giles, 1997:66; Honnet and Poulsen, 1989; Howard, 2003:102; Shumer, 1997:34);
- Provide sufficient training and support to enable students to succeed and regularly monitor and evaluate their service-learning process (Honnet and Poulsen, 1989; Howard, 2003:103);
- Ensure that the time commitment required is appropriate for all stakeholders and that the duration of service is long enough for students to develop ownership and gain sufficient experience (Eyler and Giles, 1997:67; Honnet and Poulsen, 1989);
- Rethink the traditional roles of the instructor from information dissemination to facilitation of learning (Howard, 2003:104); and
- Make the service projects "fun" and meaningful for the students and community partners, especially if the service involves children or youth (Shumer, 1997:35).

Despite the wide applicability of these good-practice recommendations, several authors have noted the relative lack of attention to the social and emotional connections that community engagement courses can foster (Felton, *et al.*, 2006:42; Kiely, 2005:6). Findings from the research reported here suggest that the social and emotional challenges of such courses may be more important than previously understood. A brief review of past work on this topic is therefore appropriate.

Social and Emotional Aspects of Community Engagement

Research on the social aspects of working with community partners suggests that when students have direct contact with marginalized populations, they are given excellent opportunities to reassess their own stereotypical attitudes and beliefs (Conway, *et al.*, 2009:240). In a national study, students who perceived a connection between their studies and their "real world" work were more likely to feel connected to the community and believe it is important to volunteer (Eyler, *et al.*, 1997:8). Other research has found that the amount of contact and the strength of the relationships formed between university students and community youth are associated with how university students rate the perceived benefits of the relationship for the participating youth (DuBois and Neville, 1997:231).

Reflection is a way for students to process social and emotional connections. Felton, *et al.* (2006:38) described it as the "bridge between conceptual understandings and concrete experiences." It is considered central to transformative educational practices that enable participants to integrate new knowledge into future practices (Angotti, *et al.*, 2011:3). Critical reflection is a key ingredient of a positive community engagement experience and should be carefully designed to fit the desired outcomes (Conway, *et al.*, 2009:241; Correia and Bleicher, 2008:42; Hatcher, *et al.*, 2004:39; Kiely, 2005:16; Waterman, 1997:7). Reflection in the form of frequent analytic discussions and writing assignments also increases the likelihood that students will develop positive relationships with instructors. Discussions, in particular, have been found to be a positive predictor of future community involvement (Eyler, *et al.*, 1997:7). In addition, reflection activities that are structured, occur regularly, and are designed with a clear educational goal help students process the course material and clarify their civic attitudes, goals, and intentions more effectively than reflection activities that do not contain all three of these qualities (Hatcher, *et al.*, 2004:42).

Felton, *et al.* (2006:42) recommended that instructors and researchers explicitly consider emotions as a critical element of reflective learning. Reporting on a case study in North Philadelphia, Harrison (2011:38) discovered that the "emotions of others — pride, shame, ambition, imagination, stemming from an attachment to their place in the world — [were] the uncontrolled and vital force" that challenged standard studio practice and presumptions. This point is especially important in disciplines that often have a significant technical component, such as environmental design. Yet, a focus on emotions requires a balance between academic rigor (Felton, *et al.*, 2006:43) and the need for a "safe and comfortable climate" in which students can work through their emotions and experience transformational learning (Kiely, 2005:16; Kolb and Kolb, 2005:207). Establishing this balance can be a major challenge for instructors when designing a community engagement course.

In order to address this challenge and determine which pedagogical approaches maximize benefits for students while also identifying learning obstacles, this evaluation aimed to find out directly from students what influenced their experiences. The findings support the need for a balanced approach that incorporates careful attention to the social and emotional aspects of working in community settings.

METHODOLOGY

Focus groups were appropriate for data collection because our goal was to understand student experiences rather than measure learning outcomes. The focus-group interview protocol was based on relevant literature and the authors' experiences in teaching community engagement courses. Questions covered topics related to the students' experiences in the community engagement course in which they were enrolled. In total, seven focus-group sessions were conducted over three semesters. Three took place at the end of the 2008 fall semester, three took place at the end of the 2009 spring semester, and a final focus group took place at the end of the 2009 fall semester. All courses were offered in the Environmental Design program in the College of Architecture and Planning at the University of Colorado Boulder. This program enrolls about 900 majors who take interdisciplinary courses taught by faculty in architecture, landscape architecture, planning, and the social sciences.

The seven community engagement classes selected for this study were chosen to represent different formats, including three design studios and four seminar-style classes. In two of the design studios, students worked in pairs or individually with various local elementary schools to redesign the school grounds. They worked primarily with Design Advisory Teams (DATs) composed of administrators, teachers, parents, and staff who were overseeing the design process and did limited work with elementary-school students. Students in the third design studio worked as a class to help local middle-school students learn about and inform the redesign of their school

1. How would you assess your experience in this class?
   a. If you think it was a success, what factors contributed to the success?
   b. If you don't think it was a success, why not?
   c. Did you encounter obstacles? What were they, and how did you overcome them?
2. Describe your interaction with your community partner (the group you worked with outside of class). What role did your community partner play in your learning experience?
3. What did you learn about your community partner in this course?
4. Has this course changed your perspective on working in the community after you graduate? Why or why not?
5. How did your learning experience in this service-learning course compare to your experiences in lecture- or seminar-style courses that do not have an outreach or service-learning component?
6. Describe your experience facilitating/leading a session with the group that you worked with (if applicable).
   a. Were you empowered to take ownership of your lead facilitation session? Why or why not?
7. Do you think you had an impact on the group that you worked with this semester?
   a. If yes, please give examples of the types of impact you think you had.
   b. If not, why not?
8. What did you hope to learn from your community service-learning experience in this course?
   a. What do you think your instructor/professor wanted you to learn in this class?
   b. What course learning goals did the service-learning experience address?
   c. Would this course be effective without the service-learning component?
9. Did you have the opportunity to reflect on your experiences in this class?
   a. If yes, were/was it effective?
   b. If not, what would have been helpful?
10. Did this community experience leave you with new questions or concerns?
11. Will you take another service-learning course? Why or why not?
12. Do you have any other comments you would like to share?

FIGURE 1. Focus-group questions.

building. Students involved in the four seminar-style classes worked in small groups (three to six students) to facilitate activities with diverse youth at several high schools to explore issues of integrating marginalized populations into their community. The instructors were knowledgeable in service-learning techniques and had been teaching community engagement courses for many years.

The focus-group sessions lasted approximately one hour. Instructors and teaching assistants were not present. Two of the authors facilitated the focus groups individually for classes with which they were not associated. Each session was also voice recorded and then transcribed. Students were encouraged to be candid and were assured their answers would in no way affect their grade. Six to 13 undergraduate students participated in each focus group, which represented 60-100% of the students enrolled in each course. The focus groups followed a semi-structured format that included the questions listed in Figure 1. Follow-up questions asked about details specific to each course and topics that students found most relevant.

The authors read the seven focus-group transcripts to determine initial thematic categories and then imported the transcripts into NVivo content analysis software. To develop the coding

TABLE 1. Coding structure.

Codes	No. of Focus Groups in Which Topic Was Discussed	Total No. of Occurrences Across All Focus Groups
Beneficial challenges		
Learning how to work effectively with community partners	7	214
Learning course content	7	99
Learning effective strategies for reflection	5	18
Learning obstacles		
Lack of coordination and communication of expectations with community partner	4	77
Lack of clarity about course expectations for students	6	51
Disorganization of course	5	48
Lack of service-process preparation	5	44
Poor communication between students and instructor	5	41
Overall course workload too high	6	26
Disconnect between course content and service	6	25
Not enough time to build relationships with community partners	5	24
Lack of course-content coverage	5	20
Lack of reflection	3	17
Not enough time doing service on site	3	11
Lack of flexibility in course structure	3	8
Competing academic demands	2	7

scheme, two of the authors separately coded the longest transcript and discussed which codes were appropriate and how to interpret various passages. With a unified coding scheme, three transcripts were individually coded by two of the authors. These three transcripts were from classes with which the coders were not affiliated and excluded the transcript used to develop the coding scheme. The three coded transcripts were compared to calculate inter-coder agreement, which was determined at a mean of 97% agreement across all codes in the three transcripts. Calculation of the Kappa coefficient across all codes to accommodate chance agreement produced a mean of .58, indicating substantial inter-coder agreement. With an acceptable level of agreement established, the final three transcripts were coded using the established coding scheme. Because of the relatively small number of students in each course and the large number of course variables that could not be controlled for, an analysis comparing outcomes for different course styles and student levels was not meaningful.

FINDINGS

The data analysis highlighted three general themes: (1) students recognized beneficial challenges associated with learning how to work effectively with community partners, pushing them out of their comfort zone and increasing their awareness of community needs; (2) learning obstacles led to frustration and dissatisfaction with the overall experience and specific components of the course; and (3) the social and emotional connections with community partners were the most educationally significant part of the experience for students. Table 1 shows the coding structure for the items in the two broad categories we identified (beneficial challenges and learning obstacles), the number of focus groups (out of seven) in which each code was present, and the total number of occurrences of each code across all seven focus groups.

Beneficial Challenges

Beneficial challenges were aspects of the course that students found difficult yet also acknowledged were valuable learning opportunities. The analysis suggested three general categories of beneficial challenges.

"Learning how to work effectively with community partners" includes aspects of the course not found in traditional, classroom-only courses, such as taking on new social roles, connecting with different people in unfamiliar situations, and becoming proficient in techniques that help produce successful community outcomes. Such aspects were mentioned in all seven focus groups a total of 214 times. The benefit of these challenges was by far the most frequent reflection mentioned by participating students (see Table 1).

"Learning the course content" refers to learning the technical and theoretical components of the course that are typically taught in the classroom and would commonly be present in a classroom-based course. This was the second most frequent student reflection, recorded in all seven focus groups a total of 99 times (see Table 1). Students indicated that the process of learning the course content was essential to a successful community experience. In their comments, students often described these first two course components as being closely interconnected.

"Learning effective strategies for reflection" refers to thinking about and discussing what occurred during the community engagement activities and what can be learned from the experience. Although this challenge was not mentioned nearly as often as the first two (18 times combined in five focus groups), the discussions revealed that effective strategies for reflection often involved getting immediate feedback from instructors and other students in order to improve the community engagement process during the course. In addition, students enjoyed creative reflection techniques, such as digital storytelling, which encouraged them to think about their emotional response to working with community partners and connect it to the course theme in a creative format.

Learning Obstacles

In contrast to beneficial challenges, students also noted learning obstacles experienced during the course that resulted in frustration and/or discontentment and did not have positive outcomes, such as gaining skills or connecting theory to the engagement experience. The analysis identified 13 learning obstacles (see Table 1). Below, we focus on the six obstacles that are most relevant to this discussion.

"Lack of coordination and communication of expectations with the community partner" refers to difficulties related to disconnects regarding the expectations of the community partner and the service-learning course. These included practical and technical issues such as logistics and scheduling, as well as more interpersonal and social issues. While students deemed some difficulty of this nature meaningful, the aspects of the course referenced by this code were distracting and unproductive.

"Lack of clarity about course expectations for students," "poor communication between students and the instructor," and "disorganization of the course" are examples of difficulties that some students experienced with the pedagogical process led by the instructor(s). These included students not understanding in advance that the course would involve them in the community, too many logistical and content changes, and conflicts between multiple course instructors and volunteers. Students reported that these difficulties made it hard to know where, when, and how to focus their efforts. Students also reported that challenges of this nature took their attention away or prevented them from learning and integrating the theoretical and community-oriented aspects of the course.

"Not enough time to build relationships with community partners" and "not enough time doing service on site" were expressed by students who noted the constraints of a course lasting only one semester. While these issues were often intertwined with workload, this point may best be addressed through pedagogical techniques that help maximize the time students have to build relationships and engage with the community.

Social and Emotional Aspects

Taking a step back from the detailed categorization of specific challenges and obstacles, it was striking how often students spoke positively about the social and emotional aspects of working with a community partner. Students talked about "*real* reactions," "*real* situations" (meaning social situations), and "*real* projects" with "*real* impacts" on "*real* people." Their language was loaded with emotionally oriented words such as "energized," "community feel," and "empowered." One student commented, "Even though it was hard for us at times, with our school, it prepared me so much for the real world and this is what I want to do. So maybe it was good that my first experience was a little rough. I may not have gotten as much out of it if it hadn't been that bad. I got to actually design a real life playground. No other class is like that. It really benefited me." Similar comments appeared throughout the focus-group transcripts.

FURTHER OBSERVATIONS AND RECOMMENDATIONS

Once we identified the importance of the emotional and social aspects of the service-learning process, we deemed it appropriate to direct our attention to the implications of what the students were saying for good pedagogical practices in environmental design courses. Learning how to work with community partners included key aspects of working in a community setting with a specific population. Many students spoke generally about learning the process of community engagement, while other students talked very specifically about experiencing new social roles, developing relevant social skills, finding an emotional context for theoretical course content, the social reality of "real world" work and their engagement in the community, and specific pedagogical techniques that served as practical bridges between the emotional and theoretical aspects of the course.

Starting with the broadest conceptualization of socially and emotionally focused service-learning, students frequently discussed becoming emotionally involved and connecting with community partners. When they described their community engagement experience as "successful," they often used emotionally laden language. The following quote illustrates the emotional and mental challenges of working in the community, which this student found to be very worthwhile:

> *I don't think I've ever had a course that has challenged me both emotionally and mentally to really think about what I believe, and what I think, and what I know. I have had exposure to this topic area before, and it wasn't necessarily just learning the facts. I think there were a couple days when a couple of us got emotionally drained. Some days were really negative and some had really emotional highs and any class that can have that kind of impact on people, and especially the majority, it's pretty amazing.*

Other students were similarly able to develop connections with their community partners and recognized that they could not get this experience from textbooks or non-service-learning courses:

> *Yeah, that's what is so hard, I guess about learning, 'cause [instructors] are trying to teach you stuff but nothing that I read fully prepared me for the attachment I was going to have to the kids.*

> *[T]hat's why these service-learning projects and the hands-on experience are so much different than learning traditionally. Because no amount of books and stuff is really going to teach you or give you the feel, like in your heart, when you're with those kids and you start connecting with them, feeling their problems, their frustrations. No book is going to give you that feeling, you know? You have to go and you have to be with them and talk to them.*

The focus-group data, illustrated by these and similar quotes, provided a useful basis for good-practice recommendations that instructors in environmental design courses can use to capitalize on the social and emotional aspects of service-learning. While the distinction between learning

obstacles and beneficial challenges is useful for this discussion, it is a distinction that often becomes blurred in practice. Challenges occur along a continuum, and things that initially appear to be learning obstacles may, in fact, be teachable moments in future experiences.

Recommendations

With the foregoing considerations in mind, the following recommendations are intended as proactive techniques that instructors can adapt to their specific circumstances.

Recommendation 1: Provide opportunities for students to develop and practice social skills
The data gathered in this study underscore the need for social and emotional preparation before and during community engagement to complement the ongoing reflection and preparation in design and technical skills. Learning specific methods of social interaction up front, including facilitating structured dialogues and group activities, as well as conducting participatory research, helped prepare students for engagement with their community partners. Others have similarly pointed to the need to incorporate these skills to differentiate a community engagement experience from a traditional design studio course that merely uses a real project site (Schuman, 2006:10).

Students often mentioned the methods used to foster meaningful social connections and emotionally involved engagement and frequently stated that learning how to work in the community prepared them for their future careers. Students emphasized the importance of emotional and social preparation more than possessing technical skills. For example:

> *While I agree that we needed more technical training, I also think we needed actual training with group work. Personally, I've had difficulty working with my community this semester, so it would have been nice to have a class or two on how to work with groups, like what to do. [The instructors] gave us an outline and that was it. But these are adults, and we're students, so it was very intimidating.*
>
> *I think the one thing was we each took turns facilitating, so we each facilitated only once, maybe twice. The people who were training us told us it takes time, so you have to keep practicing. So we got a taste and then didn't really get to continue with it. So it would've been nice if we had more opportunities.*

The findings suggest that instructors should provide specific and sufficient opportunities for students to practice social skills in class or with other groups prior to working with community partners. In addition, instructors can use scaffolding to model these behaviors and skills for their students, ensuring that those who do not have the required skills at the start of the course have sufficient opportunities to develop them (Hung, *et al.*, 2005:162).

Recommendation 2: Ensure connections between academic content and engagement to provide a more integrated learning experience
Researchers have found the integration of academic content with community experience to be the most significant indicator of course quality (Hatcher, *et al.*, 2004:42). In one focus group, students discussed how the community engagement aspects of their course reinforced the theoretical content and made it very real. They indicated that their involvement in the community added an essential emotional component to theoretical concepts through social interaction, communication, and bonding with real people in real situations:

> *I wanted to say that one thing I think that is a really successful part of this course — the topics we deal with. We have really good discussions in class about them and we really get into depth and that kind of thing. And I think what's really successful is that we're working with youth and talking with youth about these issues. So it's a good incorporation of theory and practice. We're not just sitting here and talking about it, we're sitting here talking about it and then doing things about it and talking with other people about it and being engaged in the community. So that's one thing I think is really successful about the class.*

Making the emotional and social aspects of the course explicit in assignments and discussions helps students move between the various course components more easily and creates a more complete learning experience.

Recommendation 3: Coordinate with community partners and communicate expectations
The community partner forms a large part of the social and emotional context within which service-learning students operate. In addition to coordinating logistics and communicating technical expectations, explicitly accommodating the social and emotional aspects of the relationship can help students feel more comfortable as they try out new skills and explore new social roles. The student quote below indicates what happens if this does not occur:

> *I think the [community partner] should understand that we're students and be more supportive of our work. Our DAT would talk about me right in front of me and they would reiterate that I was a student and go on about how they may not trust us with these things. They were supposed to foster a positive spirit for students, so for them to be negative is contradictory.*

Instructors can help prevent this type of situation by communicating with the community partner ahead of time that students are learning the process of engagement and will require understanding and support. Instructors can also communicate that it may benefit the community partner to help build social and emotional connections in order to foster a sense of responsibility and awareness on the part of the students.

Recommendation 4: Maintain clear communication about the "real world" implications of the course
Good communication between instructors and students is a key component of any successful course. However, for a community engagement course, communication is even more critical since students assume responsibilities on which community partners rely. Students who did not realize the nature of community engagement felt they were unprepared to perform in a realm that carries "real" consequences: "[O]bviously when you take a studio class you're going to pull an all-nighter, but this was different because we had to go places and meet with people. It would have helped to know that this was real world, so it was frustrating."

In this light, instructors should pay particular attention to keeping lines of communication open during a community engagement course. Doing so encompasses both providing a clear overview of the "real world" components in the course description and syllabus and including students, when appropriate, in communications with community partners. As students are working with community partners, they will benefit from having more information about the coordination that is often taking place behind the scenes.

Recommendation 5: Support students in exploring various community engagement roles
Students valued that community engagement enabled them to explore various social roles and taught them how to interact with community partners in ways that were emotionally different from interacting with fellow students in non-service-learning courses. The following quote expresses one student's understanding of the different roles required during a community engagement course: "The idea is that we would talk about issues and cement our own ideas, but then go facilitate the same discussion with different people. So we'd be the participants in one moment, but the facilitators in another. So that was really good." This exploration of different roles gave students opportunities to develop important social skills. Instructors can model the process of taking on different social roles by putting on different hats in the classroom or by making the roles of technical expert or community collaborator explicit at the engagement site.

Recommendation 6: Incorporate non-traditional and creative reflection techniques
One of the seminar-style community engagement courses used digital storytelling as a method for student reflection, and the students themselves then facilitated this activity with high-school

youth. Digital storytelling, with its roots in community arts and oral history, enables people to tell their own compelling story by creating a short video using a narrative script, still images, and music (Davis, 2004:1; Meadows, 2003:192). Students praised digital storytelling because it fostered social and emotional connections in a non-threatening way and provided an engaging format for reflection. Their experience confirms a conceptualization of reflection as a bridge between technical and/or theoretical course content and the emotional and social context that community engagement can provide (*e.g.*, Angotti, *et al.*, 2011:Part II; Felton, *et al.*, 2006).

Traditional forms of reflection, such as group discussions and visual journals, can be supplemented with more creative ways for students to express themselves and reflect on what they are experiencing. Multimedia techniques, such as digital storytelling, can give students the opportunity to learn new skills while they reflect. But instructors should be careful to ensure that the reflection method does not override or make it difficult for students to focus on the content of the reflection.

Recommendation 7: Provide sufficient time for students to build relationships with community partners and complete the engagement activities

Students mentioned a lack of time to prepare for their work with the community and for bonding with their individual community partners. Students expressed frustration and a feeling of social obligation to do the project correctly and get things finished without having the time to do so.

> *I think I would have liked to have worked with [the community youth] a little bit more. I felt like while we were there they had a classroom assignment that they had to do, we had a classroom assignment to do. It was like, okay, get in, get this done. And even now, ya know, the kids at [the high school] really pushed to get things done. I would have liked to have maybe gone into the school a little sooner in the semester so we could have built that bond a little bit and then really had time to enjoy the kids. You know, doing more of the advocacy and the volunteer work of it, instead of it just being, you know, you gotta get this done, you've gotta push them. It would have been nice to get to know them a little better.*

Some students also wanted more time to serve the community and become mentors to the youth with whom they were working: "If our schedules actually worked, if we met in these dialogues but worked with them outside of that time on other things … because we talked a lot about being, like, mentors to them. But other than these dialogue circles, we never talked to them. So [if] we interacted with them more … or if this could be a two semester program, if it were possible."

It is recommended that instructors find ways of giving students extra time to work with their community partners. Although offering a course over two semesters can be challenging for instructors and may not be supported within a strict curricular structure, some instructors continue key tasks with students doing independent studies or internships or schedule the engagement course in the spring, allowing for a follow-up elective during the summer. The emerging focus on developing lasting university/community relationships seen in planning and design schools reinforces the importance of sustained involvement (Boyer and Mitgang, 1996; Lund and Urey, 2006:78; Rios, 2011:47; Sullivan, 2011).

CONCLUSION AND FURTHER RESEARCH

The literature has only obliquely addressed the emotional and social challenges of community engagement courses. However, several authors have recently called for additional research on these important points (Felton, *et al.*, 2006; Kiely, 2005). This study contributes to this research by placing the social and emotional challenges encountered by students front and center. As students reflected on their experience, it became evident that community engagement can be an effective pedagogical technique to socially and emotionally connect students to the community (*cf.* Rios, 2011). Reflection also enables students to connect individual experiences and observations to a broader context (*ibid.*:48). Proactively addressing the skills and time needed to work with community

partners led to more favorable student experiences overall and, more specifically, to successful integration and contextualization of course content. Emotionally and socially oriented preparation and training, as well as individual and group reflection, such as digital stories and structured dialogues, can serve as useful building blocks for community engagement courses in environmental design.

It is also important to recognize the need for diligent communication and coordination between all stakeholders. Students perceived learning obstacles when these processes broke down. To promote positive outcomes, Bartholomew and Locher (2011) stress the importance of providing students with ample opportunities to practice and reflect on complementary communication techniques in interactions with community partners.

Future research is needed to study community engagement in design and planning graduate programs, as well as with nonprofit organizations versus local government partners. It would also be useful to explore possible differences between courses in architecture, a profession that tends to be more oriented to the private sector, and planning, a profession that is more in the public sphere. In addition, evaluating instructors' experiences with these recommendations would help support further development of good community engagement practices in environmental design education.

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