

Teaching Proposal:

Landscape Architecture Foundation Landscape Performance Education Grant (LPEG), 2013-2014

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Principal Investigator / Instructor Reflections

Background:

This project was conducted during the spring 2014 semester at The Design School at Arizona State University. The scope of the project was to explore the teaching and learning of landscape performance as a primary learning objective within the framework of the Master of Landscape Architecture thesis studio. Within the MLA program, a thesis or an applied culminating project is a core requirement in the concluding semester of the degree program. At ASU the difference between a “Thesis” and an “Applied Culminating Project” is that process and product of a “Thesis” must following standard ASU Graduate School format and procedures typical of traditional masters theses in most disciplines in most research institutions. The “Applied Culminating Project” permits the student to engage in an independent investigation in format and process that has much more flexibility in both the process and the deliverable products. Although students have the option to choose either approach (thesis or applied project), almost all choose, or are encouraged to choose the applied project format. In our School, this generally means that most of our MLA students enroll in a semester-long research project that explores a significant design issue and plies the findings of that research through a prototype design project that illustrates the application of those research findings in a professional design setting. Most of those students will enroll in a studio course that has a single faculty instructor. Some highly-capable and motivated students will be given permission by the faculty to work on their Applied Project independently of the studio with a Landscape Architecture faculty member of their choice. Each of the students will have a principle faculty critic and all of them will present and defend their work before a jury that includes the landscape architecture faculty as well as outside reviewers.

The Design School has professional studio-based masters programs in the disciplines of architecture (MArch), industrial design (MID), interior architecture (MIA), landscape architecture (MLA), visual communications design (MVCD) and urban design (MUD). Although most of these masters programs were established relatively recently, the MArch program has operated for many years and it has successfully used the applied studio project format for a culminating project for quite some time. It makes it easier to manage our programs – both in terms of communicating degree requirements to students and accountability policies with the ASU Graduate School by using these thesis/applied project options consistently for all of these degree programs across The Design School.

Our MArch and MLA programs are each accredited by the respective accrediting agencies (NAAB and LAAB). Both the MArch and the MLA degree programs have a two-year track for students that come from a professional undergraduate degree background and a three-year track that accommodates students without professional undergraduate background in the related discipline. The MUD program is structured as a post-professional degree, requiring a student to already have advanced professional education in either architecture or landscape architecture as a prerequisite to entry into the program. The instruction in the MUD program is carried out by architecture and landscape architecture faculty members of The Design School. MArch, MLA and MUD students have several overlapping courses within their curricula. Within the MLA Applied Project Studio this past spring, there were MLA and MUD students enrolled.

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Project Organization:

This LAF LPEG project was organized to use the MLA Applied Studio instructional framework to teach landscape architectural (and urban) design performance as a means of evaluation and assessment of the value and success of a design strategy. Each student enrolled in the course was assigned to select a significant critical topic of interest to base their term project on. Topics includes such issues as water management, riparian habitat, park utilization, urban infill, animal conservation, therapeutic gardens, transit, and sustainable building materials and strategies. Each student did research on their topic and explored ways that they could resolve problems, enhance design benefits and contribute to a quadruple bottom line outcome as demonstrated in a prototype design project. As a prototype project, the design needs to become a role-model or exemplar for applying the design strategies in other similar situations. The students also had to evaluate their final designs with a framework that identified the performance benefits of the design relative to the primary issue being studied. The goal of the project was to optimize design on the issue of special interest, and not necessarily endeavor to optimize on all possible issues.

Another major component of this LPEG project was the creation of an integrated seminar course dedicated to the topic of “Design Performance” that formally met for an hour each week to explore and discuss issues, philosophies, history and strategies for using “Design Performance” tools and techniques in evaluating, enhancing and promoting better design. We used the terminology “Design Performance” in place of “Landscape Performance” to give a broader transdisciplinary perspective more broadly accommodating to all of the disciplines in The Design School. Obviously, if the nature of the “design” is applied to landscapes or landscape architecture, we are implying “landscape performance.”

By structuring and scheduling the Seminar within the clock hours of the Studio, we could guarantee participation of all of the studio participants in the Seminar. By making it quasi-independent, we could accommodate participation by some other students who were not a part of the Studio, but wanted to participate in the discussions and activities of the Seminar.

The official enrollment in the studio included 10 MLA students and 2 MUD students. We also had 2 MLA students who were working on “Independent Applied Projects” parallel with the studio. Although those 2 students were not required to participate in the studio, they did participate in the monthly mid-semester critiques and final presentations, just like all of the other MLA students. All 14 of these students participated in the Seminar, as did two other non-degree graduate students not enrolled in studio courses. One of those other two students is the ASU campus landscape architect who also serves in an adjunct teaching capacity with The Design School. The second non-degree graduate student is a person who’s undergraduate degree is in Architectural Studies from our School and she also has a Master of Education and she currently serves as one of the staff members coordinating student development in our College.

The activities of the seminar included reading and discussing topics of design performance based on the book *Urban Design and the Bottom Line: Optimizing the Return on Perception*, by Dennis Jerke, Douglas R. Porter and Terry J. Lassar and published by ULI in 2008. Another activity of the seminar was to participate in the LAF Webinar on March 20, 2014, on incorporating landscape performance research into design, presented by Allyson Mendenhall, PLA, Associate, Director of DW Legacy Design; Design Workshop; Deb Mitchell, FASLA, PLA, Senior Vice President, SmithGroupJJR; and Skip Graffam, ASLA, PLA, Partner, Director of Research, OLIN. Students discussed the nature of the quadruple bottom line as advocated by Jerke (economic, ecological, social and aesthetic – sometimes referred to by others as Planet, Profit, People and Poetics) and sought way to demonstrate quadruple-bottom-line benefits into their own projects. Samples of some of the presentation materials from the seminar are included in the Illustrative Vignettes Folder of the submitted materials. Another reference of applied professional work was the project work from Ayers Saint Gross for the City of Washington, DC for their The Sustainable DC Plan (<http://sustainable.dc.gov/finalplan>).

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The Studio Project Topics:

There were 14 projects, each with a different agenda of critical issues and problems to solve, developed by the students during the semester. The projects are described below. Most of the students have given me permission to use their name in crediting their work. Where I don't have such written permission, the student author remains anonymous. The deliverables for the applied studio project for the term were a set of three documents: 1) an illustrated oral presentation (a Powerpoint/pdf file presented by the student to a jury of professional reviewers); 2) a text and image document that could be read by an interested reviewer; and 3) a poster (dimensions 2' x 6') promoting the project. Some selected samples of the work have been provided with these reports.

The student projects:

Carol Kegley (MLA) ***"Urban wetlands provide ecosystem services by re-using wastewater."*** This is a proposal for an adaptive water strategy recycling wastewater through constructed urban wetlands and reusing it to generate an attractive and climate mitigating landscape for downtown Phoenix. This is one way towards conserving the fresh water supply while providing ecosystem services for people and the environment and creating a healthier downtown Phoenix.

Toby Roanhorse (MLA) ***"Integrating traditional knowledge with dry wetland restoration"*** A riparian area is ecologically rehabilitated in a manner that is culturally sensitive to a resident indigenous American Indian community using traditional ecological knowledge (TEK).

Christine Kimple (MLA) ***"Dust Control Management."*** Due to mismanagement of land use and climate change the hazards from dust will be ever increasing. The dangers are not only here in the Arizona, but also in other places in the world. Dust Control Management doesn't have a simple applied solution. It is a complex problem that manifests itself on multiple levels. Finding efficient ways to tackle land sources of dust and creating environments for focused investigation and research can influence our policy, knowledge and practice.

Melodii Zhu (MLA) ***"Promoting Utilization Rates of Urban Neighborhood Parks."*** Neighborhood park is a self expression of the community. It is a strong icon linking the relationship among neighbors. Low utilization rate is a common issue happens in most of our urban parks. Even though each park is serving thousands of residents, less than 20% of them really use the park. By providing flexible functions, neighborhood parks could serve multi-generations. The benefit of the project is to encourage social interaction, enhance personal health and create internal enjoyment.

Anonymous (MUD) ***"Downtown East Revitalization through start-up economy."*** The proposed project aims to establish a new innovation hub east of downtown which cultivates strong entrepreneurship, harness creativity, lower economic barriers, and generate productive energy with healthy, inspiring environments.

Anonymous (MUD) ***"Entertainment and Cultural District in Downtown Phoenix."*** To build connection between the downtown phoenix and warehouse district and Southern neighborhood by incorporating entertainment, cultural and appropriate mix of other land uses and bring back the liveliness of the district which is lost in time.

Anonymous (MLA) ***"Connecting stormwater infrastructure to natural hydrologic system in a xeric environments."*** Urban runoff outfall is used to charge a rehabilitated riparian area.

Anonymous (MLA) ***“Principles of therapeutic gardens and their application to a park hiking trail.”*** Healing gardens are fast becoming a place of refuge for urbanites from the daily grind and the stressors that accompany our fast-paced world. Gardens in urban spaces may improve the overall health and well-being of individuals and thus communities as a whole. Evidence-based design can help us rediscover increased happiness and well-being of our mind-body-spirit as a whole with the healing powers of nature.

Jesse Westad (MLA) ***“Green wall applications in the arid Southwest.”*** The rapid urbanization of the arid southwest has led to an increase in the urban heat island effect, a decrease in nature, irresponsible building practices, as well as noise and air pollution. Now that these systems are already in place how do we use nature to help mitigate these issues in the built environment? My project will focus on the applicability of green walls and how through proper usage can provide a very valuable asset to the urban dweller.

Cris Portugal (MLA) ***“Using art to encourage community engagement in a south Phoenix TOD development zone.”*** A transit-oriented development node is created in south Phoenix that enhances the cultural and artistic heritage of the community.

Starin Butler (MLA) ***“Exemplary Zoo Exhibit Design”.*** A well-designed zoo exhibit can help urban zoos fulfill their roles as wildlife conservation and education centers. By creating a zoo exhibit rubric, landscape architects and zoo officials will have the tools they need to assess, evaluate, and design exemplary zoo exhibits.

Jose Quintana (MLA) ***“Creating great streets that promote smart paving systems – a pedestrian mall on the ASU campus.”*** An exploration of the sustainability characteristics of local hardscape materials and paving systems, demonstrated in a prototype design for a pedestrian streetscape on a campus.

Anonymous (MLA) ***“Symbiotic school garden model.”*** An exploration of community gardening, environmental education, local food production within an educational system that provides vocational training, healthy living and economic opportunities to disadvantaged youth.

Anonymous (MLA) ***“Arizona capital mall redevelopment with augmented reality enhancements”.*** Upgrading an existing urban landscape to enhance the narrative, function, and economic well-being of the pedestrian environment.

Student Work Evaluation and Critique:

During the semester, students has regular desk critiques during studio production time. At regular intervals, all students make semi-formal progress presentations to a review panel made up of faculty. These faculty members included the regular landscape architecture faculty, some adjunct faculty members, several of the architecture/urban design faculty and occasionally critics from outside the university. These may have been public officials serving a “client role” for a specific project or they may have been technical or professional experts providing additional mentoring in a particular student’s project. These monthly progress reviews were scheduled and announced from the beginning of the course and were designated as open, public reviews.

Towards the end of the semester, we held a review with a couple of invited outside critics. Those critics were Ms. Astric Sykes, Associate of the firm of Mia Lehrer and Duane Blossom, FASLA, recently retired from Todd Associates. At the end of the term, our distinguished review panel included (in addition to faculty members), Dr. Mary Myers of Temple University and an LAF CSI & LPEG Fellow; Mr. Jay Hicks, ASLA of Logan-Simpson Design; and Mr. Chris Brown, FASLA of Floor Associates.

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Project Assessment:

I would make the judgment that the project was a success. The students engaged critical issues of interest to the profession and developed design strategies to illustrate resolving or advancing our understanding of those issues. Their projects were conducted professionally. I expect several of the projects to be entered into ASLA design awards programs at the state and national levels. Several have already been recognized for “Design Excellence” within The Design School. I also expect for one to three papers presented in a forum such as the CELA annual conference to come out of this work.

What did we do well? The structure of the project, with both a studio component and a seminar component, provided a framework for engaging the issues both intellectually and in hands-on professional, activity-based problem-solving settings. Including people who were not regularly enrolled thesis/applied project students into the discussion enhanced the richness of the learning environment (these other people included the other members of the landscape architecture faculty – both regular and adjunct; other graduate students who were not enrolled in the studio portion; community experts or “clients”; and outstanding experience professionals serving on the juries.

I believe that the project demonstrated that the consideration of design benefits perspective or an evidence-based design approach could be incorporated as one of the important learning objectives of most intermediate or advanced courses. In our case, the studio had a very broad and flexibly wide agenda, but it would be possible to make performance benefits a component of courses with a narrower learning agenda (including courses focusing on planting design, urban design, recreation planning, infill, brownfields reclamation, sustainable landscape construction or other similar professional specialties).

How could we improve the course?

I believe that incorporating learning objectives related to design performance, evidence-based design, and research-informed design into the thesis/applied project course on a regular and permanent basis is both justified and critical to advancing the capacity of the students to bring such skills to their professional settings. Celebrating the joy of discovery and a design well-crafted will put such students in a position of providing vision and leadership to their firms/agencies, professions and their service to society and the environment.

It would be difficult to justify making the course projects longer than the semester, giving the general tightness within the curriculum, but it might help students prepare for this semester by having an orientation session early in the fall semester so that they could begin planning and exploring ideas for possible thesis/applied projects before they begin the semester.

It might also enhance their confidence and competence in developing skill and experience with various design benefit tools to create a series of demonstration projects that give them some hands-on experience with various benefit calculation tools (either early within the course or earlier throughout the curriculum).

I believe that one of the goals of a thesis/applied project should be the expectation for a systematic or structured sharing of the information in ways that encourages and facilitates peer review. To that end, creating a format for sharing project findings would enhance the exchange of information from such student projects.



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