

Associated Colleges of the South
Report on Teaching with Technology Fellowship
“Integrating Theatre Lighting Design software into the classroom”
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PLEASE NOTE THAT REPORT IS IN BOLD ITALICS!

1. Background: Rationale for Overall Project

I annually teach an introductory course called *Lighting Design for the Theatre*, using traditional printed materials (text, periodicals, handouts) in a laboratory theatre. Because theatrical lighting is an abstract form of expression, one of the weakest parts of the course involves the design process from initial visualization to realized design. Students frequently stumble over the process in part because of the difficulty in seeing in the mind's eye what the lighting will look like when they are actually present in the real theater setting. There have been great strides made by lighting software companies to integrate 3-D lighting presentations with cad drafting and spreadsheet applications. At present departmental resources do not exist for the acquisition of software applications that truly assist the fledgling lighting designer in visualizing and then realizing one's creations. I want to incorporate this learning/working technology into my class.

Spring semester of this year I taught an independent study course with two advanced lighting design students. We used the software provided through the fellowship (WSYWIG and LD Assistant) to explore these remarkable computer aided rendering and drafting applications. Both students are currently using these applications as their design communication process in their senior capstone projects.

2. Description: Part of the Project to be done under ACS funding

There are two software applications that I would like to explore that provide lighting visualization platforms that are woven into cad and spreadsheet platforms: WYSWIG and LD Assistant. I would like to acquire these applications and weigh their strengths and weaknesses, and ultimately choose one for integration into the introductory lighting design course. I will undoubtedly be creating new course modules and assignments throughout the process of exploration.

As a result of the independent study last spring, we have determined that WYSWIG is a decent rendering agent but it does not have an onboard or on-line tutorial. It's advantage might be its interface with the entire design process- including the cueing process. LD ASSISTANT is an authorized AUTOCAD plug-in with a decent tutorial that did not entirely reflect the

most recent version that we acquired. A manual that could be printed would have been helpful.

3. Timeline: Deliverables/Milestones for ACS Funded part of project

In past years, I have been intimately involved in Southwestern University's Summer Stage Repertory program as a designer, mentor and administrator. The fact that we are not producing this ambitious series of theatrical productions will allow me to focus on course development. I expect to begin exploring these software applications by May 15, 2003 and would need to complete the work by August 15, 2003. If possible, I would then incorporate either WSYWIG or LD Assistant into *Lighting for the Theatre* for the Spring 2004 offering.

We actually had the software up and running by the middle of March, and we have been using it with little or no problem since that time.

4. Technology: Technical Requirements for the Project

Thanks to the new Dell office computer that was installed in July, 2002, I believe that I possess adequate hardware to run both WSYWIG and LD Assistant. I would need to acquire the Windows-based versions of these applications.

We decided to seek a neutral location for a separate computer (a sort of one computer "lab") in order to accommodate students' work and class schedules.

5. Other Support: Institutional and/or Outside Support for Project

Once the process of selecting the most appropriate application has been completed, I will need to enlist the aid of the Theatre Department, the Sarofim School of Fine Arts, Information Technology Services, and any other known and available resources to acquire a site license for the selected application. Once the software has been secured, I will work with the Registrar's Office in locating a computer classroom appropriate for demonstrating and teaching with this new technology.

Thanks to the generous support of Southwestern University's Information Technology Services, a fast running, large storage Dell pc was in place by the time the software arrived in Mid March. Also, Suzanne Bonefas's ACS office also generously assisted in our purchase of the software applications.

6. Learning Outcomes: How the Project will enhance Teaching/Learning

I am excited about the possibility of incorporating today's technology into my introductory Lighting Design course. Our students deserve to experience and to

be enriched by the fantastic learning tools that are now within our reach. I have several current students with whom I am already discussing the free demo versions of WSYWIG and LD Assistant. I am considering the idea of employing one of them to work with me as a teaching assistant during the initial course offerings that incorporate the visualization/cad/spreadsheet software. I, too, will personally benefit from the freedom of creativity that these applications offer to the experienced and inexperienced designer.

Our design students have already benefited from their exposure to WSYWIG and LD ASSISTANT. The level of excitement that these outstanding applications have raised is just fantastic. Our students now have the potential of being even more competitive in the job market and the graduate school market by being able to demonstrate familiarity with the top rendering applications for entertainment lighting. One student used lighting renderings created through WSYWIG to communicate their design ideas with the director of an April production of Equus. Another student is currently using LD ASSISTANT to create design possibilities for our current production of Le Bourgeois Avant-garde.

7. Curriculum: How the Project will be integrated into the Curriculum

As stated above, the abstract nature of lighting design will be somewhat demystified when the beginner can actually see the beam of light and can virtually manipulate the color, texture, intensity, angle and movement of simulated lighting fixtures. I imagine that I will create a series of assignments that gradually increase their usage of the software that culminate in a "paper" design of an assigned script within a given hall. The student will be able to render certain required "looks" and produce a lighting plan and the associated spreadsheets that organized a professional design.

I am also interested in developing an advanced lighting design course as part of our Bachelor of Fine Arts curriculum. There are many possibilities for integrating this kind of software into an advanced course.

As stated above I am considering the augmentation of a lighting rendering project based on using WSYWIG or LD ASSISTANT (and serving as a design and a communication too) for an advanced lighting design class I will be teaching this coming Spring semester.

8. Assessment: How the Project will be evaluated

I think that I will try to involve one or two interested lighting students in the initial phases of this Summer 2003 process. I may apply for a Mundy Fellowship to compensate them for the time and energy spent exploring the two applications. From them, I can more accurately gauge what sorts of learning possibilities the

software can provide. I will also provide any documentation that is appropriate regarding the “shootout” between WYSWIG and LD Assistant. If I do employ a student as a teaching assistant during my initial incorporation of this visualization software, I will expect to get the student’s point of view during the period of the course itself and I will ask the students enrolled in the course to evaluate the use of the software at the end of the semester.

My primary method of evaluation has been in observation of the students’ learning curves and actual “finished product” renderings from the independent study course. Both students used our smallest theatre space—a rehearsal hall equipped with a twelve dimmer lighting control system. They animated a series of cues or “looks” to the music of the Beatles from Magical Mystery Tour. I was impressed with the quality of both students’ work, especially considering that the first third of the semester was spent in selecting and acquiring the applications.

9. Dissemination: How the Project will be shared with ACS Colleagues

After I have taught *Lighting for the Theatre* in Spring 2004, I would like to offer an ACS Summer Workshop to interested faculty. The Workshop could be two-fold: informational (regarding the software used) and educational (sharing strengths and weaknesses of my early pedagogical choices).

At the Drama Workshops in Birmingham this past summer, I presented a powerpoint presentation that depicted the achievements of the independent study course that explored these applications. That presentation can be made available to interested students and professors. I would like to demonstrate the basic nuances of these applications at the ACS Theatre Workshop at Trinity in the Summer of 2004, building on the advanced lighting design class I am teaching in the spring of 2004. We intend to require that the paper design projects include computer aided renderings in all three of the theatre spaces in our Fine Arts Complex.