

LSU College of Art & Design

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Increasing the Competitive Advantage of Louisiana Design Graduates and Professionals in the Global Market

Summary:

The globalization of the design market is a reality not only facing our graduates but also Louisiana design professionals competing in the building, commercial, and green industries such as architecture, interior, graphic arts, and landscape architecture. The workplace of architects, graphic designers, landscape architects, and interior designers has—like the rest of the professional world—dramatically changed with the advent of electronic information transfer and computer application technologies.

Design professionals work differently, having exchanged drafting tables, T-squares, and ink pens for computers, plotters, and a host of electronic production and information transfer hardware and software. Not only have their tools changed but also so has their working habits. Geographically dispersed individuals become closely knit interdisciplinary design teams with the exchange of electronic information. Design files are traded between Dallas, Seattle, and Hong Kong as the production of design documents expands to a round-the-clock enterprise. All phases of design production in today's professional world are conducted electronically in a reiterate cycle of shared digital files. Ultimately these electronic information files will guide the construction of bridges, office building complexes, tourism venues and the like. Firms of architects, interior designers, landscape architects, engineers, and graphic designers are no longer limited geographically to compete in markets close to home. The very scope of professional design service has changes with the advent of computing technologies and the transfer of information electronically.

The job market of today requires university graduates to have the skills and knowledge to work and communicate electronically. The ability of a design firm to expand its market, let alone compete demands an electronically integrated work place. Currently, most professional design offices in Louisiana are not competitive outside their immediate local or state market. Out-of-state firms are making significant inroads into a new way of working, placing further pressure on Louisiana firms to work differently if they are to be competitive and expand to serve other markets.

The funding of this proposal will enable the disciplines in the College of Art & Design to prepare students to be more competitive as they enter the work place. It will provide them with the instruction and experience of working digitally and electronically. The funding will also enhance the resources available to faculty in the College to develop courses and to integrate computing technologies and applications into their existing professional courses. Existing faculty will be able to multiply their capabilities in teaching and research with the support of new faculty. The proposal requests hiring of new faculty who will be selected with specific expertise in electronic produced design and information transfer technologies. Prospective graduate students in all of the College's design disciplines will be attracted to graduate studies at LSU with new graduate assistantships funded under the IT initiative. Funding this proposal will enable the College to achieve all three of the State's objectives of the

Information Technology Initiative and Governor Foster's Vision 2020 blueprint to guide the economic renewal and diversification of the state.

Introduction and Background:

Recent economic statistics indicate that architectural firms in the State of Louisiana acquire a significant percentage of their income from in-state contracts. Similar statistics for the other disciplines in the College of Art & Design suggest an unhealthy reliance on Louisiana-based contracts. The ability of firms to successfully compete in markets outside the state is largely hampered by a less than competitive capability in electronic production and information technology transfer applications. Out-of-state design firms have successfully expanded markets through the use of superior capabilities in the various forms of electronic information technology applications. An infusion of new resources (faculty and graduate students) will enable the College to meet the challenge of preparing future design professionals as well as form and educational partnership with exiting Louisiana design firms.

Proposal: Integrating Electronic Technologies in Design

Current efforts to integrate computer technology in the teaching and research activities of the College of Art & Design have met with limited success. Existing faculty have a limited expertise with electronic technologies but have laid the foundation that can achieve an integrated approach to electronic technology in their classrooms and research agenda. At this time, however, students in the College are barely prepared to enter the job market with competitive computer application skills nor can professional firms look to LSU for training and expertise, excepted on a limited basis. The College needs an environment that will facilitate exploration and learning in a variety of integrated electronic applications employed by the leading design professionals. The critical technologies to be emphasized include:

- Advanced web-based teaching/training/representation technologies.
- Advanced computer-based visualization tools/techniques.
- Advanced image editing.
- Advanced computer-aided design, and representation capabilities.

Benefits to the State of Louisiana

- Provide continuing education courses and outreach education opportunities to design professionals in the state to enhance their electronic communication and digital imaging application capabilities.
- Increase the competitive advantage of design professionals within the state to enhance their market share in the highly competitive building, commercial, and green industry economic sectors.

Benefits to the College and University:

- Enhance the academic standing (national prominence) of the College professional units relative to peer institutions. Solidify the already high ranking of the School of Landscape Architecture and the Department of Interior Design.
- Serve as a model for other professional units in the University and enhance the computer technology potential of their faculty and students.
- Provide greater visibility of service activities of the academic units to the community and state.

- Enhance the potential for interdisciplinary teaching and research activities outside the College of Art & Design to other academic units and other institutions in the state and region.

Benefits to the Faculty:

- Develop course materials using web-based delivery systems.
- Test new computing technologies for specialized research and teaching applications. Extend teaching and research effectiveness.
- Learn and apply latest design visualization applications.
- Develop teaching methods that provide students with experience in collaborative, problem solving.
- Critique the work of students having computer generated course materials.
- Prepare high-quality graphic images for use in courses and research.
- Work with faculty and other students, to develop innovative computer technology applications and skills.
- Develop new application techniques using state-of-the-art equipment and software.

Benefits to the Students:

- Learn and explore new computer application methods for course work.
- Develop personal web page for employment search purposes.
- Develop personal portfolio on CD and paper.
- Work with faculty and other students, to develop innovative computer technology applications and skills.
- Experience working in an environment to extend design skills required in professional and collaborative setting.
- Provide opportunities for internships with professional offices during summer or other semesters within the academic setting through distant electronic communication.

Participating Disciplines and Laboratories:

School of Art: Graphic Arts, Mass Communication Arts, and Interior Design

School of Architecture:

School of Landscape Architecture

CADGIS (Computer Aided Design & Geographic Information System Laboratory)

MODE Lab

COAD Visual Imaging Library

MAD Studio (Music, Art & Design Studio)

Conclusion:

This proposal supports the goals in Governor Foster's Vision 2020 IT initiative. The proposal will deploy the resources necessary to better prepare College of Art & Design students to enter the IT-intensive workplace; to help focus more of the college's research enterprise on IT-related fields of discovery and application; and to promote a more rapid deployment of new technologies into the marketplace. The IT initiative of the College of Art & Design can emerge and succeed only as a result of permanent funding.