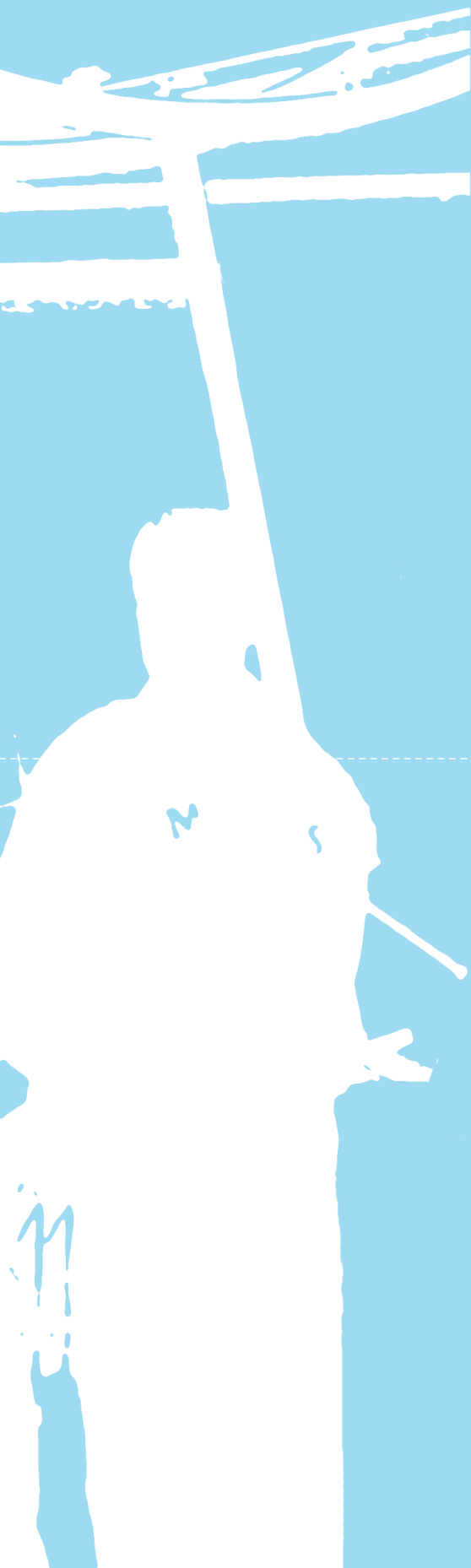




Sustainability and BIM Projects Receive First-ever NCARB Prize Grants

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The National Council of Architectural Registration Boards has chosen proposals from the University of Kansas Center for Research and North Dakota State University as the inaugural recipients of its NCARB Prize Grant program. In its first year, the Prize Grant initiative attracted 16 entries from accredited programs of architecture. Grants are awarded for innovative and risk-taking projects that support the integration of practice and education.

In early December 2006, the National Council of Architectural Registration Boards awarded inaugural NCARB Prize Grants to the University of Kansas Center for Research and to North Dakota State University. The KU Center for Research received \$6,000 for its efforts to create an educational model that immerses students in sustainability. Building information modeling (BIM) is the focus of the North Dakota State University project, which received a \$4,000 grant.

THE UNIVERSITY OF KANSAS CENTER FOR RESEARCH

"Sustainability Immersion"

Our goal is to develop a pedagogical model new to architectural education that is rooted in educational theory and by which students

are immersed in the concepts and underlying principles of sustainability throughout their education. Such immersion will situate sustainability at the core of students' fundamental understanding of architecture so that as graduates they can provide professional leadership in sustainability. We intend to leverage professional involvement throughout this initiative in order to enrich the pedagogy and enhance the sustainability knowledge-base within the profession.

Under the guidance of Keith Diaz Moore, AIA, the KU Center for Research, a private, non-profit organization affiliated with the University of Kansas, is focused on "creating an educational model in which students are immersed in the mindset of sustainability

throughout the curriculum.” The project’s overarching goal is to recast sustainability as a “paradigm-shifting concept—not merely a technical add-on—that demands a fundamentally different perspective from which one defines firmness, commodity and delight.”

KU faculty, working with building industry professionals, will engage students in sustainability concepts through “three key moments” in the curriculum, which are linked to Benjamin Bloom’s taxonomy of learning (a six-level cognitive learning model). The three key moments are

- the newly created “Introduction to Architecture” lecture courses, which are held during the first three semesters;
- third-year design studios that explore performance systems and assemblies; and
- the Professional Options program where students in their final year delve into professional hot topics such as designing sustainable environments.

By focusing on “curricular innovation,” the KU program will cultivate the “sharing of information and experiences with professionals who . . . happen to be national leaders in the area of sustainability.” Interaction among program participants will comprise different types of learning situations, “thereby creating a greater likelihood of successfully achieving the goal of full immersion in the concepts of sustainability.”

The KU Center for Research will use the bulk of its \$6,000 Prize Grant to purchase related

analytical software, including Ecotect and Athena Model. The grant also will help to fund a graduate assistant who will work on identifying evaluation projects, developing case studies, and training program participants in the use of new digital resources.

**NORTH DAKOTA STATE UNIVERSITY
DEPARTMENT OF ARCHITECTURE AND
LANDSCAPE ARCHITECTURE**

“The Implementation of Building Information Modeling (BIM) in Architectural Practice”

We hope that the initiative will help local firms convert to the BIM paradigm by creating a bank of students who will be readily employable by the firms upon graduation. This would also address the problem of out-migration that our state faces with its youth, while strengthening the local professional environment.

North Dakota State University’s winning proposal—to recast an architectural firm’s production environment into a Building Information Modeling (BIM) paradigm—is both pragmatic and forward-thinking in its long-term goals. NCARB Prize Grant funding will support the development of a design studio through which students will work with a local architectural firm. After studying and analyzing the firm’s operations and production environment, students then will develop BIM components. These components will be evaluated for their effectiveness by the firm itself as well as the participating students.

An underlying goal of the project is to generate “a bank of readily employable students . . . who have special skills in the implementa-

tion of the BIM paradigm.” The opportunity to develop such skills may mitigate the “out-migration of students . . . by enabling [them] to remain in the area and work for local firms.”

The project will be led by Professor Ganapathy Mahalingam, Ph.D. The architectural firm R. L. Engebretson, whose president Ricky L. Engebretson, AIA, is a current member of the North Dakota State Board of Architecture and an NCARB-certified architect, will serve as the practice setting for NDSU students.

North Dakota State will use its \$4,000 NCARB Grant to cover research-based expenses, release time for architectural firm staff, and academic licenses for BIM software resources.

ABOUT THE NCARB PRIZE GRANT PROGRAM

The NCARB Prize Grant program is an extension of the NCARB Prize for the Creative Integration of Practice and Education in the Academy. As a separate funding venture, NCARB Grants assist in the creation and implementation of new ideas and methods of integrating practice and education. The objective is to support and encourage concepts that may be more risk-taking than a school can initially afford on its own.

Schools applying for NCARB Grants are encouraged

- to explore different venues or innovative curricular methods/programs to increase the practice/education link or
- to support efforts that, for a variety of

Each academic year, the Council awards up to a total of \$10,000 through one, two, or three grants to NAAB-accredited schools to support the creation of new curricular initiatives at the institutions.

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reasons, have not materialized into for-credit curricular activities and, therefore, have not been submitted to the NCARB Prize program.

Under current guidelines, an NCARB Grant may not be used for university indirect costs or overhead, salary for adjuncts to teach the proposed class, or expenses for existing courses. NCARB does not place additional restrictions other than to suggest that the grants are to be used for work that results in interaction between students and practitioners. Grants are not intended for individual faculty enhancement activities. Budget items may include, but are not limited to, items such as:

- faculty release time to create the program (The studio/class will need to be part of their teaching load when initiated.)
- cost of new technology providing long-distance interconnectivity with architectural or other appropriate offices
- cost of materials
- travel costs for students

Each academic year, the Council awards up to a total of \$10,000 through one, two, or three grants to a NAAB-accredited school(s) to support the creation of new curricular initiatives. NCARB reserves the right not to make any awards, based on the quality of proposals received.

Members of the Council's Practice Education Committee will review all proposals, which comprise an application form, a narrative no longer than five pages, a supporting letter of

commitment, an itemized budget, and a letter from the dean authorizing the project. Written notification of the committee's decisions will be mailed at the beginning of December so that project(s) can start in January with the implementation of the studio/class being offered in the fall semester at the latest. The selected institution(s) will receive a check and an award letter that outlines specific terms and conditions for the grant including a project report after the project is completed that will be published by NCARB.

For more information about the NCARB Prize Grant program, visit the NCARB Prize section of the Council web site (www.ncarb.org) for a downloadable application and detailed instructions. NCARB Prize Grant submissions for the 2007-2008 academic year are due in the NCARB offices, on or before 5:00 p.m. EST, on Tuesday, October 16, 2007. DC