

BALL STATE UNIVERSITY EDUCATION REDEFINED

FACULTY AND STUDENT SYMPOSIUM

March 23, 2011



COLLEGE OF ARCHITECTURE AND PLANNING

ARCHITECTURE ■ LANDSCAPE ARCHITECTURE ■ URBAN PLANNING

DESIGN + THINKING

Welcome from the Dean

This is our fourth CAP Faculty Symposium and the first time that this event includes presentations by some of our most talented students. Since 2008, every spring semester we have invited our community of learners to submit abstracts about their creative activities and take time out of their busy schedules in order to celebrate the richness of our collective endeavor. In our symposia we have learned much about each other and further confirmed our fundamental vocation as a community of perpetual learners.

As on previous occasions, we will have the pleasure of learning more about the teaching, research, art, service, and learning that happens every day in CAP. Our symposia provide unparalleled opportunities for empowering our students with a deep understanding of how faculty learn what we teach and how to teach it. By providing such a high level of transparency on how faculty learn we hope to offer our students with living examples of what means to be a perpetual learner—a true scholar.

This year we also want to learn more about how our students learn, and in many instances how they teach. In CAP we rely heavily on student peer interaction as a means to promote the creative inferences

that fuel our design and planning processes. It is of critical importance for our community of learners that we understand how our students gather knowledge and translate what they have just learned into peer interaction in the studio or seminar room.

Another important addition to our 2011 symposium is the inclusion of presentations by faculty that have participated in a special assigned leave the previous year. A Special Assigned Leave is a prime opportunity for eligible faculty to concentrate during a semester or a year, in activities that will improve their effectiveness as teachers, scholars, and/or creative professionals. I am sure that the presentations of this year will not only demonstrate the benefits of the special assigned leave program but will also stimulate others to participate.

With a great sense of pride in the uniqueness of the learning experience we offer, please join us in this celebration.

Guillermo Vasquez de Velasco, Ph.D.
Dean



**Ball State
University**

**College of
Architecture and
Planning**

**Faculty and Student
Symposium**

March 23, 2011

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Pat Quinn, Editor
Christopher Helms, Design

Faculty/Student Symposium
Advisory Committee:
Pam Harwood - Chair
Michael Burayidi, Meg Calkins,
Tony Costello, Lohren Deeg, Susan
Tomizawa

Schedule of Events

8:30 AM	Continental Breakfast	
9:00 AM	AB100	
9:00 AM	Opening Remarks—Dean Guillermo Vasquez de Velasco	
9:15 AM	AB100	AB101
9:15 AM	<i>Duncan Campbell, Cindy Brubaker, Anya Grahn, Whitney Airgood</i> Tear Down City: Neighborhood Preservation in Muncie	<i>Lohren Deeg, with Current and Perennial CAP First Year Faculty</i> Examining Multidisciplinary and Multi-scale Thinking in Beginning Design Projects: Metaphors For a Sustainable Thinking (Re)start in Environmental Design Education
10:30 AM	Coffee Break	
10:45 AM	AB100	AB101
10:45 AM	<i>Josh Vermillion, James Dechant + Andre Haffenden, Jared Burt + Matt Flamm, Adam Buente + Kyle Perry, PROJECTiONE</i> Tooling Up!: Student Perspectives on Education and Industry Partnerships through Digital Design and Fabrication	<i>John Motloch, Pam Harwood, Scott Truex, Duncan Campbell</i> Interdisciplinary Initiatives
12:00 NOON	Lunch	
1:00 PM	Atrium	
1:00 PM	Poster Session	
1:30 PM	AB100	AB101
1:30 PM	<i>Malcolm Cairns</i> The Indiana Heritage of Landscape Architecture	<i>Antonieta Angulo</i> Effectiveness of VIRTUAL SET Visual-Spatial Simulations in the Perception of Architectural Projects
2:00 PM	<i>Christopher Baas and Kevin Henn</i> The Role of Animation in Interpreting the Mormon Beater Haypress: Student and Faculty Collaborations in Defining Historic Landscapes	<i>Michele Chiuini, John Fillwalk, Josh Vermillion</i> Digital Technologies and Immersive Learning, a Reflection on the Introduction of Laser Scanners in Research and Professional Training at BSU
2:30 PM	<i>Rob Benson</i> Rice, Slaves, and Camellias: Globalism, Sustainability, and Landscape Aesthetics in the Colonial Americas, or, “There and back again”	<i>Michael Gibson</i> Integrating Geometry and Light: Daylight Solutions Through Computational, Performance-Based Algorithms
3:00 PM	<i>Janice Shimizu</i> The KA House: Overlap, Interlock, + Secret Doors	<i>Kevin Klinger</i> Connect Globally, Make Locally: Manufacturing, Materials, and Making Cases for Midwest Digital Design and Fabrication
3:30 PM	<i>Stephen Kendall</i> KITFIT: Efficient and Customized Unit-by-Unit Interior Fit-Out	<i>Olon Dotson</i> Gary, Indiana: A Critical Geography of a Fourth World City
4:00 PM	<i>Joshua Coggeshall</i> Aurora’s Fold: An Investigation Between Here and There	<i>Pam Harwood</i> Educational Trends Impacting Facility Design: Design Patterns Illustrated for Charter Schools

8:30 AM

9:00 AM

AB004

Pam Harwood, Jonathan Spodek, Steve Kendall
Design Build Initiatives in the Department of Architecture

9:15 AM

10:30 AM

AB004

Joseph Bilello, Michael Holmes, Kevin R. Klinger, Bruce A. Race
Open Source: Trajectories for the Near Future of Design Practice and Education

10:45 AM

12:00 NOON

1:00 PM

AB004

Mahesh Senagala
A Garage Studio: Market-driven Innovation for Architects

Timothy Gray
Salvaged Layers: A Collaborative Site Specific Performance

Harry Eggink
Visual Stories

Jody Rosenblatt Naderi
Wild Kindergartens - Outdoor Learning and Contact with Nature

Jessica Lee Barnes
Rebuilding After Conflict: An Examination of Refugee Camp Design in Jordan

Chris Marlow
Games & Play for Designers: Revealing Landscape Architecture

AB202

Ryan Shrack
Unstoppable Progress: Interstate 65 and the Fight to Save the Neighborhood

Ryan Wilhite
Riding Red Ink: Public Transportation as a Civil Right

Bruce Race
Climate Mitigation and Adaptation - The Future Shape of Cities

Thomas Fraley
Sustainability of the Human Spirit: Experience, Aesthetics, and Endurance in Environmental Literature

Nicholas Serrano
The Bloom of Age: Eastern Aesthetics in the Discourse of Contemporary Planting Design

German Cruz
The French Mind on the Land

1:30 PM

2:00 PM

2:30 PM

3:00 PM

3:30 PM

4:00 PM

Panel Discussions

Duncan Campbell is the director of the graduate program in historic preservation and teaches Preservation Economics, Design Studio, Technology, and a Preservation Theory seminar. He has an undergraduate history degree and masters in historic preservation from Columbia University. dcampbell@bsu.edu

Cynthia Brubaker teaches Technology, Documentation, Law & Planning, and Design and Presentation Techniques in the MSHP program. Her undergraduate degree is from Goshen College, and she also has a masters degree in historic preservation from Columbia University. cjbrubaker@bsu.edu

Anya Grahn is a first year graduate student in the MSHP program and is a graduate of the University of Wisconsin.

Whitney Airgood is a graduate of Simmons College, and a second year MSHP student.

Lohren Deeg
Assistant Professor · Department of Urban Planning · CAP First Year Program Coordinator · M.Arch., Ball State University, 2004 · BArch., Ball State University, 1999 · B.S. Environmental Design, Ball State University, 1999 · ldeeg@bsu.edu

Duncan Campbell, Cindy Brubaker, Anya Grahn, and Whitney Airgood

Tear Down City: Neighborhood Preservation in Muncie

What can we do to turn around Muncie's tear down strategies? Is our only choice to follow the model of Youngstown, Gary, and Detroit? Following a long pattern of tear downs, the city of Muncie is now accessing Housing and Urban Development Department funding with plans to demolish up to 27 neglected or abandoned houses located in Muncie's National Register districts. Following the prerogatives of the National Historic Preservation Act, the city has passed its request for this use of federal dollars through the State Historic Preservation Office as well as the federal level Advisory Council on Historic Preservation as part of the Section 106 process, which evaluates the potential effect of federal expenditures on nationally significant historic resources. Some college faculty and MSHP students have strongly objected to a city policy bent on demolishing historically significant buildings in our local historic neighborhoods and elsewhere. A panel of two historic preservation faculty, Duncan Campbell, and Cindy Brubaker, and two graduate preservation students, Anya Grahn and Whitney Airgood, will present the issues of this debate in order to open a discussion with the audience on the appropriateness of such a policy and the challenges of maintaining historically significant urban fabric in the face of economic downturn, disinvestment, and abandonment.

Lohren Deeg with Current and Perennial CAP First Year Faculty
Examining Multidisciplinary And Multi-scale Thinking In Beginning Design Projects: Metaphors For A Sustainable Thinking (Re)start in Environmental Design Education

Questions are being raised as to what is an appropriate and effective introduction of sustainable principles in beginning design curricula. The 27th National Conference on the Beginning Design Student (to be held March 31st-April 2nd in Lincoln Nebraska) will gather educators, practitioners, and thinkers around these questions. Currently, students are often subjected to a buffet of sustainability issues, but rarely grasp a broad range of systematic thinking with a beginning design studio project. The three departments of the Ball State University College of Architecture and Planning seek to support the cooperation that is becoming necessary to introduce sustainability in a relevant manner. Contrary to many studio projects in the past, it may be argued that the most sustainable structure, infrastructure, or site is one that is already there, containing embodied energy, labor, materials, systems, and connections. It is in this spirit that the faculty team are currently designing projects that stir awareness in multiple scales and constraints into a curriculum founded in abstract thinking and modernist principles.



Pam Harwood, Steve Kendall, Jonathan Spodek
Design Build Initiatives in the Department of Architecture

This panel will discuss current Design/Build initiatives within the Department of Architecture. Participants may include faculty, staff, students, professionals, con-

sultants, contractors, and clients. Each of three initiatives will make a 5-10 minute presentation (maximum) of their initiative, including issues such motivations/goals, developing collaborative relations between student designers, clients, and contractors; creating unified work flows from concept through construction; safety, liability, delivery, budgets; digital fabrication and hand construction; and community design and service learning opportunities.



Joshua Vermillion, James Dechant + Andre Haffenden, Jared Burt + Matt Flamm, Adam Buente + Kyle Perry,
PROJECTIONE

Tooling Up!: Student Perspectives on Education and Industry Partnerships through Digital Design and Fabrication

This moment in the world—shaped by rapid and disruptive effects of digital technologies—has engendered a shift in production (physical and cultural) nearly as big as the industrial revolution. What is the role of the academy in formulating relevant instruction for a globally connected/locally

affected world? Our present models are outdated. At our University, we have a commitment to two topic areas: immersive learning and emerging media—in other words: cultivating information technology, and engaging industry directly. Immersive learning aims to intersect classroom activity with real world partnerships. Emerging media, explores the latest technology in order to prepare students for our information-driven world. We believe that these two areas add a strategy to the pedagogical formula that is critical for making a regional impact while still adding value to knowledge within the global exchange of ideas.

This panel will examine student-centric experiences of project-based, digital design-through-production methodologies in partnership with industry to better understand new pedagogical strategies being applied in our new graduate certificate program in digital design and fabrication, which is designed to prepare students to develop a skill set with digital information, while directly collaborating with industry partners.

John Motloch, Pam Harwood, Scott Truex, Duncan Campbell
Interdisciplinary Initiatives

In this panel, faculty and students committed to interdisciplinary teaching and learning share their experiences of working on Ball State projects that have included multiple disciplines. Rather than the typical session of Powerpoint presentations by each speaker, this panel takes a “core conversation” format. It opens with brief personal statements where each



Pam Harwood
Associate Professor · Department of Architecture · M.Arch., University of Minnesota, 1991 · Diploma Program in Urban Studies, International Graduate School, University of Stockholm, 1984-85 · B.S. in Architectural Studies, University of Wisconsin, 1981 · pharwood@bsu.edu

Stephen Kendall
Professor · Department of Architecture · Ph.D., Massachusetts Institute of Technology, 1990 · M.Arch. & Urban Design, Washington University, 1976 · B.S., University of Cincinnati, 1970 · skendall@bsu.edu

Jonathan Spodek
Associate Professor · Department of Architecture · M.Arch., University of Illinois, 1987 · B.S. in Architectural Studies, 1985 · Program in Architecture, Unite Pedagogique d'Architecture, Versailles, France, 1983-84 · jspodek@bsu.edu

Joshua Vermillion
Instructor · Department of Architecture · M.Arch., Ball State University, 2005 · B.Arch., Ball State University, 2002 · jdvermillion@bsu.edu

John Motloch
Professor · Department of Landscape Architecture · Director, Land Design Institute · Ph.D., University of Pretoria, 1992 · M.L.A., University of Pennsylvania, 1978 · B.Arch., University of Texas at Austin, 1970 · jmotloch@bsu.edu

Scott Truex
Associate Professor · Department of Urban Planning · Director, Community Based Projects Program · M.Arch., Ball State University, 1982 · B.Arch., & B.S. Environmental Design, Ball State University, 1980 · struex@bsu.edu

Joseph Bilello, Ph.D., FAIA is Professor of Architecture at Ball State University College of Architecture and Planning. His research on sustainability, building performance, professional practice/design interface, community development and architectural education has been published and presented internationally. jbilello@bsu.edu

Michael Holmes, Ph.D., (University of Minnesota, 1991) is Director of Insight & Research for the Center for Media Design at Ball State University. He oversees the execution of the unit's research in the domains of "Media behavior, now and next" and "Emerging media forms and functions." mholmes@bsu.edu

Kevin R. Klinger is Director of the Institute for Digital Fabrication (www.i-m-a-d-e.org) at Ball State University, Associate Professor of Architecture, and Director of the Post-Professional Master of Architecture program in the College of Architecture and Planning. krklinger@bsu.edu

Bruce A. Race, FAIA, AICP, is the Associate Professor of Practice in the College of Architecture and Planning teaching in the Masters of Urban Design program in Indianapolis; and a PhD candidate at University of Cardiff in Wales. Mr. Race maintains an active and visible professional practice at a local and national level. brace@bsu.edu

panel member shares key thoughts about interdisciplinary teaching and learning. Each speaks to their motivation to engage in interdisciplinary teaching and learning, their personal approach, and experiences including the advantages they have observed with interdisciplinary teaching and learning and the special challenges this teaching and learning has presented.

These brief opening statements set the stage for this interdisciplinary initiatives panel session as a robust, interactive conversation with the audience. In this conversation, members of the audience and the panel raise issues and ask questions that guide the conversation. The conversation explores the added value of learning in a context informed by multiple disciplinary perspectives and the richness of solutions that grow from the collective consciousness that emerges from interdisciplinary teaching and learning rather than the more bounded thinking of any single discipline. The session includes conversation about how to organize and teach interdisciplinary courses and how to address the profound and growing need for higher education to move beyond its current siloed approach to greater interdisciplinary teaching and learning.

Joseph Bilello, Michael Holmes, Kevin R. Klinger, Bruce A. Race

Open Source: Trajectories for the Near Future of Design Practice and Education

Modalities of design and planning practice and education have readily taken on new technologies to enhance productivity and to align themselves with the expectations of their respective marketplaces.

Similarly, the professions have reflected societal changes of direction from communitarian gentlemen practitioners (who were unpaid into the professions of a rising middle class) to the bipolarity of the individual with open access to the crowd of those who want to "prosume" and share their knowledge.

Wikinomics: What would Google do? Here comes everybody, and crowd sourcing illuminates a twenty year history of

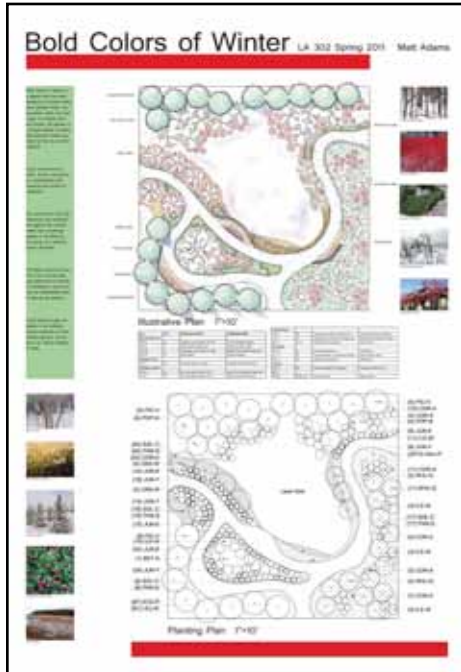
emergence of open source (aka crowd sourcing) as the new means of production in all modes of production and services amongst people across the globe contributing to asynchronous movement. In architecture, the successful emergence of Architecture for Humanity and its spin off Open Source Architecture portend directions for the production and delivery of design services that may dramatically change the countenance of our profession irreversibly and rapidly.

As we move forward in preparing students for a world of practice, trajectories based on these real world developments need to be accounted for.

This panel of four with expertise in significant intellectual and professional range is asked to deliberate, in the context of the aforementioned growing body of evidence, on the preferred scenarios for education and practice to strategically place our graduates in the near and mid-term future during which the "wisdom of the crowd" is likely to loom largely over the practice opportunities of designers and planners.

Poster Session

Matthew Adams



Monica Goshorn-Maroney



Matthew Adams is from Mount Prospect, Illinois, he attended John Hersey High School and is now a third year landscape architecture student.



Kirstin Voelkel is a 3rd year Landscape Architecture from Ireland, Indiana. She graduated from Jasper High School in 2008.



Monica Goshorn-Maroney is a home-schooled 2008 graduate from Ladoga, Indiana. She is currently majoring in Landscape Architecture and minoring in Technology and the Environment.

Kirstin Voelkel



Luke Munz



Luke Munz is a 2007 graduate of Hamilton Southeastern High School in Fishers, Indiana. He studies Architectural Technology at IUPUI and transferred to Ball State University in the spring of 2009. Luke is currently a 3rd year Landscape Architecture student. He hopes to be travel on the 2013 World Tour and will be graduating that spring.



Mark Sandberg is a 4th year Landscape Architecture student with an Energy Minor from Rochester Hills, MI. He participated in World Tour 4 during the Spring 2010.



Bobby Slavens is a Floyd Central High School Graduate now studying Landscape Architecture. He is currently the

Vice President of 'Students for a Sustainable Campus'. He grew up in Englewood, Ohio and moved to Floyd Knobs, Indiana the summer before his senior year of high school



Kevin Snyder is a 3rd Year Landscape Architecture Major with Urban Planning Minor, he is from Saint John, Indiana and graduated from Lake Central High School.

He wants to go to graduate school at the University of Georgia and become a professor. He loves being outside and has a passion for art and photography.



Hana Geswein is a Garrett High School Graduate from Garrett, Indiana. She is a 3rd Year Landscape Architecture major.

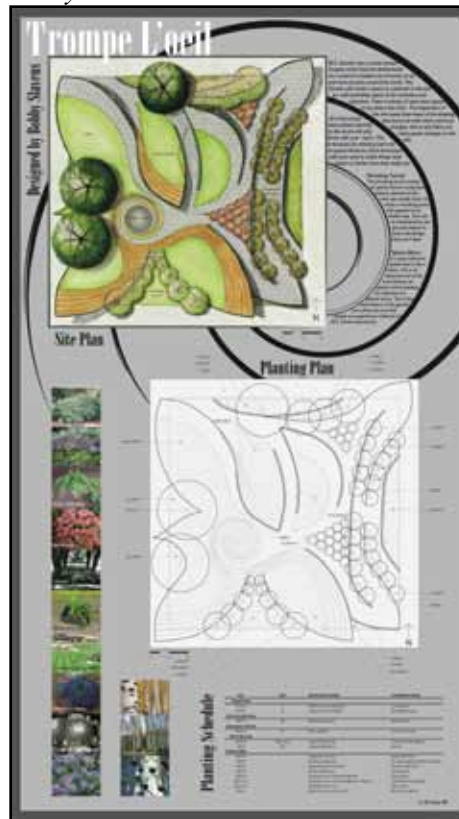
Mark Sandberg



Kevin Snyder

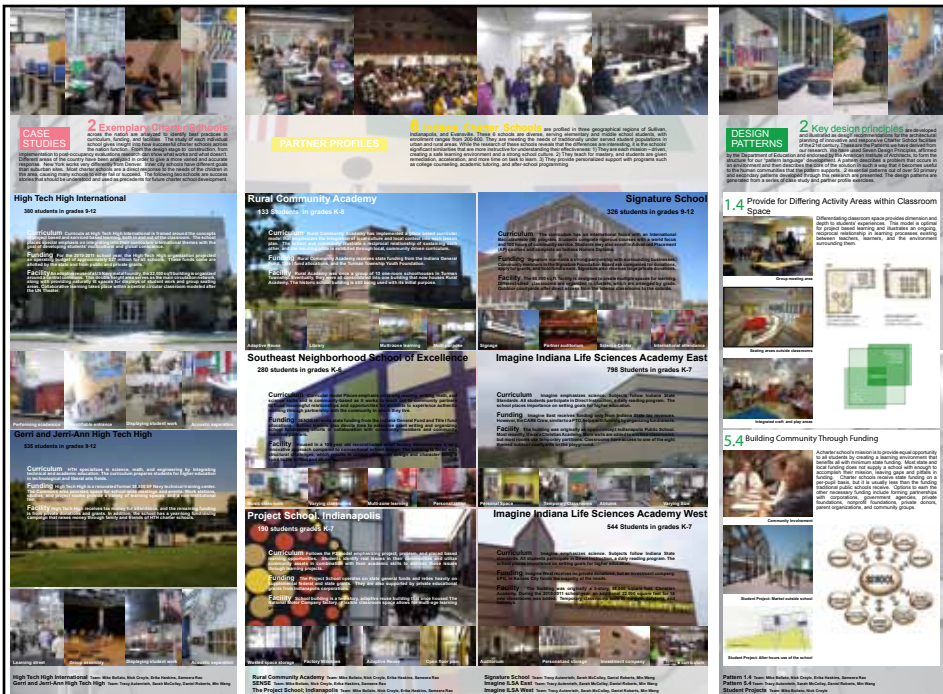


Bobby Slavens



Hana Geswein



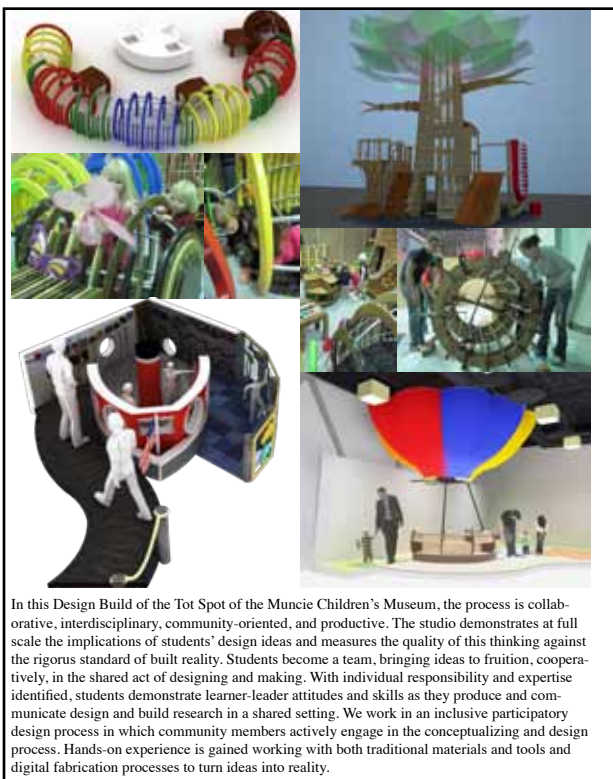


Adaptive Reuse

Pam Harwood, Architecture, Assoc. Prof., pharwood@bsu.edu
 Dan Roberts, Architecture, Graduate Assistant
 Min Wang, Urban Planning, Graduate
 Sarah McColley, Landscape Architecture, Senior
 Tracy Autenrieth, Architecture, Graduate
 Sameera Chandrasekar, Landscape Architecture, Graduate
 Nick Croyle, Architecture, Senior
 Michale Bolatto, Architecture, Senior
 Erika Haskins, Education Leadership, Graduate

Tot Spot

Ashlyn Ackerman: Communicator
 Dusty Lake: Rhino Designer
 David Vallandingham: DFabDesign
 Anna Deripaska: Materials Expert
 Neil Hoerstman: Const. Manager
 Marlee Brabin: Publicist/Marketing
 Zehra Ashary: Accounting
 Cassie DeMerchant: Communicator
 Lindsey Gregory: Publicist/Market.
 Eric Beaman: Construct. Manager
 Miranda Kryder: Materials
 Ashley VanMeter: Accounting
 Tayler Mikosz: DFab Designer
 Dan Roberts: AutoCAD
 Taf Bwitti: DFab Designer
 Melissa Klemeyer: Communicator
 Chris Simmons: DFab/Designer
 Jordan Doyle: Materials Expert
 Mark Figgins: Construct. Manager
 Dawn Baker: Acct/Marketing
 Becky Perez: AutoCAD
 Cassie DeMerchant: Communicator
 Eric Beaman: Construct. Manager
 Anna Deripaska: Materials Expert
 Sam Slaughter: DFab Designer
 Eric Till: AutoCAD
 Travis Liburd: Acct/Marketing
 Pam Harwood: Project Director
 David Calvin: Finish Carpenter
 Bob Githens: Carpenter Consultant
 Josh Vermillion: DFab Consultant
 Mary Slafkosky: MCM Director/Client
 Robert Abner: MCM Exhibits/Client



In this Design Build of the Tot Spot of the Muncie Children's Museum, the process is collaborative, interdisciplinary, community-oriented, and productive. The studio demonstrates at full scale the implications of students' design ideas and measures the quality of this thinking against the rigorous standard of built reality. Students become a team, bringing ideas to fruition, cooperatively, in the shared act of designing and making. With individual responsibility and expertise identified, students demonstrate learner-leader attitudes and skills as they produce and communicate design and build research in a shared setting. We work in an inclusive participatory design process in which community members actively engage in the conceptualizing and design process. Hands-on experience is gained working with both traditional materials and tools and digital fabrication processes to turn ideas into reality.



Malcolm Cairns
Professor · Department
of Landscape
Architecture · M.L.A.,
Iowa State University,
1977 · B.L.A., Ohio

State University, 1972 – mcairns@
bsu.edu



Antonieta Angulo
Associate Professor of
Practice · Department
of Architecture · Ph.D.
in Architecture, Technische
Universiteit

Delft, 1995 · Professional Degree,
Universidad Ricardo Palma, Peru,
1981 · B.Arch., Universidad Ricardo
Palma, Peru, 1980 · aangulo@
bsu.edu

Paper Sessions

Malcolm Cairns, FASLA

The Indiana Heritage of Landscape Architecture

Indiana has a rich and diverse collection of historic designed landscapes. The history of landscape architecture in Indiana parallels national trends and is highlighted by the work of America's best known landscape architects, including the Olmsted Brothers, Jens Jensen, OC. Simonds and George Kessler. The state's cities, towns, and rural areas have benefited from this heritage through the design of public parks, boulevards and parkways; university campuses; state parks and memorials; municipal cemeteries; the design of residential subdivisions and the estate grounds they often contained.

This paper presentation will profile ongoing research associated with the Indiana Historic Designed Landscape Survey, which is intended to result in documentation necessary to create a publication which would profile the Indiana Heritage of Landscape Architecture (IHLA). The IHLA project represents the extension of previous research and publications by the author, and provides an opportunity to continue the process of developing scholarship associated with the documentation and evaluation of significant cultural landscapes, and increasing public awareness of these important historic resources. The project will also serve to advance the goals of the Historic American Landscape Survey (HALS).

The work to be presented includes:

1. Selections from illustrated place/topic essays representing an outline of The Indiana Heritage of Landscape Architecture. Modeled after The Illinois Heritage of Landscape Architecture (Cairns, 1995), the types of landscapes to be profiled include: Parks, Campuses, Residential Grounds, Subdivisions and Town Planning.

2. Selected narrative histories and illustrative descriptions of representative examples of Indiana designed landscapes.

3. Representative drawings, maps, and historic photographs associated with selected projects, including documentation from a variety of regional and national archives and other sources.

4. Ongoing work in progress which reflects specialized topics in Indiana designed landscape history including aspects of African American landscape history; Indiana Commercial Clubs and the Park, Parkway and Boulevard movement; and Depression Era federally supported landscape designs and development.



Antonieta Angulo

Effectiveness of VIRTUAL SET visual-spatial simulations in the perception of architectural projects

Nowadays we take advantage of a great variety of tools to aid in the visualization and assessment of architectural design projects. When used at later stages of the design process these tools aim to accurately communicate the project to clients and to consultants. Currently used tools create design representations that tend to emphasize the designed objects rather than the spatial experience. The entire process of understanding and evaluating a space with these tools could be detrimental to its intent of improving the communication between the designer and the client. Simulating the experiential aspects of space is still an enormous challenge for

current visualization tools.

As an alternative, virtual reality environments (VRE) could help designers and their clients make more accurate evaluations about the spatial characteristics of their projects because they would perceive virtual spatial information the same way as they do real spatial information. Architectural visualization tools that can enable a sense of presence may provide designers an opportunity to comprehend the spaces under design and evaluate their experiential aspects.



Virtual Set for the Cardinal Sports Live show, by Chris Harrison, Fall 2010

The purpose of this particular study is to explore and determine the accuracy of virtual set technology in simulating the basic characteristics of architectural spaces and to evaluate to what extent our perceptions of virtual and real spaces coincide. A virtual set (VS) is an enhanced version of a conventional VRE because it mixes the virtual reality environment with the reality of people and other artifacts. We can borrow this technology for the creation of a virtual set and use it to recreate space designs that communicate their visual characteristics and performance with real people.

Correlating the sense of presence with visual-spatial comprehension is vital in this study. Although the concept of presence is extremely subjective and can only be loosely described as the feeling of “being in a place”, we can measure presence in terms of both involvement and immersion. We conclude that relevant levels

of presence contained within a VS for architectural visualization should include focus of attention, social interaction with inhabitants of virtual environments, and immersion through high levels of realism and detail of the virtual model.

Mahesh Senagala

A Garage Studio: Market-driven Innovation for Architects

The presentation will feature a Master of Architecture design studio conducted in spring 2010. The studio was named “A Garage Studio” to communicate the attitude, goals, methods and pedagogy of innovation. Offered in partnership with the Center for Media Design and the Miller College of Business’ Center for Entrepreneurship, the studio introduced methods and means of addressing market-based design and innovation (in distinction to client-based projects). Three “garages” were formed in partnership with business students.

Basic literature of innovation, intellectual property, licensing, commercialization and business modeling were introduced to the students.

The deliverables of the studio were not only the design proposals, but also prototypes and business models aimed at specific markets and commercialization opportunities. New pedagogical methods were used. The methods included self-organization, goal setting, problem refram-



Mahesh Senagala
Department Chair and
Professor · Department
of Architecture ·
M.Arch., Kansas State
University, 1994 ·

B.Arch., Jawaharlal Nehru Tech-
nological University, Hyderabad,
India, 1990 · mahesh@bsu.edu



Ryan Shrack is a second year graduate student in Ball State University's College of Architecture and Planning and will graduate

in May with his Master of Science in Historic Preservation degree. He earned a Bachelor of Arts degree in History from Ball State University in May 2009. Ryan is a graduate assistant and works for the BSU Center for Historic Preservation. After graduation, he hopes to gain employment working in the field of downtown revitalization.



Chris Baas
Assistant Professor ·
Department of Landscape Architecture ·
Ball State Landscape Architecture alum,

Master's Degree University of Wisconsin-Madison, 20 years practical experience, scholarship focus is historic landscape preservation. rcbaas@bsu.edu

ing and the use of classification frameworks for design researchers, prototyping, testing, conflict resolution and advocacy. Three projects resulted from three garages: A comprehensive solution for Chicago local transit system, a rapidly-deployable shelter system for disaster relief, and a home automation toolkit. The projects were then pitched to venture capitalists and Ball State Innovation Corporation executives.

Ryan Shrack

Unstoppable Progress: Interstate 65 and the Fight to Save the Neighborhood

The planning and construction of the Interstate Highway System in the United States was one of the most advanced and expensive technological and engineering feats of the twentieth century. The interstate highway, born in the mid-1950s, has literally consumed thousands of acres of both the natural and built environments during its lifetime. In constructing the interstate highways through the nation's cities, countless neighborhoods were completely annihilated or permanently scarred. Many of these neighborhoods contained multiple historic structures that are now gone forever. In Indianapolis, the construction of Interstate 65 threatened many historic neighborhoods, including the Old Northside Neighborhood. This neighborhood has many historic buildings, including the Morris-Butler House and the President Benjamin Harrison House and was also home to many important citizens in Indianapolis' and Indiana's history.

In the early 1970s, the Old Northside



Neighborhood was scheduled for demolition as part of the nation's relentless march forward to build a federally funded interstate highway system. The National Historic Preservation Act, passed in 1966, was new and largely untested. Could the process put in place by Congress in 1966 tame the steamrolling highway process it had put in place ten years earlier? This presentation will show that through Eli Lilly, Indiana Landmarks, and other concerned citizens acting within the process that the 1966 act intended, a significant part of the historic neighborhood was spared from the bulldozer. The presentation will be augmented through the use of a powerpoint slideshow that includes many historic photographs and maps.

Christopher Baas and Kevin Henn

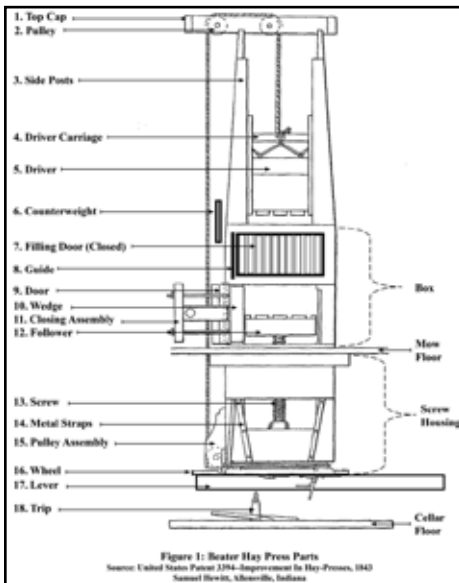
The Role of Animation in Interpreting the Mormon Beater Haypress: Student and Faculty Collaborations in Defining Historic Landscapes

Throughout the middle decades of the nineteenth century, Ohio River Valley farmers participated in a hay culture where timothy was grown, pressed, and shipped to east coast cities. The culture's most intriguing and recognizable material culture artifact is Samuel Hewitt's patented beater hay press. This automated, animal-powered machine compacted timothy by dropping a massive wooden block--guillotine style--into a hay-filled box. The press produced 2' x 3' x 4,' 400 pound bales. The ability to press bales of this size and density simplified the handling, storage, and transportation of hay. As a result, the press has become the iconic symbol of a regional culture where Ohio Valley farmers became wealthy shipping bales to New Orleans, then on to East Coast cities to fuel urban horses.

The three-story tall press was housed in a barn type that accommodated wagon traffic and the storage of massive amounts of loose and baled hay. Contemporary accounts of the culture report the existence of several hundred

presses throughout southeastern Indiana and northern Kentucky. However, only thirteen press barns have been identified, and only eight still contain a press. Two of the presses are operational, and a third is being rehabilitated.

Professor Christopher Baas spent summer and fall of 2010 conducting field work documenting the many aspects of this historic landscape in efforts to define it both culturally and geographically. He is partnering with Dr. Darrin Rubino to “date”



press barns using dendrochronology (tree-ring) methods. He will be presenting a paper discussing the aspects of early “mass produced and packaged” foodstuffs at the Agricultural Historic Society’s Annual Conference in June.

Seeking public history methods for disseminating this scholarship, Chris is working with 4th year DoLA Student Kevin Henn. Kevin’s interest in animation has created the opportunity to virtually illustrate the press’ operation. The results can be used in schools, museums, and web based applications to interpret the historic technology.

This paper presentation will share the status of the scholarship, the expectations and challenges of interpreting historic technology through animation,



and a demonstration of the animation completed.

Michele Chiuini, John Fillwalk, Josh Vermillion

Digital technologies and immersive learning. A reflection on the introduction of laser scanners in research and professional training at BSU

The recent acquisition of laser scanners in CAP has led to a number of projects and training opportunities during 2010. A creative teaching grant has made it possible to test course contents and methodologies, and has also contributed to increasing our staff and faculty skills in the use of laser scanners.

Following the educational and research applications of the Simlab Zscanner 700, a group of faculty and staff has been exploring uses for the new FARO Photon 120. After training on the FARO LS and related software, we conducted in spring 2010 field tests with the Center for Historic Preservation (ULI project) and in Chicago, as an extension of the DiCSX, with an IDIA Fellowship.

The elective on Laser Scanner Applications in Historic Preservation has allowed faculty and students to perform fieldwork on campus buildings, as well as a digital fabrication application in collaboration with the Indiana Limestone Fabricators, one of the Institute for Digital Fabrication’s key industry partners. The IDIA has also employed the laser scanner in its Immersion Seminar in Virtual Worlds, resulting in a year long project



Michele Chiuini
Professor · Department of Architecture · M.A., Architecture, University of Sheffield, 1974 · BSCE, Politecnico di Milano, 1973 · mchiuini@bsu.edu



John Fillwalk is an Intermedia artist and director of the Institute for Digital Intermedia Arts [IDIA Lab} at Ball State University.

Funded by Eli Lilly Foundation, Inc. the IDIA Lab is an interdisciplinary and collaborative design studio exploring the intersections of art, science and technology. Fillwalk is a leading figure in the design and application of virtual and hybrid environments in the arts. He is president of the Hans Breder Foundation – an international non-profit for the study, archive and sponsorship of Intermedia artforms. Fillwalk serves on the advisory board of the Virtual World Heritage Laboratory and hosts a node in the Upgrade! Network. He has received numerous grants, awards, fellowships and presentations. His artwork has been exhibited internationally at festivals, galleries and museums. His most notable exhibitions include CYNETart, Synthèse at Bourges, several SIGGRAPHs, Boston Cyberarts Festival, 404 Festivals, SIGGRAPH Asia, ASCI Art and Science Competition, Digital Sur Festival, Indian Institute of Technology in Mumbai, and Dutch Design Week. · jfillwalk@bsu.edu



Joshua Vermillion
Instructor · Department of Architecture · M.Arch., Ball State University, 2005 · B.Arch., Ball State University, 2002 · jdvermillion@bsu.edu



Tim Gray
Associate Professor · Department
of Architecture ·
M.Arch., University of
California-Berkeley,
1989 · B.Arch., Ball State Univer-
sity, 1984 · B.S., Environmental
Design, Ball State University, 1984
· tcgray@bsu.edu



Ryan Wilhite is an
adopted Hoosier.
Born in Wichita, KS,
he lived most of his
life in Evansville and
Indianapolis, enjoying

the benefits of a caring home. He
spent most of his time as a youth
playing tennis and soccer, study-
ing the American Civil War and
begrudgingly doing yardwork.
He attended Indiana University,
where he received a Bachelor of
Arts in History and followed that
with a Master of Arts in History at
IUPUI. His thesis is titled: “Rid-
ing Red Ink: Public Ownership of
Mass Transit in Indianapolis.” He
is now pursuing a Master in Urban
and Regional Planning at Ball
State University and is interested
in transportation planning, public
policy and economic development.

connecting scanned sculptural works of art
in their original simulated environments.
Simulations included a major reconstruc-
tion of the 1915 San Francisco World’s
Fair and a Japanese Temple – both in Blue
Mars – a next generation virtual world.

BSU media have reported on these activi-
ties in a number of occasions, providing
evidence of immersive learning and
student access to emerging digital tech-
nologies.

Timothy Gray

SALVAGED LAYERS; A Collaborative Site Specific Performance

This paper documents and reflects on the
activities of a collaborative, interdisciplin-
ary studio which challenged students to
explore issues of craft, making and place
through a series of full scale built inter-
ventions in a historic theatre. The project,
which was a collaboration between a
group of Theatre students and a group
of Architecture students from separate
Universities, culminated in a two night
performance at the Irving Theatre in India-
napolis in the spring of 2010.



By positioning this project as a cross
disciplinary collaboration it gave students
the opportunity to explore ways in which
the different disciplines could creatively
engage one another while simultaneously
grounding their activities in the specific
circumstance of the site. This presentation
will discuss the goals, the process and the
performance, and reflect on the learning
outcomes from this rigorous semester.

Ryan Wilhite

Riding Red Ink: Public Transportation as a Civil Right

During the Civil Rights Movement of the
1950s, the topic of transportation equi-
ty was one of importance. From Rosa
Parks to the Montgomery Bus Boycotts,
equitable access to public transportation
created the spark that ignited the Civil
Rights Movement. Public policies, grass-
roots movements and legal cases provide
the foundation for transportation equity
in America. In these academic discus-
sions of transportation equity, historians
and planners ignore the relevancy of one
important phenomenon in post World War
II America – public ownership.

For the majority of the industry’s history,
urban mass transportation has been pri-
vately owned. Although publicly regulat-
ed, the mass transportation industry served
many masters, the first of which were
stockholders. At the turn of the twentieth
century, streetcar stocks (and their divi-
dends) were considered wise investments.
A combination of internal and external
events damaged the viability of streetcars
as a profitable enterprise. Calls for public
ownership initially began in
response to inadequate transpor-
tation facilities in major metro-
politan areas like Chicago and
New York City. Public owner-
ship did not reappear again until
the industry began its deathknell
in postwar America.

In Indianapolis, the call for
public ownership occurred in
the 1960s and 1970s, as increas-
ing inflation, reduced service and
higher fares reduced the local
mass transit system, Indianapo-
lis Transit Systems (ITS), to a
skeleton system. Riders and transit advo-
cates opposed the efficiency cuts by ITS,
and pointed to their dividends as evidence
of their greed and disregard for Indianapo-
lis transit riders. Politicians largely avoid-
ed entering the fare battles until the period
between fare raises decreased. Indianapo-
lis politicians and media distanced itself
from public ownership and the community
did not completely embrace the idea.
Blue-ribbon commissions and professional

reports changed the minds of politicians about the necessity of public ownership. Within these reports, the authors emphasized the need for mass transit for the transit dependent. Indianapolis, attempting to become a first-class city, could not be respected if they could not provide transportation for their poor, aged and others unable to use private transportation. Public ownership reinforced the unique idea of providing transportation services, not just the corridors, for its residents. In short, public ownership recognized transportation as a civil right.



Rob Benson

Rice, Slaves, and Camellias: Globalism, Sustainability, and Landscape Aesthetics in the Colonial Americas, or, “There and back again”

The Eighteenth Century saw a new understanding of nature as a model for society, and a dawning comprehension of ecological forces and agricultural requirements which could be merged in a synergistic manner in which aesthetics also played a role. Unfortunately, trafficking in human flesh laid the foundation for this to occur in the British colonies of the Caribbean and the Americas. This paper will explore these inter-relationships, focusing on the great colonial rice plantation of Middleton Place, SC.

Rice and slaves were the sources of an emerging culture in colonial Carolina, and Charles town was the center for both. First cultivated in Indonesia, rice as a field crop made its way to India, then Persia, and finally, the river deltas of northwest Africa. These, unfortunately, would also be the primary points of supply for the English slave trade. The infamous “Middle Passage” embodied the forced transportation of native Africans to work the sugar plantations of British colonies in the Caribbean, such as Antigua, Barbados, and others. An eventual scarcity of arable land forced a second migration of the English and a smaller group of French Huguenots during the 17th and early 18th centuries to what came to be known as the Carolina Lowcountry. The local climate, ecology, and ease of travel – and trade - via the Ashley and Cooper Rivers provided natural support for the cultivation of cotton, rice, and indigo. All were shipped downriver to Charles Town for export; supplies, needed raw materials, and European luxury goods made the return trip via the same routes. Once established, this system of exchange would sustain the region’s economic health and multi-cultural identity until the Civil War.

Rice provided the source of wealth needed to ensure the security of the English rural aristocracy. Not only did the crop make money, but it was also a factor in the evolution of a unique slave dialect - “Gullah” - a distinguished regional cuisine, and inspired decorative motifs on fine locally crafted furniture. The knowledge of the African slaves, who had cultivated rice before their involuntary transportation, made the large scale production of a recently acquired superior variety of rice known as “Carolina Gold” both possible and practical. Because of its economic importance - it quickly became the source of Carolina’s gold, so to speak, and the slaves’ knowledge regarding its successful cultivation in riparian environments, their living conditions tended to be relatively good, thus making it easier to preserve their own cultural traditions. The native language(s) would evolve over time into modern day Gullah, a dialect of the coastal islands near Charleston, and they were allowed to cultivate their own food crops during periods of relative inactivity when the rice plants



Rob Benson
Professor · Department
of Landscape Architecture · M.L.A., Harvard
University, 1967 · B.A.
Harvard College, 1964

· rbenson@bsu.edu



Michael Gibson
 Instructor · Department of Architecture
 · M.Arch., Harvard Graduate School of Design, 2006 · B.A.

Architecture, Miami University, 2002 · mdgibson@bsu.edu

sown in the floodplains had to be flooded, an unintended, but beneficial result of the alliance between nature and humans. In a final irony, the crop produced by the imported slaves became a staple ingredient of their daily diet, there and elsewhere in the British colonies, while “Carolina Gold” was introduced to northwest Africa as superior to native species. It is now once again becoming commercially available to modern consumers – an outstanding example of “what goes round comes round,” several times over.

Middletown Place was one of the great rice plantations on the Ashley River, and a focal point of the cultural whirlpool represented by the social, economic, and aesthetic movements of the 18th century. It also embodied what we now consider to be issues relating to physical and cultural sustainability, including sustainable agriculture and social justice, although less conspicuous consumption had yet to be added to the mix. Although rice cultivation may no longer be the backbone of the Lowcountry economy, its influence was centered in such establishments, and lasted for almost two centuries. In modern times the integrity of this once great estate now faces threats from a different sort of cultural warfare involving Charleston politics, the state’s economy, and urban sprawl, with the results remaining to be seen.

Michael Gibson

Integrating Geometry and Light: Daylight Solutions Through Computational, Performance-Based Algorithms

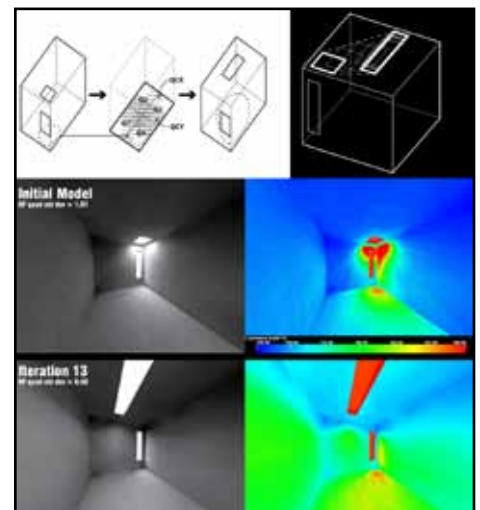
Designing spaces for daylight is a complex problem for architects, balancing geometry with the location of daylight sources. Conventional design practice approaches this balance one-dimensionally: common procedures, rules of thumb, and building codes lead designers to default to regularity when designing windows and skylights.

The problem of daylight can be restated, starting first from the basic performance goal of distributed, uniform light. In traditional vernacular architecture, it is common to observe intentional coincidences among windows and interior surfaces,

illustrating that openings and interior geometry can be integrated to distribute light in a way that is also experientially dynamic: integration also understood by great architects of the past and present.

Parametric design – a method of working where pieces of a simulated model can be manipulated ad infinitum – provides a new way of studying the relationship between light and geometry in the producing desirable, uniform, lighting conditions. Taking parametric design a step further, it is possible to tie together parametric models and computer-based simulations to produce an algorithm that ‘finds’ optimal configurations between openings and interior geometry. Such an algorithm reveals two possibilities. The first is that designers can systematically determine the best relationship among openings and interior space. Secondly, the success of these algorithms offers objective proof that, in comparison to the default of regularized patterns of openings, a more organic (i.e. less artificially ordered) relationship between openings and interior indeed is better for producing uniform daylight.

Two parametric algorithms will be discussed in the paper: an optimization algorithm, leading to a given problem to a single solution, and an evolutionary algorithm, using the random generation of individual solutions to reach better fitting results. The workings of the algorithms as well as the interpretation of the results in the context of design for daylight are discussed.



Harry A. Eggink
Visual Stories

Today our mental climate is one of caution and fear, and much is being said and written about the meaning and relevance of our work. Author Daniel H. Pink, in the



book “A Whole New Mind”, addresses these modern day fears and lays out a program for survival in the 21st century. To combat “cheaper labor sources, computer speeds, the meaning of our work” and an environment where high-tech programs are no longer enough to be productively and actively engaged in our ever changing modern world, he says, “we need to supplement our well-developed high-tech abilities with abilities that are high concept and high touch”. He continues his dialog by introducing the Conceptual Age, where we reinforce our left-brain directed



reasoning and add the development of six essential right-brain directed aptitudes. Although all of these aptitudes - Design, Story, Symphony, Empathy, Play, and Meaning - are deeply ingrained in our profession, this paper explores the “Story” concept, its graphic vocabulary, story construction and visual dialogue.

It is encouraging to see other professions and disciplines discover our design education process, and weave it into their working and thinking models, but more importantly for us, it an opportunity to better understand our methods of communication through visual story telling.

The paper will dissect a design lecture, subject “spaces and layers in sustainable urban design”, through graphic exploration, the use of graphic tools, the depth and range of visual imaging, and building up to the story. The presentation will explore the essence of how abstract graphics carefully evolve through layers of images in order to paint the process and reveal the design story. These graphic generated stories will also incorporate the visual iconography chart, from Scott McCloud’s book “Understanding Comics”, as a method of dissecting our visual design trail in a typical lecture and its influence on student architecture/urban design projects.

Bruce Race
Climate Mitigation and Adaptation—The Future Shape of Cities

Eight communities of various sizes and in climatic regions are studied to learn their motivation for preparing climate action plans (CAPs) and the tools and methods each used. The case studies provided a better understanding about how external state and national policies, city size, form of local government, and climatic region impacted their motivation, process and outcomes. Case study research includes review of state policies, local CAPs reports, technical studies and interviews of planning managers. The case studies demon-



Harry Eggink
Professor · Department of Architecture · M.Arch., Urban Design, Harvard University, 1977 ·

United National Graduate Student Programme, Geneva, Switzerland, 1972 · Technical University of Helsinki, Fulbright Scholar (on year graduate work), 1972 · B.Arch., Ball State University, 1971 · School of Fine Arts and Architecture, Fountainbleau, France, Summer 1969 · heggink@bsu.edu



Bruce Race
Associate Professor · Department of Urban Planning · Bruce A. Race, FAIA, AICP, is an award-winning

architect and planner. He has a national practice, is the Associate Professor of Practice in the College of Architecture and Planning teaching in the Masters of Urban Design program in Indianapolis; and a PhD candidate at University of Cardiff in Wales. Mr. Race maintains an active and visible professional practice at a local and national level. His plan for the California University at Merced received the 2010 AIA/California Council Urban Design Award and 2009 Governor’s Environmental and Economic Leadership Award. RACESTUDIO’s clients have received 29 national, state and regional design and planning awards. Mr. Race’s PhD research titled Qualitative Indexes for Carbon-Based Planning focuses on defining best practice tools for local government in the preparation of climate action plans. brace@bsu.edu



Janice Shimizu
Instructor of Architecture · Department of Architecture · M.Arch., Southern California Institute of Architecture, 1997 · Bachelor of Environmental Design, University of Manitoba, 1990 · jhshimizu@bsu.edu

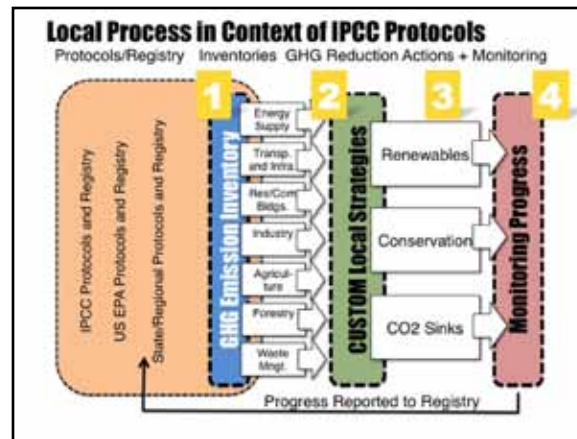


Kevin Klinger
Associate Professor · Department of Architecture · M.Arch., University of Illinois, 1996 · B.A. DePauw University, 1990 · krklinger@bsu.edu

strated the influence of both international protocols and state legislation on CAP tools, protocols and community process; that for some communities climate adaptation planning will have a larger impact on their evolving form; and the degree in which GHG emission strategies are integrated into comprehensive planning varies from community to community and may impact a CAPs effectiveness.

floor with the large site. During the design process for this project, we were interested in an investigation of the following three ideas: Overlap, Interlock, + Secret Doors.

Overlap refers to the idea that program can create discrete buildings within a singular building by defining separate understandings of space. Design thus begins with an inside-out approach that pays special attention to how program occupies space and to the resultant experiences of overlapping activities. This creates moments of slippage when different layers of the building might come in and out of focus.



Interlock is an attempt to make spatial connections between or within volumes. This might happen around a point of use or a point of view. This might be defined as rooms wrapping around other rooms but there was also an interest in using material or light to define these “edges”.

Janice Shimizu

Overlap, Interlock, + Secret Doors

The KA House is a 4000 sf residence in Westchester, California for a couple, three children, and a grandmother. The house focuses inward on a courtyard and yet also opens up completely with long sliding glass panels that connect the first

The term “secret doors” introduces an underlying idea of play that allows spaces to be seen and not be seen. This idea is named after the small 30” high door that connects the boys’ bedrooms and tries to imagine a completely different occupation of the house.

Kevin R. Klinger

Connect Globally, Make Locally: Manufacturing, Materials, and Making Cases for Midwest Digital Design and Fabrication

Professor Klinger’s lecture will illustrate strategies for deploying digital technology in the service of making architecture through direct connection with industry partnerships. The talk lays the historical groundwork that the Midwest has always been a place for innovation in industry, and that manufacturing and craft has historically found



root in this fertile region. Continuing the examples laid out in the recent book *Manufacturing Material Effects: Rethinking Design and Making in Architecture*, professor Klinger argues that the direct engagement with industry is essential to a new form of production in architecture, and that through new methods of design and production that embrace advanced technologies in a globally competitive market, the Midwest is ripe to continue its tradition of making and craft from within our region. Research projects of the Institute for Digital Fabrication at Ball State University, local and regional industry opportunities, and regional cases studies will demonstrate a new information age ethic for “connecting globally, and making locally.”

Participants will be able to understand regional industry potential, consider an architectural working process using a total design through production methodology, compare and contrast our regional identity and historical traditions within a global context.

Jody Rosenblatt Naderi

Wild Kindergartens - Outdoor Learning and Contact with Nature

From the land of fairy tales and the Brothers Grimm comes a new story about learning lessons in the Woods. The *Wildeckindergarten* (Wild Kindergarten) is a formal pedagogical approach to learning outdoors that is emerging across the contemporary north European landscape. The *Wildeckindergarten* is an option to traditional indoor learning environments being offered as kindergarten curriculum where the child is outdoors all day toy-less and computer-free with giant rabbits, wild boar and the endless light and shadow of the forest. The learning outcomes are impressive with many graduates testing significantly higher in standardized secondary school evaluations than their compatriots who learned indoors. Rooted in the cultural context of Germany where the *Schrebergarten* and *Community Garden* concept was developed in the 1930's, educators around the world are daring to advance into the forest landscape and reap the benefits for children's health and learning.

To explore how the forest landscape is found and managed as a *Wildeckindergarten*, landscape architectural post-occupancy case studies compare two locations. Both schools are located in the forests of the North Westphalia winter landscape. They both target ages 3 to 6, and are both accessible by transit/car from the nearby city of Bonn. Current status of outdoor kindergarten practice and how it impacts the design of schools from a perspective of landscape architecture is explored.

Thomas Fraley

Sustainability of the Human Spirit: Experience, Aesthetics, and Endurance in Environmental Literature

The power of landscape architecture as a profession lies in its engagement with allied disciplines especially in understanding ideas of culture, the relationship between humans and nature, and new ways by which we can view and interpret the landscape. John Wylie in his book, *Landscape* asserts that “landscape art, alongside cognate arts such as cartography, photography, poetry and literature, is a key medium through which Western and in particular European culture have historically understood themselves, and their relations with other cultures and the natural world.” This paper views the medium of nature writing through the lens of sustaining the human spirit, exploring ideas of landscape interpretation, transcendence and spirituality, aesthetic preference, and the ability of nature to help us endure as humans, helping us find beauty in a broken world. An independent project, mentored by German Cruz in the Fall of 2010, engages literature from Henry David Thoreau, Izaak Walton, Terry Tempest Williams, Mary Oliver, James Prosek, Gretel Ehrlich, and others, along with selections from *Orion Magazine*.



Jody Rosenblatt Naderi
Chair and Irving Distinguished Professor · Department of Landscape Architecture · M.L.A., Harvard University, 1980 · B.A., Fine Arts, University of Maryland, College Park, 1976 · jrnaderi@bsu.edu



Thomas Fraley is a 5th year student in the Bachelor of Landscape Architecture program. After graduation he plans to pursue a Masters of Fine Arts in Painting and Fiber. His interests include the post-industrial landscape, the engagement of landscape architecture with other disciplines, design process, and theory, especially aesthetics and phenomenology.



Stephen Kendall
Professor · Department
of Architecture ·
Ph.D., Massachusetts
Institute of Technol-
ogy, 1990 · M.Arch.

& Urban Design, Washington
University, 1976 · B.S., University
of Cincinnati, 1970 · skendall@
bsu.edu



Olon Dotson
Associate Professor ·
Department of Archi-
tecture · M.S., Colum-
bia University, 1990
· B.Arch., Ball State

University, 1987 · B.S. Environ-
mental Design, Ball State Univer-
sity, 1987 · odotson@bsu.edu

Stephen Kendall

**KITFIT: Efficient And Customized Unit-
by-Unit Interior Fit-Out**

KIT_FIT is a new design/build method for completing empty demised spaces by means of an integrated “FIT-OUT SYSTEM.” A fit-out system allows rapid installation of partitions, heating and cooling equipment, kitchen and bathroom equipment, fixtures and cabinets with all piping and wiring related to that occupancy. Installation is done per unit by a multi-skilled installation team, according to the floor plan chosen for that particular unit. This “product/service” is made available from a single source, reducing overhead, streamlining delivery and assuring the desired cost/quality ratio. This is attractive because it offers an individualized approach in large projects with many units of occupancy where attention to individual – and often changing - preferences is most difficult. It is economically competitive compared to conventional modes of fitting out dwelling and other spaces, and therefore constitutes a breakthrough combining increased adaptability with more efficient production.



This problem is not limited to multi-unit residential occupancies. The same issues plague other occupancy types such as, for example, medical office space. Benefits go to users or occupants; real estate investors and developers; architects and engineers who design these projects; construction companies responsible for construction schedules and logistics; subcontractors forced to fix problems left by the previous subcontractor; and lenders, who

are assured of more long-lasting real estate assets because they are readily adaptable to new realities in the market. Maturation of this new product/service capability in general is one way to meet the goals of a sustainable building stock.

Olon Dotson

**Gary, Indiana: A Critical Geography Of
A Fourth World City**

As the United States describes itself as the most developed and industrialized nation in the world, many of its citizens reside in conditions comparable to what can be found in the most distressed areas of so-called “Third World” or “Developing” countries. I have chosen the term “Fourth World” to describe the phenomena of “Third World” conditions in a so-called “First World” environment. Fourth World Theory explores the institutional abandonment of inner-cities throughout the United States and investigates the causes which have led to the massive disinvestment. Although many urban centers contain districts, sections, or neighborhoods in which such conditions are prevalent, the city of

Gary, Indiana represents a case where the entire community is in a virtual state of severe distress and is thus classified as a Fourth World city.

Gary’s historic structural inequalities demonstrate that the city, which was founded on such principles, is apparently incapable of reconciling social stratification based primarily

on the construction of race as a vehicle



for physical separation and institutional abandonment. In the United States, a general reluctance to confront the social construction of race undermines productive dialogue on the matter. Fourth World Theory argues that race is at the core. By conducting comprehensive analyses from the establishment of the city at the beginning of the twentieth century, its development of acute institutionalized ethnic, class, and race-based stratification, and the causes which have led to unprecedented and massive disinvestment, Gary will serve as a demonstration that the legacy and continued liability of race as central to the rise and fall, not only of the city, but potentially of the entire nation.

munities can connect to the area's natural systems and landscape for better water management, utilization of passive heating and cooling systems, and reduced electrical needs.

This project develops a prototype for a healthy refugee community and an example for applying the prototype to the landscape near Amman, Jordan. The prototype addresses cultural concerns specific to the Palestinian community, local climate and landscape, eco-balanced community design, and development strategies. The example addresses the theoretical application of the prototype to the landscape near Amman, Jordan, showing a case study of how a community might use the recommendations from the prototype.



The political and economic atmosphere of the area makes the care of refugee populations precarious—it is hoped that better and more sustainable design will help alleviate some of the pressures these communities place on their host countries while promoting better health, improved economic growth, and stronger community networks for the refugee community.

Jessica Lee Barnes
**Rebuilding After Conflict:
An Examination of Refugee
Camp Design in Jordan**

This presentation examines refugee camp design for the people displaced by the Israel-Palestine Conflict who are now residing in Jordan. In the past, refugee communities have had little or no formal design. However, by utilizing the principles of landscape architecture, these populations can rebuild their communities in ways that empower and promote community vitality. Well-designed communities encourage responsible stewardship of land, greater human health, and quicker economic recovery. Likewise, well-designed com-



Jessi Barnes is a fifth year landscape architecture major. She's lived in North Africa studying Arabic and the Middle East, and she has studied abroad two semesters learning about sustainability and sustainable design in Mexico and Brazil. She recently attended *Camp David III: Negotiating the Path to Israel-Palestinian Peace*, an academic seminar in Washington, DC.



Nicholas Serrano
Originally from Raleigh, NC, Nicholas is a plantsman and designer by training with a passion for education.

After receiving a BS in Horticulture from North Carolina State University and pursuing graduate study at the Rhode Island School of Design, he came to Ball State University to complete a Master of Landscape Architecture and teach undergraduate courses on plant materials. Currently a research fellow with the Smithsonian Institute and writing his thesis, Nicholas works on the aesthetic experience of planting design in landscape architecture in addition to how students learn plant identification.



Joshua Coggeshall
Assistant Professor · Department of Architecture · M.S. in Architecture, Southern California Institute of

Architecture, 1997 · Bachelor of Environmental Design, Texas A + M University, 1991 · jrcoggeshall@bsu.edu



Pam Harwood
Associate Professor · Department of Architecture · M.Arch., University of Minnesota, 1991 · Diploma

Program in Urban Studies, International Graduate School, University of Stockholm, 1984-85 · B.S. in Architectural Studies, University of Wisconsin, 1981 · pharwood@bsu.edu

Nicholas Serrano

The Bloom of Age: Western Aesthetics in the Discourse of Contemporary Planting Design

Landscape architecture stems from the landscape gardening movement with plants as the central media for design expression. However, since modernists departed from the Beaux Arts tradition in the 20th century, our profession has experienced the steady decline of discourse on plants as design compositions for fear of trivializing it as ornamentation of landscape. In this new age of design with heightened demands on process and materiality, how is landscape architecture to prove planting design as an artistic endeavor when it is still caught in the tired language of formalism?

Most contemporary discourse of aesthetics and beauty is based on western dialogue of formalism and a scientific world view, yet eastern cultures are also deeply (possibly more so) concerned with beauty. This paper focuses on the Japanese aesthetic of wabi sabi to investigate the beauty of impermanence and imperfection in planting design. A brief historical review of Japanese culture and Zen Buddhism influence provides background for a fundamental understanding of this philosophical theory. The premise that everything is in the process of emerging from or devolving to nothingness finds direct applicability to landscape aesthetics. Principles are outlined for landscape architecture and examples of built projects validate the use of this theory. Correlations with the sustainability agenda are found to be corporal within this aesthetic and future research may strengthen the observed relationship.



Joshua R. Coggeshall

Aurora's Fold: an Investigation Between Here and There

A proposed chapel for Air Force Veterans has a material and tectonic agenda that speaks about an experience. A veteran's story of sunrise seen on the return journey and the resulting sense of relief and joy was the impetus for the project. It attempts to create a sacred space using masonry, steel trusses, and light. These imply ideas of technology (airplanes) and of place (church). The sanctuary is cloaked with opalescent glass in the colors of morning. Traces of the structure emerge through the glass and the scale of the ceiling suggests the wing spread of an airplane and the enormity of the unknown- positions between this world and that.

Pam Harwood

Educational Trends Impacting Facility Design: Design Patterns Illustrated for Charter Schools

This paper examines current educational trends influencing the planning and design of school facilities. Although applicable to any educational environment, our research focuses on charter schools whose missions typically stress the importance of innovative teaching and learning and consider such innovations in the design or adaptive reuse of their facility. Although we can't know exactly how current educational trends might play out in the future, their thoughtful consideration during the planning and design process could have a profound effect on how successfully a new or renovated school will perform over its useful life. The trends are illustrated in this paper as design "patterns". They were identified by reviewing the latest research on school facilities and student outcomes; current issues, problems, and initiatives in the educational field; emerging demographic patterns; and comparative case study research methods. The Building Better Communities and Office of Charter Schools Authorizers have funded this research

project for three years while a team of interdisciplinary students works together in profiling and exploring charter schools across the United States.



Creative Re-use of Existing Spaces: Because there is no funding for facilities, charter schools' options are often to utilize existing vacant facilities or to lease a portion of an existing building. Both approaches reduce overall impact on the environment by minimizing construction waste and bringing life to an underutilized building. Setting a charter school within an existing community can also encourage the growth of the surrounding area and provide a stronger sense of community and a life-long, multi-generational learning environment. Charter schools can creatively convert underutilized community and industrial buildings often in historical neighborhoods, as in this Power House High, where the Sears Power Plant was repurposed as a charter high school. The re-use of existing spaces is the most sustainable option as they provide great alternatives to new construction and are an environmentally responsible choice because they take advantage of existing infrastructure.

Christopher M. Marlow

Games & Play for Designers: Revealing Landscape Architecture

Games are major cultural forces. They catalyze learning – from a very early age, and in uniquely memorable ways, we learn from games and play. Games are thought-provoking activities within closed formal systems that have rules, conflict, and goals; involve decision-making; and are artificial, safe, and outside ordinary

life. While imperfect, this definition is generally common to most well-designed games. Interactive digital media & learning technologies/theories offer us unique opportunities to reform some of our basic educational approaches, while maintaining our commitment to achieving learning objectives and demonstrating outcomes.

Although exploring games in higher education challenges some fundamental notions about learning, serious games are being designed based on a sound new genre of learning theory and research. Serious games use [digital] entertainment to affect education and other strategic communication or training objectives. Good serious games embody systems that offer players, through practice and variety, opportunities to experience the ways a particular discipline considers and solves problems. Because most games are sticky, players often explore the intricacies of a problem longer and in ways unlike a documentary, news article, or book. Persuasive in their approach, they facilitate taking actions and feeling consequences, allow people to fail in safe ways, and are intended to make learning more fun. A game is a good teacher of something. We can surely identify many “some-things” around which games can be built for advancing landscape architecture education.

This presentation reveals the processes & products of an immersive upper-level LA elective course on game design. It was designed to creatively augment undergraduate education while developing a digital, online tool to assist the Indiana ASLA in fulfilling its mission to help the general public and prospective students discover our exciting profession. The highlights include course design, relevant existing games, effective game design resources, exciting student outcomes (game prototypes), survey results, and a



Christopher Marlow
Assistant Professor ·
Department of Land-
scape Architecture ·
M.L.A., University of
Illinois, 2001 · B.L.A.,

Iowa State University, 1994 ·
marlow@bsu.edu



German Cruz
 MDiv, New Orleans
 Baptist Theological
 Seminary · M.L.A.
 Ball State University,
 1999 · B.L.A. Univer-
 sity of Illinois, 1970 · gcruz@bsu.
 edu

course critique (including future direc-
 tions/implications). Compelling evidence
 suggests that, along with playing the right
 games, designing & making games has
 great potential to stimulate traditional LA
 pedagogies and make teaching & learning
 more fun and effective.

for action. While products of the American
 design market and imagination are much
 desired elsewhere. While the business as-
 pects of professional practice seem to en-
 joy the advantageous provision of design
 services abroad. It is clear that the articula-
 tion and translation of these processes and

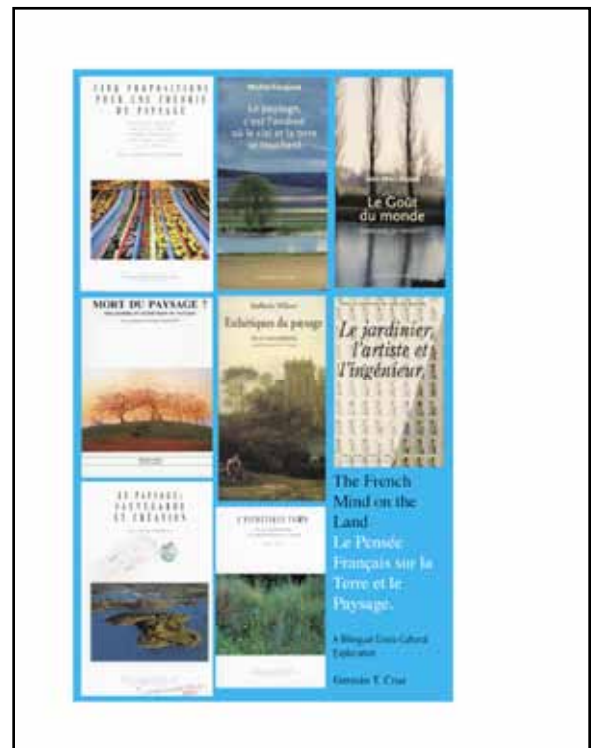
products into a local language
 and culture is fundamental to
 their acceptance, effectiveness
 and positive impact. The case of
 contrasting and often divergent
 understandings between French
 and American views of land and
 landscape offers a platform for
 the exploration of other such
 relationships and the deriva-
 tion of general protocols for the
 translation and transfer of design
 ideas.



This presentation is a prelimi-
 nary sampler of a work in pro-
 gress. An exploration in transla-
 tion (French into English) of
 selected chapters from 8 texts by
 contemporary French landscape
 architects and philosophers with
 the intent to present the contem-
 porary French vision of land-
 scape and land as germane and germinal
 to contemporary design dialogue across
 various cultures.

Germán T. Cruz
The French Mind on the Land
/ *Le Pensée Français sur la*
Terre et le Paysage.

The views and concepts of
 land and landscape are neither
 similar nor correlative between
 cultures. As it emerges with
 power and influence on the 21st
 century, landscape architecture
 finds its design thinking skills in
 great demand worldwide. This
 demand forces professionals as
 well as academics to consider
 the appropriateness of solu-
 tions to diverse environments,
 cultures and work traditions
 in order to avoid the dangers
 of cultural and technological
 colonialism. While processes
 and needs of design interven-
 tions might have common
 abstract and even rational bases



Tony Costello

The Architectural Educator/

Practitioner: Where have you gone?

This presentation will attempt to engage the audience in a discussion concerning a very interesting and, some would say, disturbing trend in architectural education. Others would say it is indicative of the growing schism between the academy and profession as well as the result of a fundamental transformation of both the scholarship and practice of architecture.

Regardless, it is a subject that this presenter feels deserves serious dialogue among all sectors of the discipline and practice of architecture. Students have a special position in this dialogue in that they can judge for themselves the knowledge-base and design skills that their faculty are bringing to their studio.

The program will first give a historical overview of architectural education during the 20th century, focusing on the role played by great educators / practitioners, each of whose “persona,” design philosophy and award-winning practice influenced 1000’s of alumni at their respective schools in the decades following post-WWI. Names like Gropius, Mies, Breuer, Kahn, Rudolph, Guirgola, Moore, Graves, Eshrick and Rapson come to mind.

Questions to be debated include: Has the concept of the architectural educator who also practices become obsolete? Has current university requirements (based on the triad of teaching, research and service) for advancement promotions and tenure within tenure-track, faculty positions encouraged or discouraged this dual career track? What does the future hold in terms of this tradition?



Anthony J. “Tony” Costello, FAIA, has been an educator / practitioner for his entire 44-year professional career. Currently holding the title of the Irving Distinguished Professor Emeritus of Architecture at Ball State University, he is also the founding principal of COSTELLO + ASSOCIATES (C+A), a limited-practice firm he founded in 1976 in Muncie, Indiana.

He earned a B.Arch degree (1965) from the Middle East Technical University, Ankara, Turkey, which he attended as a Fulbright Scholar, a B.Arch (w/ honors) from Pratt Institute (1966), and a M.S. Arch (Urban Design) degree from Columbia University (1967). As a Lilly Faculty Fellow, he did a year of post-Graduate work at Harvard and MIT in planning law and public policy in ’77-’78.

Tony was educated in the 1960’s under studio critics like: Aldo Guirgola, FAIA, at Columbia; Hugh Hardy, FAIA, Bill Conklin, FAIA & James Rossant, FAIA (Conklin & Rossant), and Dr. Fred & Maria Bentel (Bentel & Bentel) at Pratt. He lived through an era that saw: Walter Gropius (@ Harvard); Mies (@ IIT), Lou Kahn (@ Penn), Paul Rudolf (@ Yale), Ralph Rapson (@ Univ. of Minnesota), Michael Graves (@ Princeton) and Joseph Escherick (@ Berkeley) elevate the concept of the educator/practitioner to its pinnacle of prominence in the academy and practice of architecture.

The College of Architecture and Planning houses the following centers and institutions:

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CERES is an interdisciplinary academic support unit focused on issues related to energy and resource use, alternatives, and conservation.

www.bsu.edu/ceres

Center for Historic Preservation

CHP utilizes historic preservation to promote economic development, strengthen community identity, and improve the quality of life.

www.bsu.edu/chp

Institute for Digital Fabrication

IDF acts as a catalyst of digital design and fabrication techniques for both industry and education related to architecture and allied arts.

www.bsu.edu/imade

Land Design Institute

LDI pursues ecologically and culturally responsible land design through education, research, outreach, and service.

www.bsu.edu/ldi

Institute for Digital Intermedia Arts

IDIA is an interdisciplinary, collaborative research and studio environment that explores intersections between art and technology.

www.idiarts.org

College of Architecture and Planning

Ball State University
Muncie, Indiana 47306
Phone 765-285-5861
Fax 765-285-3726

