

**APDESIGN**

THE COLLEGE of  
ARCHITECTURE, PLANNING & DESIGN // K-STATE



HILTON GARDEN INN & CONVENTION CENTER MANHATTAN, KS

# DESIGNEXPO

FRIDAY, MARCH 1, 2019  
10:00 AM - 3:00 PM



DesignExpo is an opportunity to bring together students and professionals from firms throughout the country. Employers gain exposure to our students and are able to contact many potential employees leading to summer and academic internships or post-graduation employment. Students gain a better understanding of their respective disciplines and are able to interact with working professionals.

## Design Expo 2019 Kansas State University

Meet emerging professionals seeking internships or full-time positions  
Architecture + Graphic Design + Interior Architecture & Product Design +  
Interior Design + Landscape Architecture + Regional & Community Planning

Hilton Garden Inn & Convention Center  
Manhattan, Kansas  
Friday, March 1, 2019

Registration will be available December 2018 at  
[k-state.edu/careercenter/students/events/cfdesignexpo.html#Employers](http://k-state.edu/careercenter/students/events/cfdesignexpo.html#Employers)

Questions?

Contact Andrew Kohls  
Career Development Assistant Director + Design Expo Chair  
Kansas State University Career Center  
[andrewkohls@k-state.edu](mailto:andrewkohls@k-state.edu) + 785.532.1669

## DESIGN EXPO 2018

Attendance:

- o 84 firms
- o 417 students (260 APDesign)

## 2017 GRADUATES' EMPLOYMENT

98% employed within 6 months  
of graduation

Top 3 states for employment

1. MO
2. KS
3. CO





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# The Case for Programming: The Corpus and the Crucible

As we at APDesign approach one year in the new facility, a few things are rapidly becoming obvious as we settle into our spaces.

Long before primary funding from the State of Kansas for our project was even considered a legitimate possibility, we embarked on a privately-funded national RFQ process, searching for a design team partner to help our college of professionals and aspirant professionals program a 21st century design research and teaching environment. Our multistage transparent selection process resulted in landing a great design partner.

Our primary goal was to program a facility that not only conformed to our academic pursuits, but one that transformed how we operate, taking advantage of our interdisciplinary construct, of our well-established belief in making as an integral process of design, and in our belief in the transformative potency of design leadership and community engagement. More broadly, and specific to the centrality of our facility on campus, we had an opportunity to unmask the disciplines, long misunderstood and mischaracterized from our colleagues and administration, even as our national reputation continued to grow. Fact is, our building, while altered over time to be supportive of vital pedagogies, was uninviting, even foreboding in demeanor and decay. Programmatically it had few spaces that were not singularly dedicated to our specialized curricular activities, leaving little reason for visitors to frequent the facility, save for those already bound to us as alumni or friends, or those seeking a few hundred feet of shelter from the elements as they made their way across campus.

While not perfect, the programming process was conducted as openly and comprehensively as possible to garner the broadest range of responses, opinions and ideas for consideration in crafting the program and developing the subsequent conceptual design. Any good programming process will identify synergies emergent from the day to day operations and activities. In our case, while the program ultimately called for a significant increase in programmable area, the multifunction and transmutability of spaces in support of a wide range of activities and anticipating the continued evolution of design and planning education emerged as an overarching idea. Our process, and the subsequent honing of the program in Design Development resulted in a project supporting our established strengths while fully advantaging our academic and industry in crafting a truly unique path for design and planning education moving forward.

General observations on the new Seaton/Regnier complex reflect appreciation for the newness of the project, the obvious quality of materials and the 'abundance' of space. Most comments are rooted in mere accommodation, amenity, rather than in the depth of potency wrapped up in the totality of the project. The building, the corpus, is widely acclaimed for its beauty, its 'light and air' and its provocative contrast with the historic buildings comprising its context. There is no denying that these qualities, aesthetic and programmatic, resonate throughout the project, deeply enriching our experiences and activities.

The building is inviting, a draw as well, as we now have a broad range of spaces and supportive technologies allowing us to play host to a broad range of campus and community activities. Our building, always active with our own traditional activities, is now layered with a buzz with visitors for interviews, presentations, lectures and tours from across the campus and city. Where once we turned away these activities for want of capacity, we are now inundated with visitors, each one witnessing our crucible of endless academic activity, of design and planning invention that courses through our teaching, research and service.

The true beauty of the project is revealed in witnessing how our faculty, staff and students flesh out the breath of the project. It is the inventiveness of the members of our community, a trait of those engaged daily in the design process, in crafting, arranging the spaces and activities, programming the programmed so to speak, that has helped us begin to realize the synergistic potential of the project as built. While we presaged so many of the activities that could be accommodated in any one of our spaces, we could not have predicted the breadth of use they have hosted, some normative to our established methods, others indicative of new teaching methodologies and collaborative practices.

In this way the following stories touch on some of the enrichment emerging from our new hallowed halls, the depth of which owes not only to the quality of these faculty-led enterprises, but to the capacities of the spaces, amenities, sequences and technology to advance our 21st century land-grant mission. And of course, the design and planning research underwritten by our corporate and governmental partners illuminated herein, are exemplars of leveraging our facility, our faculty expertise and our collaboration with the communities we serve to enrich the unique educational enterprise that is APDesign.

Tim de Noble  
Professor and Dean





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Tim de Noble along with friends of APDesign prepare to cut the ribbons, officially opening the Seaton/Regnier Complex at the dedication event on October 13, 2017.

# Developing Twenty First Century Teaching and Learning Environments:

## A Collaborative Initiative between Academy and Professionals

Michael Gibson, Katie Hoke, Vibhavari Jani, Jin Kim, & Katie Kingery-Page

Current high school facilities in the United States are undergoing a substantial transformation to accommodate modern pedagogies and technologies. Add educational and facility standards, increased demand for energy efficiency, building codes, safety and security to this list of requirements, and it becomes a daunting task to design a new, or renovate an existing school facility! How can the designers re-imagine 21st century teaching and learning environments that accommodate above mentioned requirements and contribute to students' intellectual and personal growth; assist the educators in accomplishing their academic goals, while caring for everyone's health and well-being? The DLR Group sponsored a series of APDesign studios across disciplines to address this challenge.

With the help of Kansas City Kansas Public School district administrator Mr. Edward Marquez, DLR Group chose J. C. Harmon High School (HHS) as a focus site for the sponsored studios. This collaborative partnership brought together students from two distinct backgrounds and allowed postsecondary students from one of the nation's top architecture colleges to work with secondary students from the most diverse and multicultural urban school district in the state of Kansas.

### Archetypes for Learning as a Catalyst for Imagining a School Renovation

In fall 2017, DLR Group architects Scott Paschia and Kevin Geischer worked closely with the 5th year IAPD faculty and graduate students to address a hypothetical renovation of an existing high school in Kansas City, Kansas. Kansas City Kansas Public Schools (KCKPS) is one of the most diverse public school districts in the country. The district is comprised of 85 percent students from economically disadvantaged households, 88 percent students of color, and a remarkable 68 languages are spoken in students' homes (KDHE 2017, Lane 2017).

Associate Professor Vibhavari Jani and Professor of Practice Katie Hoke, faculty from the APDesign's Interior Architecture and Product Design (IAPD) Department, led twenty-seven 5th year students in the Fall



27 IAPD 5th year Graduate Students visited HHS to understand the existing site and building condition

2017 service-learning design project. Their goal was to demonstrate how graduate students can assist secondary education institutions in developing 21st century teaching and learning environments, and in doing so, encourage the high school students to become the knowledge seekers. Jani and Hoke invited a small group of HHS students to participate in this project. Throughout the fall semester, DLR Group architects and designers assisted IAPD and KCKPS students to develop 21st century teaching and learning environments. These students had the opportunity to work with DLR Group; an award winning architectural firm based in Kansas City.

In essence, this educational initiative provided students from both institutions an opportunity to learn from each other and help each other in developing much needed skills: KCKPS students learned the art and beauty of design from K-State students and visualized fulfilling their own academic and career goals. K-State IAPD graduate students gained knowledge and first-hand exposure to an urban school district and gained critical thinking, design, project management, collaboration, and communication skills. HHS students were asked to imagine 21st century learning environments and redesign J. C. Harmon High School. This collaborative project was

based on a premise that young knowledge seekers need thoughtfully designed learning environments that stimulate their mind, body, and soul; environs that encourage them to stay in school, promote life-long learning, and encourage the pursuit of careers of their choice. Hence, this project served as an impetus to cultivate HHS students' interest in designing their own learning environments, and in return, explore the field of architecture and design as a potential academic pathway for the future.

### Evidence Based Research and Design

During the fall semester professors Jani, Hoke, and their students focused their research efforts on understanding international and national educational theories and pedagogies currently being employed in educating young minds. Using Evidence Based Design as a framework, students gathered data for their high school renovation project utilizing qualitative research methods including site visits, observations, photo and video documentation of various KCKPS schools in the Kansas City area and reviewing and analyzing conceptual as well as built precedents for new school design.





*IAPD and HHS Students working collaboratively to design furniture*



*IAPD and HHS students presenting their furniture design ideas together after the furniture design charrette*

presented their research findings to the HHS students. After this presentation Jani and Hoke conducted a furniture design charrette to give a taste of creative design process to KCKPS students. Collaboratively, each team developed a furniture or a product piece to facilitate the main conceptual idea for the archetype being developed by the IAPD students.

IAPD students led the entire design process for the HHS students, thus becoming mentors for the HHS students.

### Final Design Presentations

At the end of the semester, IAPD students presented their final renovation schemes. HHS students visited K-State to attend these final presentations and provided feedback. Throughout the semester, HHS students mirrored the IAPD students' design process. HHS students also presented their own versions of HHS redesigns to school and district leadership. This resulted in HHS students receiving university level academic experiences.

This engaged pedagogical model resulted in a five-year university-community partnership agreement between KCKPS and APDesign. Through this design project, HHS students gained the ability and confidence they needed to realize that they can have successful lives through attainment of higher education. IAPD students learned that design makes a

difference in people's lives. Designers have agency to change society, and help in eliminating racial, ethnic, or economic boundaries and create a just, and peaceful world. The faculty learned to develop a successful collaborative service-learning project and engaged scholarship. Jani's long-term goals are to:

- Publish and present the result of this engaged scholarship generated from this multi-disciplinary collaborative project at international, national and regional conferences; reputed journals;
- Share this Engaged Teaching and Research Model with other colleges of K-State and KCKPS schools so that any institution can adapt it in their respective curriculums to assist economically disadvantaged, diverse students;
- Assist KCKPS students to earn a Diploma+ Endorsement, by completing an internship;
- Incorporate design concepts into various aspects of KCKPS teacher instruction--to include both Career and Technical Education and Core Content courses;
- Expand the number of partnerships with KCKPS schools including elementary, middle, and high schools.

### Moving Beyond the Building Walls: Imagining the Future Neighborhood, Site, and School

The DLR Group-sponsored studios continued into a second semester with new goals and a new model of engaging the JC Harmon students and faculty. In Spring 2018, third year students in architecture and landscape architecture joined forces to learn about the JC Harmon school context in the Kansas City Argentine neighborhood and to design a hypothetical school and site master plan for future HHS students. Associate Professor of Architecture Michael Gibson (ARCH), and Assistant Professor Hyung Jin Kim and Associate Professor Katie Kingery-Page (both of Department of Landscape Architecture and Regional & Community Planning; LARCP), began the interdisciplinary, service learning effort by first learning from HHS faculty and KCKPS administrators. They decided to leverage HHS' innovative problems-based learning approach within the high school's Architecture, Construction, and Engineering Academy.

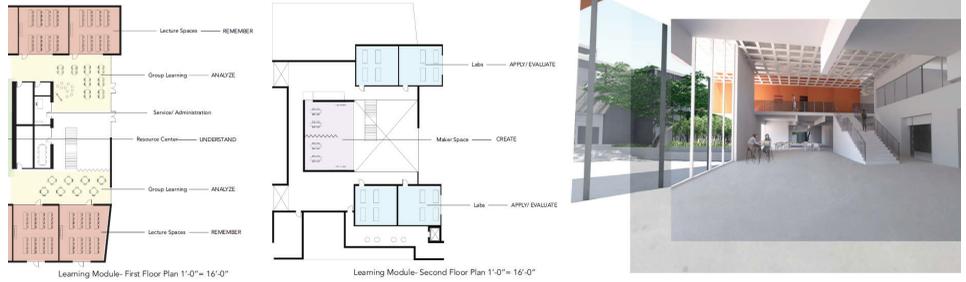
Currently, HHS faculty are commencing an innovative curricular program where authentic, problem-based, cross-curricular learning is the centerpiece of learning academies where faculty and students focus on a professional theme. In Spring 2018, the K-State faculty and staff orchestrated a series of events with HHS' Architecture, Construction, and Engineering (ACE) Academy and its approximately 100 students. These events, facilitated by the APDesign students, were designed to introduce the youth to design thinking and soft communication skills needed in the workplace, learn about their need during the school day, and engage them in long range, visionary thinking about their school site. Events with the HHS students culminated in a one-day visit to APDesign's new facility on the K-State campus to learn about professional degree programs at K-State, tour the APDesign facility, and gain a new understanding of where their ACE career paths might lead. Engagement with HHS 9th graders gave the K-State students a first-hand perspective of what it is like to be a teacher and student in the context of emerging models of learning.

Throughout the Spring 2018 semester, K-State student learning included frequent visits from DLR Group professionals, who served as valued critics of work in progress, notably visiting student at their desks and working with them throughout their design process. The DLR Group sponsorship underwrote student travel to the HHS site, brought Harmon students to K-State, and allowed the APDesign students to visit DLR Group's offices and built projects to learn firsthand about school facility design.

The Spring sponsorship brought thirty-



the school-centered neighborhood revitalization strategy. Using a neighborhood Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis, students synthesized Argentine neighborhood's strengths and weaknesses while identifying the opportunities and threats the neighborhood was facing. The SWOT analysis results helped in establishing each team's revitalization plan in relation to the area of influence of the new JC Harmon High School.



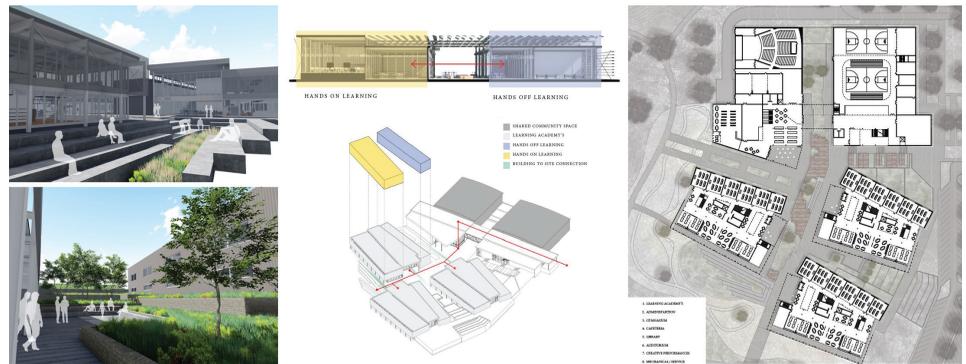
Throughout the first design exercises of the semester, each team proposed various and creative ways for planning the school-centered neighborhood revitalization such as, "Argentine green networks", "community core of well-being", "third place", "social health and community cohesion", "social rooms", "transportation connectivity and bikeability" and "social connectivity".

**Site Analysis and Preliminary Site Planning**

Based upon their neighborhood revitalization themes and plans, the ARCH and LARCP students moved into the phase of a focused site analysis and site planning, providing deeper insight into the site-focused context for their upcoming learning environment design phase. Linking to their neighborhood SWOT analysis results, the eleven mixed architecture-landscape architecture teams conducted a comprehensive analysis of the HHS school site and the surrounding area, including contours, parcel boundaries and land use, utilities and infrastructure, and vehicular and pedestrian circulation and access, tailored to each team's earlier neighborhood revitalization theme.

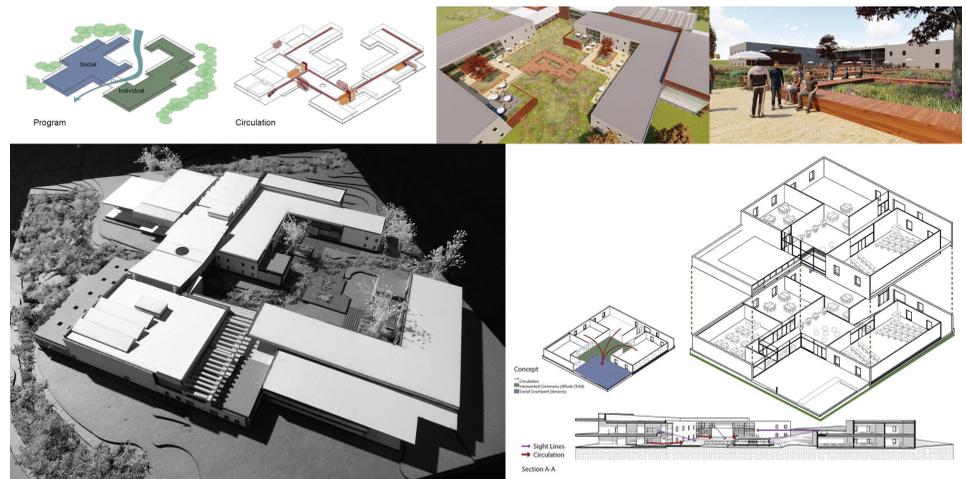


Overall site and school building proposal by Elsa Stoffel (LARCP) and Kayla Wood (ARCH), demonstrating integration across a broad range of scales



A learning environment design by Josh Barragree (LARCP) and James Jones (ARCH) integrating settings for hands-on, active learning and traditional classrooms, with common collaboration space that would serve four academies

Students and instructors also spent two days visiting the HHS school site and surrounding Argentine neighborhood for their site analysis. As the first step in preparing the site-focused design process, students observed, experienced, recorded and sketched the geographical, natural and topographical, infrastructural and architectural features of the site in multiscale from building to district. JC Harmon's faculty members also offered tours of the school building and site for students.



Overall school design and learning environment detail from Alyssa Gray (LARCP) and Christina Sanchez (ARCH), creating spatial gradients between social, sensory spaces and individual spaces considering individual wellness



*3rd year architecture and landscape architecture students visit a 21st century learning facility in Olathe, Kansas designed by DLR Group*

Also, students were asked to provide some experiential, eye-level images that best represent the potential relationships between the indoor-outdoor learning spaces on the site.

### **Design of a Learning Environment across Disciplines**

With a sense of the Argentine neighborhood and the site's opportunities and constraints in mind, the landscape architecture and architecture students recombined in smaller teams. They began a new way of working—peer-to-peer with another discipline—as they researched theories of learning, behavior and environment. After students completed the literature review on topics ranging from student-centered learning to attention restoration through time in nature, faculty asked each team to craft a vision for a place for learning. Each team designed an indoor-outdoor learning environment for one hundred students and their faculty. The size is

approximately a single grade cohort of one HHS academy. Design of the learning environment allowed K-State students to envision what a high school should afford those it serves, before wrestling with the full program for a school of 1400 pupils.

During the development of thinking about learning environments, the architecture and landscape architecture students returned to HHS to gather input from the students and share their design process.

### **Integrating School and Site Design: Bringing it Together**

By the middle of the spring 2018 semester, Gibson, Kim, and Kingery-Page's combined landscape architecture and architecture studio pivoted to tackling the problem of the whole school design and site: designing an integrated school and site master plan for 1400 future students. Individual students from both disciplines worked in pairs and three-person teams through this phase.

Conventional school programming would be driven by prescriptive spreadsheets and state planning guidelines, where attention to capacity competes with attention to the quality of spaces. For example, New Jersey's most recent high school planning guidelines use a 40% grossing factor for programming. With our program size, a school site in Fort Worth would have to come up with nearly 600 parking spaces. What happens to all of that extra space, and does capacity make for great schools?

The advice from our DLR collaborators on how to approach school planning was different: don't focus on spreadsheets and space lists, and let spatial programming come from the learning models that the students are designing. In their experience working with innovative schools, DLR found that traditional programming approaches needed to be 'scrapped' when the teaching model was different.

Thus, with a 220,000 square foot school and thirty-three acre site to design, student teams kept their learning environment research and designs in the foreground of their design effort, along with their recent first-hand experience with the JC Harmon 9th graders. Academies of 100-120 students served as the basic spatial unit for the larger designs, as opposed to individual classrooms found in conventional schools. Outdoor learning and social spaces, athletic fields, natural areas, an auditorium, two gymnasias, cafeteria, media center, and other common program completed the assemblage of spaces that were part of the design charge.

### **Advancing Interdisciplinary Teaching and Learning at APDesign**

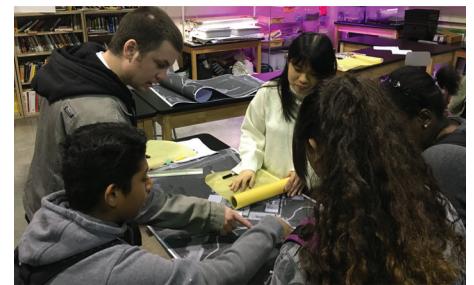
The combined architecture and landscape architecture studio led by Gibson, Kim and Kingery-Page continued a tradition of scholarly inquiry by APDesign faculty into best practices for organizing undergraduate, interdisciplinary design experiences. In the real world, design occurs across many



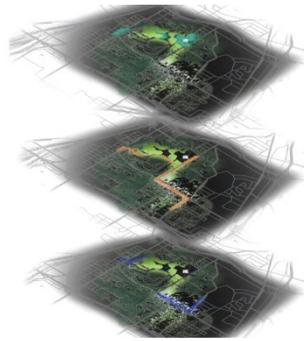
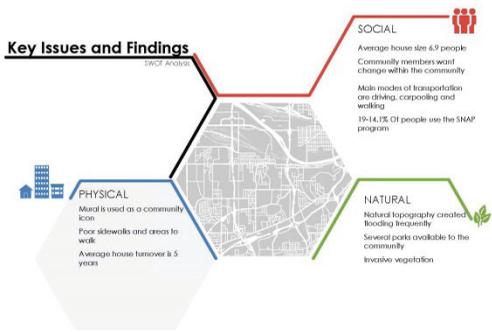
*A collaborative modeling exercise created by Eki Shoo (LARCP), Si Chen (LARCP), and Rebekka Poole (ARCH) to use with HHS students*



*Madison Quincke (LARCP) and Stasha Thomas (ARCH) discuss learning environment ideas with HHS freshmen*



*Scott Randall and Eki Shoo (LARCP) help HHS freshmen imagine a new wetland area on the school grounds*



- PHASE 1 ENHANCE**  
Ensure safety, provide programming and amenities, improve ecologies.
- PHASE 2 CONNECT**  
Create trails to connect parks, green streets, signage, way-finding.
- PHASE 3 EXPAND**  
Adding spaces needed throughout the community within abandoned or under utilized areas.

A neighborhood revitalization plan example ("Argentine green networks") (by LARCP and ARCH students Kayla Wood (A), Elsa Stoffel (L), Scott Randall (L) and Kat Gutman (A))

**Green networks in ARGENTINE**

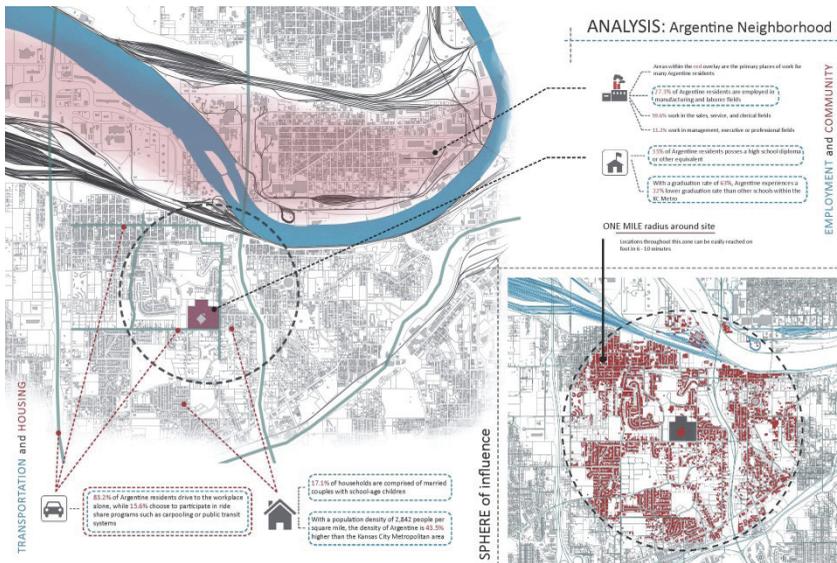
A system of corridors or greenways that enable movement through human settlements.

**WHY green networks?**

To create a more livable environment and spark growth and learning within the community.

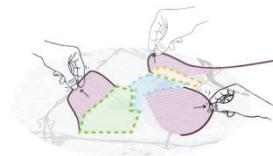


<http://eeexplorer.jeece.org/document/574632/>  
<https://www.asio.org/greeninfrastructure.aspx>

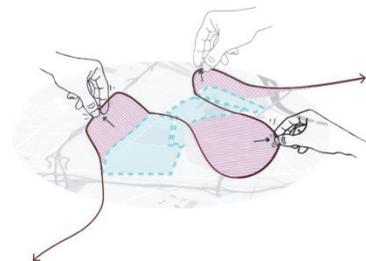


A neighborhood analysis example by LARCP and ARCH students Caleb Parker (L), Colin Esworthy (A), Josh Barragree (L), James Jones (A), and Logan Baker (L)

A neighborhood revitalization concept example by ARCH and LARCP students Rebekka Pole (A), Si Chen (L), Eki Zhong, and Marcos Aleman (L)



Concept: Social Rooms



affiliated and complementary disciplines, making the ability to collaborate a valuable preparation for future design professionals.

In the push to develop their schemes, the ARCH and LARCP students could draw upon disciplinary strengths to solve technical problems such as parking lot design, grading, building structure, and egress. But more often than not, student teams kept their design efforts integrated, sharing information and insight to make decisions. The result was more than just passive coordination between the disciplines. Teams carried forward their common vision from earlier research and design work, and used it to strengthen meaning and intent in their designs. Site and building circulation worked as one system. Exterior connections and views between building and landscape were important

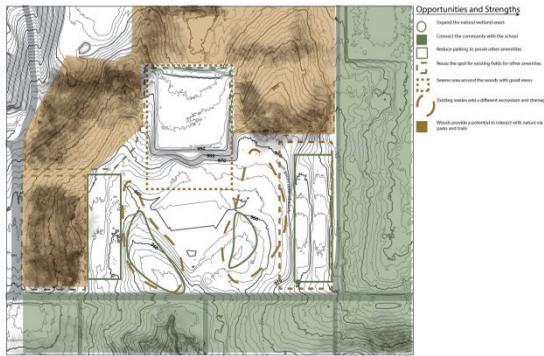
parts of schemes, and not afterthoughts. While the studio faculty expected some individualization in the designs as details and decision-making progressed towards the end, most schemes read as wholes that were more than the sum of their parts.

Inspired by sharing the process with DLR Group and the HHS Architecture, Construction, and Engineering Academy, the studio's work envisioned how a future JC Harmon High School could reflect the learning and teaching models – the learning academy – that is already transforming HHS. The DLR Group sponsorship fostered engagement with the youth of JC Harmon High School, thereby building the next generation of potential designers by harnessing the talent and energy of current K-State students.

**Engagement with KCKPS students continues**

In the spring of 2018, Associate Professor Jani worked with KCKPS administration to develop a professional development experience for KCKPS teachers, and presented a workshop titled: "Introducing Design Thinking Process in K-12 Education." Summer 2018, Associate Professor Kingery-Page led a one-day career exploration session for middle-school youth attending STEM camp at Kansas City, Kansas Community College.

**OPPORTUNITIES AND STRENGTHS**

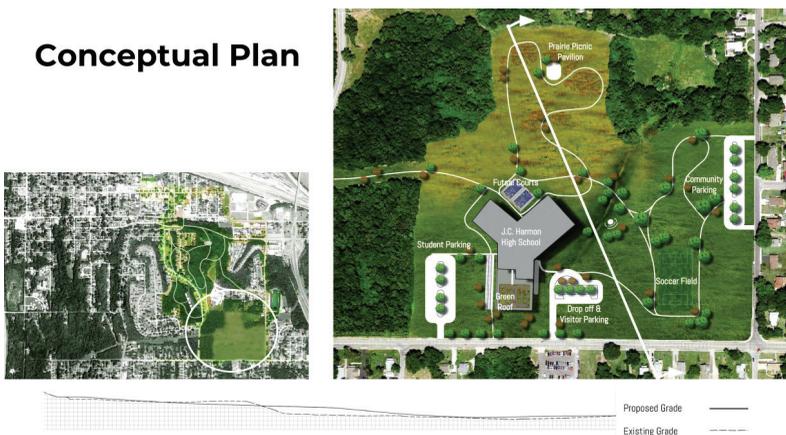


**THREATS AND WEAKNESSES**



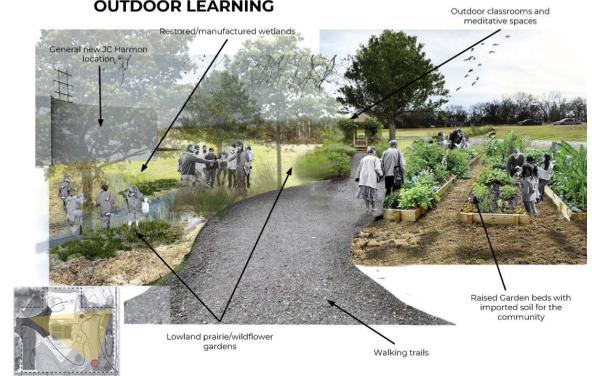
*A site analysis example by Allyssa Gray (LARCP), Dani Hodgson (LARCP), Christina Sanchez (ARCH) and Stasha Thomas (ARCH)*

**Conceptual Plan**



*A preliminary site plan with an accompanying neighborhood revitalization plan by Ahmed Akacha (ARCH), Harrison Dirks (LARCP), Bridget Hake (LARCP), Grace Mader (LARCP) and Ryan Walker (ARCH)*

**VIEW OF COMMUNITY GARDEN AND OUTDOOR LEARNING**



*An experiential image from the preliminary site plan by Allyssa Gray (LARCP), Dani Hodgson (LARCP), Christina Sanchez (ARCH) and Stasha Thomas (ARCH)*

# IAPD Students Fabricate Furniture Success

Professors and Students bring national recognition to APDesign

Neal Hubbell

Navigating the furniture market place is a challenge for seasoned designers and the companies they represent. Brands strive to be the most innovative with their designs and to create pieces that are sustainable, beautiful, comfortable and fill the needs of the consumer. Although many businesses look to experienced designers for the creation of these products, one company has found success in starting at the beginning.

For the past four years Associate Professor Neal Hubbell has taught a contract furniture class that works in concert with professionals in furniture design and OFS, an international furniture manufacturer based in Huntingburg, IN. Each year, OFS provides four furniture briefs to four student design teams. These briefs are always different and can be anything from tables, to seating, to screens and accessories.

Unlike most courses in the academy, projects are real world and are formed from a need in the market. With unique challenges frequently presented to companies from an evolving consumer, students in the Interior Architecture and Product Design program offer an innovative viewpoint to OFS.

"We continue to be impressed by the expert research and design process and raw creativity that the IAPD students and faculty bring into each new year of collaboration," said Doug Shapiro regional vice president of OFS.

The exercise of turning project briefs into designs continues throughout the school year. The fall semester focuses on market research and the teams' development of a strong narrative for how their design meets a need in the saturated market place. By spring semester, the design teams turn these narratives into fully functioning products.

This process pushes students to weld budding talents in research, storytelling, market analytics and furniture design. Expectations for the students are high, but they are led by a team of experienced designers. Professor Hubbell has brought top professionals from the



design community into the process to act as advisors for students, including alums Adam Stover (2002), Populous, Amie Keener (2001), Gensler, Erin Hurd (2013), Helix, and Thomas Jones (2012), Populous.

OFS also plays an essential role in the development of these products. With continued support from experts including Doug Shapiro, Nick Blessinger, vice president of marketing, and John Phillips, vice president of design development at OFS, students are guided in the execution of their design projects. The class meets with these industry leaders several times a semester helping them test out their growing knowledge of their brief.

Although industry experts assist in helping students perfect their designs, the curriculum of product, furniture and interior architecture design have fostered their unique creativity at all scales. Their advanced skills in furniture design also becomes an essential element in the completion of projects.

"Without the foundation of their previous furniture design workshop courses, the outstanding legacy of furniture design in the department and the well-equipped workshop facilities, this course would be nearly impossible to offer," said Hubbell.

The college fully realized the potential of the course when OFS chose to put into production two of the designs from the 2016/2017 class. The team of Garrett Steinlage and Chelsea Flickinger had their "Roo" suite of occasional tables and Christopher Garcia and Kat Arndt had their "Lotiv" pull-up computer table design selected for manufacture. Both designs were introduced at the 2018 NeoCon tradeshow in Chicago and both went on to win top design awards. The Lotiv won an Interior Design Magazine's HiP Award which honors commercial industry pioneers and achievement in product applications and the Roo table collection won a Silver Award by the Best of NeoCon presented by Contract Magazine.

The success of these student projects at the 2018 NeoCon tradeshow was a significant moment for the students and university.

"This is an unprecedented achievement. There are professional designers who work their entire careers who never receive one of these awards," said Hubbell. "We hope that these will be only just the beginning of a long continuing number of successes."

# Planning Professor Opens Up Transit Data with CATPAD

For anyone who has ever ridden public transportation, LARCP Assistant Professor Gregory Newmark has your back.

Dr. Newmark comes to K-State from Chicago where he worked for the Regional Transportation Authority (RTA) – the second largest transit system in the United States. In his role at the RTA, Dr. Newmark worked extensively with transit passenger survey data and was amazed at the difficulty of getting access to this information – even from within the agency that conducted the survey.

Transit agencies across the nation spend millions of dollars a year surveying their passengers, but rarely make that data available. As a result, the public investment in learning about transit riders is not yielding its full benefit to society. This data is essential for improving services and for ensuring that environmental justice requirements are being met. Now at K-State in the Regional and Community Planning program, Dr. Newmark is working to change that through the creation of a Central Archive for Transit Passenger Data or CATPAD.

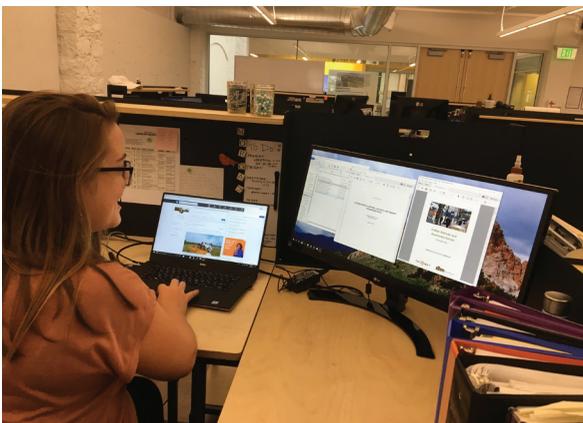
CATPAD is a cloud-hosted, publicly accessible database of transit survey instruments, reports, data, and supporting information. The resource is the first of its kind to compile and share the passenger data collected across the nation's public transportation systems. CATPAD, as its name suggests, is meant to be an archive to preserve the survey efforts and make them widely available to planners, consultants, researchers, and community advocates.

CATPAD was a long-time dream of Dr. Newmark. The proof-of-concept phase was conducted in partnership

with Prof. Hilary Nixon at San Jose State University with support from the Mineta Transportation Institute (MTI). This phase saw the review of other transportation databases and the development of the CATPAD architecture. MTI continues to be a project partner and hosts CATPAD. With support of a K-State University Small Research Grant (USRG), Dr. Newmark is currently populating CATPAD with the data from the fifty busiest transit agencies in the United States. This effort is centered at K-State and has benefited by the employment of LARCP post-baccalaureate students Morgan Dunay, Rial Carver, and Emma-Quin Smith.

The involvement of LARCP students has been essential for turning CATPAD from an idea to a resource. "I am so grateful for the USRG support that allows me to engage such talented students. Their efforts, diligence, and creativity have immeasurably advanced this project. They have transformed CATPAD from a plan to a reality," writes Dr. Newmark. CATPAD epitomizes the APDesign approach of seeking research leadership while engaging the next generation of practitioners.

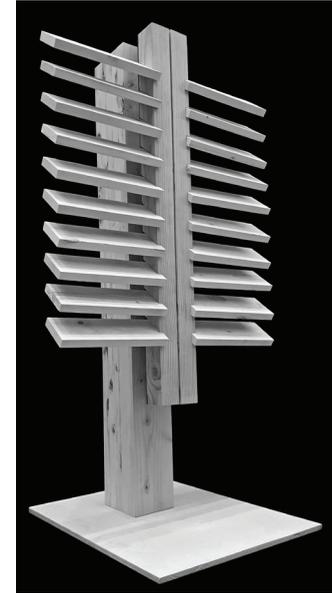
Dr. Newmark is in the process of analyzing the data within CATPAD to publish a paper on emerging trends on transit surveying. The next stage of the project will see a focus on incorporating more raw data sets and, ideally, indexing them together for cross-system research. Through these efforts, Dr. Newmark is trying to make Kansas the center of transit passenger research.



# Investigating Architectural Tectonics

Exploring the relationship between design and construction

Chad Schwartz



Tectonic anatomy diagram of Nest We Grow, Kengo Kuma and Associates with the College of Environmental Design at UC Berkeley  
Drawing by Eddie Garcia

In the Fall semester of 2017, Chad Schwartz, Assistant Professor in the Department of Architecture, taught a writing intensive seminar in which students worked to develop a better understanding of architectural tectonics. Architectural tectonics is often described as the “poetics of construction,” but over the past century and a half tectonics has evolved to adapt to changing technologies and cultural attitudes. Through this lineage of adaptation, tectonic theory has become integrative, examining the interwoven relationship between space, function, structure, context, symbolism, representation, and construction.

In this course, each student selected an architectural precedent, which he or she then analyzed using a framework developed by Professor Schwartz in his book *Introducing Architectural Tectonics: Exploring the Intersection of Design and Construction*. This framework provided the students a fundamental grounding of the theory of tectonics, dividing the complex set of ideas into the following categories:

**ANATOMY** | *the study of the primary components and systems of a building inspired by Gottfried Semper’s proposal for four elements of architecture.*

**CONSTRUCTION** | *the study of the means and methods of construction as well as the materiality of the built environment*

**DETAIL + INTERSECTION** | *the study of the joints and other critical conditions that make up the smallest scale of the built environment*

**PLACE** | *the study of the impact of a specific place or context on the tectonic makeup of a building*

**REPRESENTATION + ORNAMENTATION** | *the study of the relationship between the actual construction of the building that is required for stability or enclosure and the cladding or ornamentation that is used to create the aesthetic scheme*

**SPACE** | *the study of the relationship between the creation of space and the construction and representational qualities of a building*

**ATECTONIC** | *the study of conditions that run contrary to typical tectonic ideas*

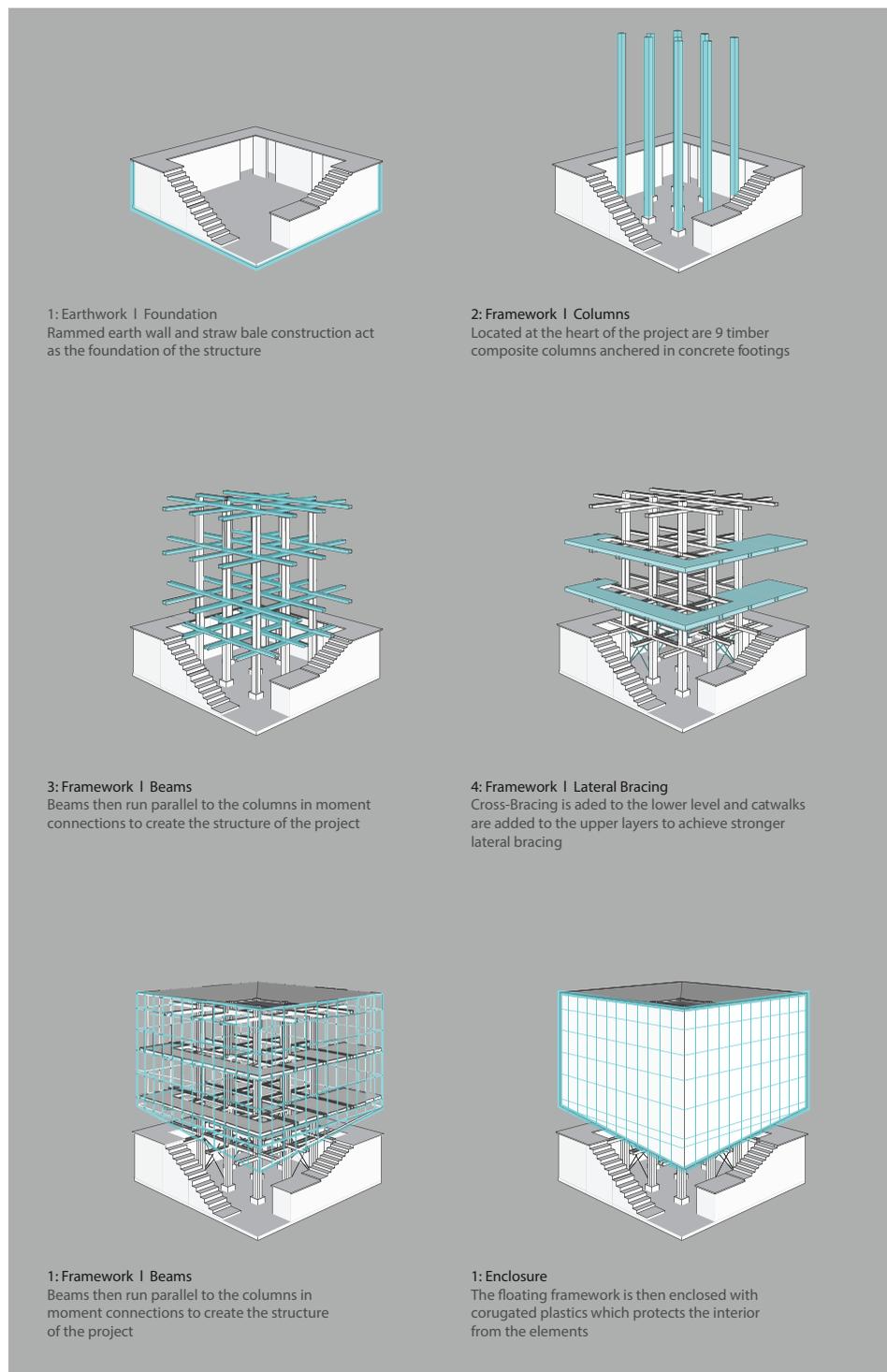
The students’ examination of the precedents paralleled the case study process Professor Schwartz undertook in his book. The students began by writing an architect brief and a project brief, concisely outlining these two components for the reader in about 700 words. Paired with this initial summary were plan and section drawings of the project, which were required to be drawn by the students. Following this initial submission, each student analyzed his or her precedent using three of the categories from the tectonic framework above. For each point of analysis, the students were required to develop a written component of 300 to 400 words, self-generated diagrams and other analytical drawings to graphically supplement the text, and found photographs of the project highlighting its tectonic impression. All components of the precedent analysis were required to be founded on research; as such, the students were required to have cited material laced throughout the analysis, taken specifically from readings on architectural tectonics studied from the beginning of the semester.

The course methodology was centered on iteration and active participation. When the students submitted their first section

of the semester, the work was critiqued by the class during in-class presentations and heavily redlined by Professor Schwartz. Each subsequent submittal of a new section repeated this process, but also required a resubmittal of all previous sections, reworked to address the critique received. As such, each section, including the text and graphic components, evolved significantly throughout the semester. Although the students were not required to write an extensive amount of words or do an extensive number of drawings, by the end of the semester each word in the text and each line in the drawings had been painstakingly and carefully selected, the ideas had been continually reworked and clearly tied to the research and process of analysis.

The students generated two final submissions for the course. First, the class was required to compile their semester's research efforts into a finished book. Each student was responsible for his or her chapter and another task in the formation of the book: cover design, layout, image citations, afterward, table of contents and other front matter, etc. The process of creating the final book, entitled *Form and Force: An Exploration of Tectonics*, provided the students with insight into the components of a professionally written book and the effort required to organize such a document.

After submitting their book, each member of the class was asked to create a built piece inspired by the tectonic analysis of his or her precedent. The nature of the construction was flexible. It could have been conceived of as a full-scale detail of a component of the precedent examining and demonstrating how it was built, an analytic model demonstrating principles at work in the project, or an abstract composition inspired by the tectonic makeup of the precedent. Regardless, however, the students were required to demonstrate one or more of the tectonic principles at work in the precedent through a built medium. The working process required the students to do design and technical drawings as well testing ideas in the selected medium. In addition to the final built piece, the students were required to pin-up a single 11x17 sheet that described the relationship between the construction and the precedent. This project concluded the semester,



providing a critical, culminating point for the tectonic investigation. Architectural tectonics, as the students found, involves the relationship between the quality of a space and the construction required to make it a reality. It was only fitting that their semester concluded with a hands-on exploration of the construction of their research.

Moment connection diagram of Nest We Grow, Kengo Kuma and Associates with the College of Environmental Design at UC Berkeley  
Drawing by Eddie Garcia

# Spring 2019 Ekdahl Lecture Series

\*all lectures will take place in Regnier Forum at 4:30pm on their respective dates



February 1, 2019

**Caitlin Taylor**

RA | Design Director

As an architect with a background in organic agriculture, Caitlin brings to the firm MASS, an interdisciplinary focus on food justice, agriculture, and food systems. She is currently working on projects based in Boston, Hartford, and the Hudson Valley Design Lab. Prior to joining MASS, Caitlin directed an independent practice focused on water infrastructure. In this capacity, she was recipient of the Holcim Foundation for Sustainable Construction Gold Prize for her work on urban flood control in Las Vegas.



February 18, 2019

**David A Rubin**

PLA, ASLA, FAAR | Principal

David is the founding principal of David Rubin Land Collective and is recipient of the 2011-2012 Garden Club of America Rome Prize in Landscape Architecture from the American Academy in Rome. His visionary contribution to the field in "empathy-driven design" is a hallmark of the studio, earning increasing renown for fusing issues of social justice in cities with excellence in the design of public spaces. His work has received awards and honors from the American Society of Landscape Architects and the American Institute of Architects. David is also Design Critic at Harvard University School of Design.



February 6, 2019

**John Stram**

L/IDSA | Industrial Design  
Consultant

John Stram has 46 years of professional award winning design experience. He served as industrial design/graphics manager at IBM, was director of design division at Seal Furniture and Systems and was manager of design—permaenat fixtures & temporary displays for American Greetings Corporation. His work has been displayed in collections at New York's Museum of Modern Art (MOMA), the Smithsonian Institution in Washington D.C., and the Museum of Contemporary Crafts in New York.



March 4, 2019

**Joyce Coffee**

LEED AP |  
Founder & President of CRC

Joyce is an accomplished organizational strategist and visionary leader with over 25 years of domestic and international experience in the corporate, government and non-profit sectors implementing resilience and sustainability strategies, management systems, performance measurement, partnerships, benchmarking and reporting. She is the Founder and President of Climate Resilience Consulting.

*Victor L. Regnier Distinguished International Lecture*

February 13, 2019

**Jeremy Smith** | B Arch (Hons First Class), BBSc VUW, B.Sc, ANZIA, Registered Architect



In his role as Design Director at Irving Smith, Jeremy has led a range of ISA's design innovations, including winning World Villa of the Year in 2017, and the design competition winning and subsequent New Zealand Architecture Award winning NMIT Arts & Media, and Whakatane Library and Exhibition Centre buildings.

Jeremy has widely lectured about the practice's work, teaches an iterative design studio to Masters students and has been both an internal and external Masters examiner at Auckland University. He was a judge for the World Architecture Festival in Singapore 2014 and judged again in Berlin 2017.

# APDesign Green Roofs Grow Grants and Scholarships

## Blackmore earns fellowship

Thom Jackson

Pam Blackmore was awarded the 2018 Garden Club of America Board of Associates Centennial Pollinator Fellowship for her project "Butterflies, Tallgrass Prairie, and Green Roofs." This fellowship, co-sponsored by the Pollinator Partnership, provides funding to study the causes of pollinator decline that could lead to potential solutions for their conservation and sustainability.



The \$4,000 fellowship will assist Blackmore in studying the butterfly communities of two K-State green roofs planted with native vegetation: the Memorial Stadium green roofs. She is evaluating the effectiveness of these green roofs to provide pollinator habitat in an urban context by comparing butterfly communities of the green roofs to urban native prairie at Warner Park and protected tallgrass sites at the Konza Prairie Biological Station.

Blackmore, a native of Alberta, Canada, is a second-year landscape architecture graduate student in the Department of Landscape Architecture and Regional & Community Planning. She obtained a Bachelor of Landscape Architecture in 2013 from Utah State University.

This award typically goes to students in science disciplines such as evolutionary biology, entomology, ecology, and zoology.

Blackmore is the first landscape architecture student to receive this award.

"Receiving this fellowship means a lot to me because it shows the jury valued the research I'm conducting, even though I'm a landscape architecture student," Blackmore said. "I have an incredible team helping me, not only from my department, but also a wildlife biologist, botanist and many others from the K-State Division of Biology. I credit my phenomenal support team for receiving this award."

Lee Skabelund, Department of Landscape Architecture and Regional & Community Planning, and Dave Haukos and Jeff Taylor, Division of Biology, are serving on Blackmore's committee for her master's thesis research. Blackmore began her study last May and continued all summer until after the Monarch migration came through Manhattan. She is using the funds to pay research assistants who helped her in the field this summer.



### Game details:

K-State vs. Texas Tech  
Saturday, November 17th 2018  
Kickoff time: TBA

Bill Snyder Family Stadium  
Manhattan, Kansas

### Party details:

**location: The Ekdahl  
(Regnier Hall, 3rd Floor)**

**\*\*party begins two hours prior to kick-off\*\***

**Please RSVP to**  
Thom Jackson, 785-532-1090 or  
t j a c k s o n @ k s u . e d u



# Weigel Library

Maxine Ganske

Best kept secret in APDesign...until now!

Do you know the Paul Weigel Library of Architecture, Planning and Design has its own Special Collections as part of the library's outstanding resources? If you didn't, you certainly aren't alone!

Professor Paul Weigel, for whom the library is named, was responsible for both the library and the Special Collections. During his time as head of the Department of Architecture and Allied Arts he acquired many volumes of immeasurable value for the architecture library here at Kansas State.

While Weigel was a practicing architect in New York City, he became acquainted with the Head of the Acquisitions Department of the New York Public Library, a Mr. Wang.

Following World War I several wealthy families were forced for economic reasons to dispose of their private libraries. J. P. Morgan purchased some of these collections and then gave many of the volumes to the New York Public Library.

When there were duplicate copies of these outstanding and comparatively rare architectural volumes Wang made them available to Weigel for purchase at substantially reduced prices. These volumes contained illustrations of period decorative motifs, detailed sketches, and photos of design and structural features of French and English cathedrals, opera houses, and city halls. By the late 1920's Kansas State's architecture library because of this collection had gained the reputation as one of the best west of the Mississippi.

In the former third floor library location, Seaton 323, very few patrons were aware of that rare book collection being housed in the small, enclosed, dimly lit room at the rear of the library, "climate controlled" only by a window air conditioner and fans.

But now as they say "the cat is out of the bag!"; or "it's out from under wraps!"; or "the beans have been spilled!"; or "the secret is out!"

The Paul Weigel Library Special Collections has been recently moved to and situated in the William A. Stoskopf Special Collections room, Regnier 0081D, in the new Weigel Library! Now located at the front of the library, the Special Collections room with its floor to ceiling glass partition allows these exceptional materials to be visible when the library is open. This spacious, well-lit facility has ample shelving allowing the books to be attractively displayed and easily accessible. The room is complete with a table, chairs and computer for patrons' convenience.

These materials are valuable and many are fragile and irreplaceable. For these reasons they must be used in the Stoskopf Special Collections Room in the library with gloves, handled with care and cannot be checked out. Patrons interested in viewing materials can request access from Weigel staff during library hours of operation.



Weigel's collection of about 1150+ titles encompass a wide range of subject matter and materials pertaining to all four disciplines within the College of APDesign. A folio volume of 164-pages presents Daniel Burnham's *Plan of Chicago prepared under the direction of the Commercial Club during the years MCMVI, MCMVII, and MCMVIII* (1909).

Of interest to the Interior Architecture and Product Design patrons will be *Historic wall-papers: from their inception to the introduction of machinery* by Nancy McClelland (1924) that covers the first block-printed French papers to the early 19th century as well as Chinese wallpaper.

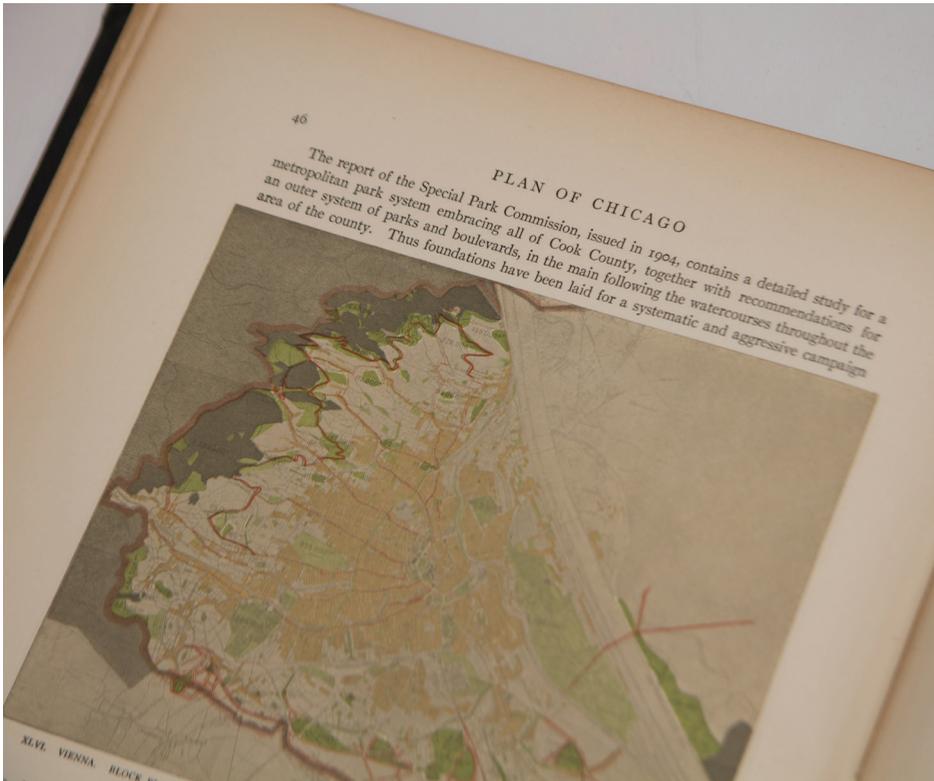
An example of unique landscape architecture resources in this collection would be the two volume set, *Gardens of Colony and State*, widely considered to be the best reference on garden-making in the early Republic. These books take you on a stroll through America's most exquisite gardens at that time, many of which have long vanished

For the architect or historian, the collection includes periodicals dating from the 1870s; large illustrated folios published in the 19th and early 20th centuries on prehistoric, Egyptian and Asian structures, Classical architecture, the European Renaissance, later European and American residential styles, and extensive collections of European folios from the Beaux Arts period; as well as complete archive collections of the modern masters - Aalto, Kahn, Le Corbusier, Mies and Wright.

Prized titles of the Weigel Library Special Collection include the 1581 edition of *I quattro libri dell'architettura di Andrea Palladio*, (*The Four Books of Architecture by Andrea Palladio*) and four volumes of Piranesi's engravings - *Diversi maniere d'adornare I cammini ed ogni altra parte degli edifizj desunte dall'architettura Egizia, Etrusca, e Greca* (1769) and *Roman architecture, sculpture and ornament; selected examples from Piranesi's monumental work first published in Rome* (1900), a volume of 200 plates reproduced from his 1756 originals.

Plans are now being developed for a "Special of the Week" display inside the room behind the glass wall to highlight a different title and show off its contents to encourage patrons to explore and utilize these resources. The "Special" will begin Fall 2018 academic year.

The students and faculty of APDesign are extremely fortunate to have these valuable volumes rich in content and exquisite illustrations at their fingertips; front and center in their library. Thanks to Paul Weigel and to William Stoskopf!



The Plan of Chicago of 1909, more familiarly known as the Burnham Plan—after its principal author, architect and city planner Daniel H. Burnham—is one of the most noted documents in the history of city planning.

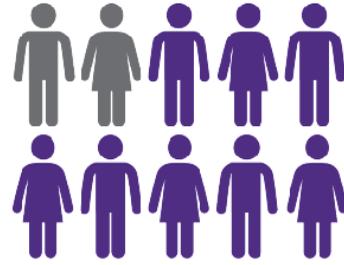






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approx. **2** out of every **10** students receive scholarship awards every year

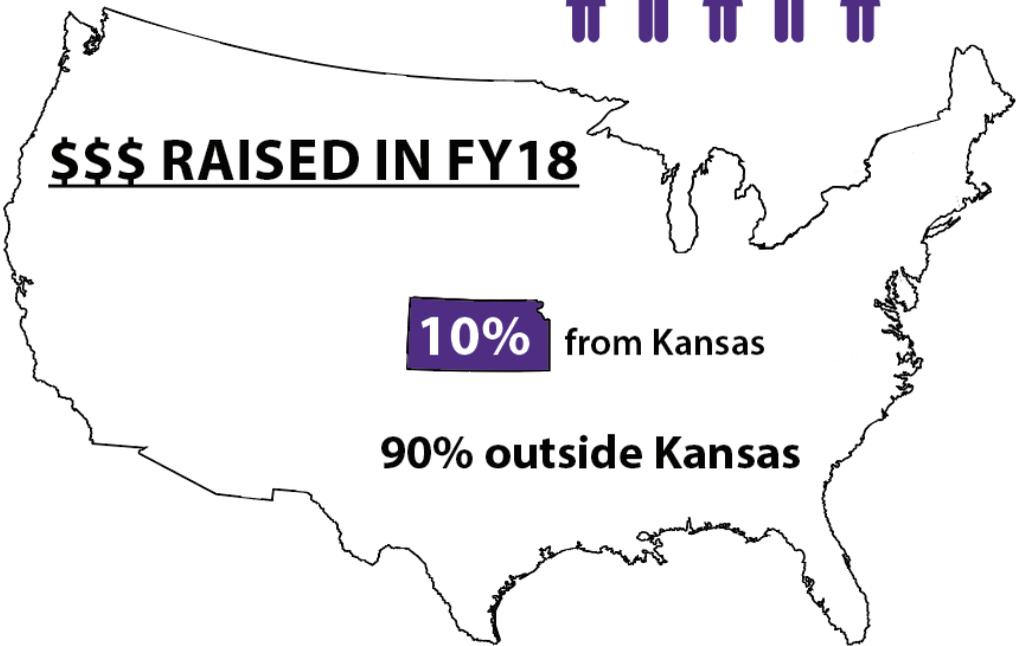


### Impact of Philanthropy

**\$2.6M**  
in FY18

FY14-FY18 \$\$\$  
54% came from Kansas  
46% outside state

APDesign's Development team traveled to 14 states and 26 cities in FY18



**\$34.9M**  
raised towards Innovation & Inspiration Campaign goal of \$44M

**11**  
number of new scholarships created

**\$270,600**  
scholarship dollars awarded in 17-18 academic year



On behalf of the KSU Foundation's College of Architecture, Planning & Design's development team, THANK YOU! Your philanthropic support has a lasting impact on the college's programs, students, faculty and staff who are committed to APDesign's vision of a nationally recognized design + planning college. Through your gifts and commitments, we are boldly advancing K-State Family!

For more information, please contact:



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# GET INVOLVED IN APDPRO

Looking for another way to connect with APDesign and our students? Consider engaging with APDPro, the professional development program for APDesign students. The program just finished its 5th and most successful year yet. Students attended events and workshops on professional communication, portfolio basics, interviewing and more.

## During the 2017-2018 academic year:

- Inaugural class of graduates became certified in APDPro
- Nearly 500 APDesign students participated in the program

## Ways to Get Involved

- **APDPro Workshop** Help influence the career readiness of your future employees by presenting a workshop or seminar to APDPro students. We welcome topics such as professional communication, transition to career life, navigating the job market, interviewing or networking skills and many more.
- **APDPro Mentor Program** Help APDesign students learn from your experience by becoming an APDPro Mentor. We'll match you with a 3rd, 4th or 5th year student looking for advice and guidance from an experienced professional. We only ask that you stay in contact at least once a month. Our program is now on WildcatLink, a web-based mentoring and networking platform, to make it easy for you to connect with your mentee, as well as other K-State alumni and friends.
- **Portfolio/Resume Critiques** Provide feedback face-to-face on students' portfolios and resumes to assist them in their preparation for Mock Interviews, Design Expo or finding an internship or job.

Congratulations to the first-ever APDesign students to receive certification in APDPro! Be on the lookout for this certification from your future job applicants.

Ashley Brunton, Master of Architecture, from North Mankato, Minnesota

Caroline Finck, Master of Landscape Architecture, from Mexico, Missouri

Margaret Brennan, Master of Architecture, from St. Louis, Missouri



Please contact Danna Voegeli, APDPro Coordinator at [apdpro@ksu.edu](mailto:apdpro@ksu.edu) to be involved in APDPro.

You can also visit [apdesign.k-state.edu/current-students/apdpro](http://apdesign.k-state.edu/current-students/apdpro) for more information.

# YOUR FUTURE

## Help Recruit Students to APDesign

*Susan Lannou is the personal contact for students interested in pursuing one of our design or planning degrees. Please feel free to share her contact information. Also if you are preparing to give a presentation about your profession, please let us know. We are happy to provide information about APDesign.*

Susan Lannou  
Director of Student Recruitment    785-532-1994    [myapd@k-state.edu](mailto:myapd@k-state.edu)





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