

Robert J. Kobet, AIA, LEED Faculty (ret) President, The Kobet Collaborative

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Green School Experience Overview

For over forty years I have enjoyed working internationally in eleven countries on five continents in the fields of sustainable design and development, high performance green buildings, LEED consulting and environmental education. I have had a thirty-year parallel career as a college professor specializing in architecture as pedagogy, greening curricula, and the relationship of K12 and institutions of higher learning. This work is based on the relationship of school communities, facilities and curriculum, using the tenants of sustainability and the insight I have gained working around the world as a compass for teaching students to become responsible global citizens. The synergisms between my professional practice and role as an educator are manifest in the creation of new sustainability initiatives in higher education, my decades of green school related contributions to the US Green Building Council, participation in several programs based on the relationship of higher education to K12, ongoing participation as a visiting lecturer, and continued authorship and contribution to green education articles and blogs, community service as a volunteer jurist and judge in green school competitions. These activities are best illustrated in the following:

- Served as Chair of the US Green Building Council's Leadership in Energy and Environmental Design LEED (USGBC LEED) Green School Committee for its entire six-year existence. This volunteer activity involved coordinating the work of other green school experts and interested stakeholders around the country which provided the basis for the current USGBC Center for Green Schools.
- Co-founded the first Master of Science in Sustainable Systems (MS3) program at Slippery Rock University. My involvement began in 1981 and ended in 1995 when I accepted an Adjunct Faculty position in the Carnegie Mellon University School of Architecture. My involvement at SRU included serving as project architect for the Robert A. Macoskey Center for Sustainable Research and Education which is my MS3 Master's thesis. I also co-authored the curriculum for the Built

Environment track, which received the first Three Rivers Award for Environmental Education. Between 1990 and 1995 I taught all of the built environment courses wherein I developed the approach to architecture as pedagogy used in the permaculture and general sustainability tracks. Most recently I participated in the SRU/EPA *Healthy Schools, Healthy Planet summer camp* held in June, 2017.

- In addition to my position at SRU my appointments as a college professor include Associate Professor of Architecture and Engineering at Penn State Fayette Campus, where I taught a full complement of architectural technology courses, and Adjunct Professor in Carnegie Mellon University's School of Architecture, where I taught Fourth Year studios dedicated to high performance buildings and sustainable design. While at CMU I authored and taught an elective on International Viewpoints on Sustainability which was offered to undergraduate and graduate students campus wide.
- Served as a green school consultant to the State of Ohio. Services included reviewing and rewriting the Ohio School Facilities Commission (OFSC) design guidelines to align with LEED for Schools requirements, offering green school stakeholder workshops state wide, and providing ongoing consulting and resource development support to architectural and engineering firms responding to Ohio school project Requests for Proposals. I have since joined the Advisory Board of ALI, a not for profit organization headquartered in Cincinnati dedicated to green schools based on the community/facility/curriculum construct.
- Consulted to the Technologico de Monterrey (TEC) Queretaro and Saltillo campuses on greening their architecture and engineering curricula. TEC is the largest University system in Mexico. My responsibilities included organizing, facilitating and teaching in two international student exchanges to study issues of sustainability and green communities. One brought TEC students to Miami where they met and worked with students at the University of Miami. The other was in Pittsburgh, PA where we worked out of CMU on green building projects. In each case over four days the student activities included guest lecturers, networking with other students, and visiting local green buildings, Fallingwater, and other iconic architecture.
- Much of my work has been in support of partnerships between K12 schools and institutions of higher learning. Most notable is Pine Jog Elementary, a K5 school in the School District of Palm Beach County, and the Pine Jog Environmental Education Center, which is owned and operated by Florida Atlantic University. My initial involvement was as the LEED and green building consultant to each project which were developed together as adjacent facilities. Each attained LEED Gold certification. The seamless integration of the projects enables each institution to benefit from sharing facilities, joint stewardship of the Pine Jog Nature Preserve upon which the facilities are located, optimal development of environmental themes across the curriculum, and the opportunity for FAU students to intern in a

green school. The partnership has precipitated the highly successful Green School Recognition Program sponsored and administered by FAU out of the Pine Jog Environmental Education Center. It is based on a yearly invitation to Florida Schools to submit their school for recognition using a well-developed rubric and submittal process. Scores of schools participate annually, and the program continues to grow. I have served as a resource for this process and judge of submissions from circa 2008.

- I have used my expertise in allergy free nontoxic design and human ecology as a design determinant to raise the awareness of causal agents of environmental illness in schools. This interest is evidenced by my contributions to the LEED for Schools Reference Manual Interior Environmental Quality Section, countless lectures and conference sessions on the topic, my articles, blogs and my ongoing association with numerous organizations and other individuals who advocate for healthy schools.
- Many of my architectural projects I have designed or contributed to as a green school consultant are based on promoting architecture as pedagogy supporting K12 activities and higher education purposes. Each anticipated hosting field trips and tours, professional development workshops, and the promotion of green curricula. Among these are the Macoskey Center for Sustainable Education and Research, Pine Jog Elementary and Pine Jog Environmental Education Center and scores of other LEED certified K12 and higher education projects, the Ann Jones Gerace Building (formally CCI Center), Pittsburgh Glassworks, The Pittsburgh Children's Museum, three Carnegie Library Projects, The Technologico de Monterrey and community school development in the Central European Linkages projects and the Micro Energy Building K1 school in Beijing, China.

High Performance Green School Experience

Chair, USGBC LEED for Schools Committee

This six-year effort formed the foundation for the USGBC's highly successful Center for Green Schools

Primary Author, ID Credit 3 - The School as a Teaching Tool

Primary Author, IEQ Credit 10 - Mold Prevention

USGBC LEED Faculty

One of eleven original faculty members in 2000. Named to Master Faculty at the 2010 Faculty retreat. Authorized to offer LEED workshops, including *LEED for Schools*, internationally and teach other LEED Faculty in other countries.

USGBC authorized to teach the following LEED workshops:

LEED for Schools

LEED for Green Building and Construction 200 and 300 Level Workshops

LEED for Commercial Interiors 200 and 300 Level Workshops

Consultant, State of Ohio LEED School Initiative

I am one of three primary consultants who were involved in assisting the Ohio Schools Facility Commission (OFSC) formulate their LEED school Initiatives. All Ohio schools now require LEED Silver. In my capacity:

- Performed the first green review of the Ohio Schools Design Manual (OSDM) in 2005. This
 work was in anticipation of a more comprehensive initiative to green Ohio's K12 schools
 involving other consultants. I was contracted to revise the OSDM to align it with LEED for
 Schools requirements.
- Authored and facilitated number of OFSC staff meetings and working sessions with architectural teams around the State of Ohio between approximately 2006 and 2008. My responsibility was to critique a number of LEED school projects across the state that were in progress and act as a resource to the State and the A/E teams working on LEED School submissions.
- Served as an ongoing resource to OSFC Administration and staff to answer questions submitted by the teams developing LEED Schools through 2008.

Current Member ALI Advisory Board

ALI primarily serves K12 programs in Cincinnati but its strategic plan is to expand into the southwest Ohio and Northern Kentucky regions. My role has been to advise on STEM related initiatives aimed at greening K12 curriculum and supporting school architecture as pedagogy.

Consultant to the School District of Palm Beach County (SDPBC)

- Facilitated an interdepartmental effort to rewrite the guidelines for this school district to align with the tenets of the USGBC LEED for Schools rating system.
- Contributed to efforts to green the culture of the school district by working with their newly designated sustainability officer, and Pine Jog administrators and staff.
- Prepared and facilitated a Daylighting and Acoustics workshop based on integrated design and LEED credit requirements
- Served as green design and LEED consultant on Pine Jog Elementary and Pine Jog Environmental Education Center and numerous others in South Florida.



Pine Jog Environmental Education Center



Pine Jog Elementary School Gardens



Pine Jog Elementary School



Kids in Pine Jog Gardens

Consultant Miami Dade School District

- Assisted the Miami Dade School District Facilities Department in the greening of their design Guidelines
- Conducted several working sessions with the Facilities and Maintenance departments to coordinate their department's responsibilities and concerns regarding the greening of the design guidelines
- Conducted numerous private, in house LEED NC and LEED for Schools test preparation study sessions for School District administrators and staff.
- Conducted district wide green school training sessions designed to familiarize different departments with the tenets of high performance green schools and LEED for Schools

Volunteer and Consultant, New Orleans, Louisiana Schools (NOLA)

- Participated in the NOLA Green School Charrette at Greenbuild Atlanta in 2005 while Chair of LEED for Schools
- Spent ten days volunteering in clean up and repair of K12 Schools in New Orleans in October 2006. Activities included repairing flood damage and removing debris from flooded schools, painting Hart Elementary School, moving salvaged furniture from one school to another to assist in getting a number of schools that were not totally damaged back on line for the 2006 school year.
- While there I mentored a number of Tulane architecture students on the tenets of high performance green schools and familiarized them with what the LEED for Schools committee was doing.
- Conducted several private sector green school workshops between 2006 and 2007 for representatives of the Clinton Foundation. Also collaborated with Global Green to build their Green School Initiatives. Activity included a keynote address to them in Los Angeles on the topic of high performance green schools and their role in rebuilding post Katrina New Orleans.



Restoring Hart Elementary





Clearing Neighborhoods



Clearing My House Center for Learning

Rebuilding Schools in New Orleans - Volunteering after Katrina

Consultant, Pittsburgh High Performance Green School Initiative

- Participated in the creation of the Pittsburgh Green School Initiative while serving as Director of Green Building Services for Conservation Consultants Incorporated, a 501.c3 environmental organization devoted to environmental stewardship and education.
- Was project director for CCI Center, which was designed, in part, to serve as an example of high
 performance green building and architecture as pedagogy. Part of the mission is to provide K12
 students hands on experience to learn about passive solar design, renewable energy systems,
 energy and water conservation, living roofs, urban gardening and allergy free nontoxic design.
 CCI Center was designed and constructed before LEED but has since received a LEED EBOM
 Gold certification.





View from Southeast showing PV at porch

Rooftop terrace showing PV and movable shading device

CCI Center - Partner in the Pittsburgh High Performance School Partnership

Consultant to a number of individual K12 green schools in a several countries

• Green design consultant to the team that developed the Micro Energy Building in the Beijing Olympic Village. The building began its life as a mixed-use facility to accommodate the Olympic athletes and the Olympic Village development group. It is now serving as a mixed-use K1 school and office building. I was the only US architectural design consultant on this project.



Courtyard



Interior Atrium



Living Machine Waste Treatment



South Entrance



Second Level

Micro Energy Building and School – Beijing Olympic Village

• Sunrise School, Ruhengeri. Visited Rwanda at the invitation of the Episcopal Diocese of the United States. Participated in a two day on site design review of Sunrise School to critique the proposed school for the tenets of sustainable design and development as part of a larger, regional environmental stewardship initiative. However, there was little I could add to this outstanding example of indigenous design.





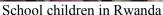


Typical school in Rwanda

Consulting in Rwanda

Typical school in Rwanda







Sunrise School – Rhuengeri, Rwanda

School Consulting in Rwanda

• Albert Schweitzer Hospital (Hopital Albert Schweitzer) Served as a green design consultant on the master plan of Albert Schweitzer Hospital in Deschapelles, Haiti. Participated at the invitation of Luke Desmone of Desmone and Associates, Architect in Pittsburgh, PA, and the Friends of Albert Schweitzer Hospital. This ongoing effort involves scores of architects, engineers, doctors and other professionals from around the world. The focus is on making the vision of Dr. Larry and Gwen Mellon self-supporting and sustainable in the future. The master plan is based on the tenets of sustainable design and development, community building, food production, self-sufficiency, job training and a variety of medical programs that are designed to break the down cycle of environmental degradation and poverty. The basic premise is that medical treatment cannot be effective without attendant efforts in nutrition and education. This program is now under being stewarded by the Friends of Albert Schweitzer Hospital. The plan integrates improvements to the hospital, energy and resource efficient housing, community services and education using permaculture, green design and local human resources. The goal is to make Hopital Albert Schweitzer an independent, off the grid facility and model community of community sustainability.



Removing leaded x-rays from the earth



Working with PV



Constructing new housing



Master Plan of Albert Schweitzer Hospital, Haiti



Our team in the field

Hopital Albert Schweitzer, Haiti

• Participated in the development and implementation of a green school living landscape playground in **Hdrenak nad Nasou**, Czech Republic. Over the course of several visits I assisted VITA, a CZ based not for profit organization, with the planning, community meetings and construction of the school grounds renovation. Ultimately the project was implemented over a three-day weekend and was done by over one hundred volunteers representing three generations. I participated in the organization and construction of the project.

Much of my work on the project was to assist in the community organization around the construction of the playgrounds and ensure that the pedagogical value of the work involved as many stakeholders as possible. The concept was to make the project replicable in part by making sure the process was understood as a learning opportunity.







Building school playgrounds with all natural materials, found objects and food producing plants







Building Playgrounds in the Czech Republic

• Participated in the organizational development of VITA, a not for profit organization which began in Ostrava, CZ. Established in 1991, VITA was one of the first not for profit organizations to be recognized for its purpose after the Velvet Revolution of 1989. I made numerous visits between 1995 and 2000 to Ostrava and Prague with the support of the Rockefeller Brother Foundation and the Air and Waste Management Association while Director of Green Building Services for CCI. My responsibility was to consult on sustainable design and development on a community level. Projects that were developed or retrofitted to be energy, material and resource efficient included both civic projects and schools.



Consulting with VITA



VITA Executive Director Zdenek Jakupka







Community Center Green School Charrette and Community building weatherization consulting

Consulting in Ostrava, Czech Republic

LEED Schools I have consulted on include:

- o Pine Jog Elementary LEED Gold
- o Pine Jog Environmental Education Center LEED Gold
- Hope Centennial LEED Silver
- o Pahokee Middle School –LEED Silver
- Stranahan High School LEED Gold
- o Pine Crest High School LEED Silver
- o Plumosa Elementary LEED Gold
- Gove Elementary LEED Gold
- o Several schools for a number of A/E teams in the Ohio LEED school Initiative



Eco Signage in the Playground



Butterfly Garden



Day lighting – Beijing



Green roof retrofit - CCI Center, Pittsburgh, PA

Typical Green School Amenities

My green school expertise is based on the integration of community, facility and curriculum and how each is manifest in school architecture as pedagogy. Ultimately the goal is to integrate the tenets of sustainability into K12 curriculum and forge relationships between K12 School Districts and institutions of higher learning. My personal mission is to contribute my expertise in allergy free nontoxic design to insure healthy and productive learning environments, from the community context to individual classrooms and other school spaces.

Green School Related Services and Activities

Member, South Florida Green School Advocacy Committee

This committee is associated with USGBC National but works to address the needs of local school districts trying to green their schools facilities and curriculum. I presented several programs for this committee and am involved in the ACE Mentoring program. Currently involved as an advisor and juror for their annual Green School competition, which has garnered national recognition for its comprehensive approach to developing green schools.

Current Consultant to Paul Scanlon, PE., Slippery Rock University Director of Sustainability

Ongoing work includes volunteer assistance in developing a strategic plan for the modernization and repurposing of the Robert A. Macoskey Center. Past work includes participating in the 2017 Summer Camp for regional K12 school stakeholders interested in integrating sustainability into their school cultures. I anticipate participating in the 2019 version of the summer camp.

Past Member, GreenGuard Institute Advisory Board

GreenGuard is heavily involved with the USGBC and other organizations advocating for healthy schools. I was invited to the advisory board because of my expertise in allergy free nontoxic design and my position as Chair of LEED for Schools.

Member, International Green Education Network, Karlsruhe, Germany

IGEN is dedicated to international cooperation between a number of member organizations interested in environmental education, green schools and curriculum development. I spoke at their 2009 Conference in Karlsruhe on the subject of integrating K12 curriculum, community and school facilities.

Past Juror, Texas AIA Green School Competition, 2010 and 2011

One of three jurors who reviewed and selected the K12 winners for 2010 and 2011

Member, Council of Education Facility Planners International (CEFPI)

Founding member of the CEFPI Sustainable Design Committee. I have presented numerous times to this organization on a variety of green school topics.

Served on the AHSRAE Advanced Energy Design Guidelines (AEDG) 50% Energy Reduction in Schools Energy committee

ASHRAE is cooperating with a number of agencies and organizations to publish documents focused on reducing energy use. I am one of two USGBC representatives who worked on and contributed to the 50% Energy Reduction in Schools version of these publications.

Recognized nationally for my expertise in Allergy Free nontoxic design

This expertise is critical in Healthy School design and is the basis for much of the LEED IEQ Credit category. This is why I was asked to author the *IEQ Credit 10 – Mold Prevention*. I have also contributed to LEED User, an online LEED consulting service on this topic.

Past Member, Pittsburgh Waldorf School Board of Directors

Served in this capacity between 2005 and 2006. I took the position to volunteer my expertise and assist them in greening their facility. Contributed to greening the business model and worked with a faculty / administration team on a strategic plan to renovate the facility and blend the effort with greening the curriculum.

Past Member, Green Building Alliance Healthy, Green School Program

Participated as a green school advisor in the 2012 school year start-up phase of this program.

Recognized Internationally as a green school / teacher workshop facilitator

Much of my work as a green school consultant is in helping teachers transition existing curriculum. It is based on my combined experience as a green school consultant / educator. This expertise requires knowledge of the relationships between facilities, community and curriculum and the ability to navigate through school administration, teacher contract, academic calendar and budget issues.







Queretaro, Mexico



Karlsruhe, Germany









Chaperoning my daughter Danille's class "Eco-Sailing Adventure" Field Trip in New York Harbor

Green School Advocacy Speaking Engagements

- Kansas Green School Initiative Keynotes and panel participation
 - Multiple engagements
- Kentucky Department of Education
- EPA Tools for Schools Keynotes and panel participation
 - Multiple engagements
- Association of School Board Officials (ASBO)
- Pennsylvania Green Schools Summit Keynotes and panel participation
 - Multiple engagements
- Clarion College, October 2008 Keynote Address
- Penn State University, Fayette Campus
- Council of Educational Facility Planners International (CEFPI)
 - Multiple engagements
- Global Green Keynote
- USGBC Greenbuild Conferences LEED For Schools Workshops
 - Multiple engagements
- American Society of Interior Designers
 - Multiple engagements
- Wingspread Conference Barriers to High Performance Schools (HPS)
- National Schools Expo

- School Facility Management Association
- Florida School Facility Management Association
- Greenprints National Conference
- Pennsylvania Association of School Business Officials
- Ohio Schools Facilities Commission
 - Multiple engagements
- Ohio Environmental Education Commission Keynote and panel participation
- University of Cincinnati Distinguished Alumni Lecture Keynote and panel participation
- Oberlin College, Oberlin, OH
 - o Multiple engagements
- St. Mary's College Annual Environmental Forum
- Cleveland Green Building Coalition Keynote and panel participation
- Cleveland Public Schools
- Chicago Public Schools
- Miami Tropical Green
- MiaGreen 2010 and 2011

Articles and Publications

- Materials in Healthcare Facilities Beyond IAQ. Durability and Design Magazine http://www.durabilityanddesign.com/archive/?fuseaction=view&articleid=5977 January 2017
- Materials and Coatings in Schools Don't Kids Have Enough to Worry About? Durability and Design Magazine.

 http://www.durabilityanddesign.com/archive/2fuseaction_view&articleid=5847

http://www.durabilityanddesign.com/archive/?fuseaction=view&articleid=5847 May 2016

- Healthcare Facility Finishes What Matters and Why. Durability and Design Magazine http://www.durabilityanddesign.com/archive/?fuseaction=view&articleid=5606 March 2015
- Healthy Coatings for Schools: An Industry Grows Up. Durability and Design Magazine, http://www.durabilityanddesign.com/archive/?fuseaction=view&articleid=5381 August 2014.
- Durability and Design blogs. On retainer to provide blogs on a variety of green building topics. http://www.durabilityanddesign.com/blog/?fuseaction=view&blogID=251
- 84 Lumber and GreenEdge Supply. Under contract to provide monthly blogs and green living segments. https://greenedgesupply.wordpress.com
- Co-Author, *Residential Builders Guide to Act 222 Manual*, Commonwealth of PA Department of Environmental Education, 1999
- Materials and Coatings in Schools Don't Kids Have Enough to Worry About? Durability and Design Magazine. May 2016
- *Healthy Inside and Out* School Planning and Management http://schoolplanning.epubxpress.com/
- The Future of Green Schools NSSEA and Essentials Magazine, November 2009

From Greenbuild to Debris Field – Environmental Design + Construction, March 2006 Green Schools: Architecture as Pedagogy – Building Operation Management, August 2005

Empowering Learning Thorough Natural, Human and Building Ecology – Design Share, January 2003

Please visit <u>www.bobkobet.com</u> for a more complete listing of articles and videos pertaining to my involvement in the high performance green school movement.

Higher Education related to K12 and the High Performance Green School Movement

- Master of Science in Sustainable Systems (MS3) Slippery Rock University, Slippery Rock, PA (see http://academics.sru.edu/gge/ms3/ms3.html)
 - One of a core group of six people who developed the country's first program of its kind between 1981 and 1990. The overall initiative involved public private partnerships, the formation and involvement of the Alternative Living Technology Energy and Research (ALTER) Foundation, the Commonwealth of Pennsylvania Department of Environmental Protection and the State Board of Reagents.
 - First Architect in Pennsylvania to earn the degree. My Master's thesis is the design and construction of Harmony House, the student residence and lab that serves as the nucleus of the Macoskey Center, the research facility that houses the program. (Phase One)
 - Over saw the student design and development of the barn that compliments the Harmony House at Macoskey Center. The barn was constructed of recycled structural members and slate salvaged from deconstructed barns in the western PA area, straw bale infill and earth plaster finish. (Phase Two)
 - o Authored the Built Environment Track of the two-year interdisciplinary curriculum. The curriculum I co-authored received the first Three Rivers Award for Environmental Education
 - o I taught the three courses in the built environment track I authored between 1990 and 1995 as an adjunct professor.
 - Over a fourteen-year period I was responsible for mentoring students and consultants, writing curriculum, and the design and construction of two facilities steeped in the tenets of sustainable design and development which the students participated in.
 - During this time I was tutored and mentored by pioneers in the fields of environmental design and education. These include Bill Mollison (the Father of Permaculture), Dr. David Orr (Oberlin College), Robert Rodale, Dr. Robert Macoskey and Robert Laporte of Moose Prints, one of the leaders in earth based construction materials and techniques



Original Harmony House Harmony Road, Slippery Rock, PA



Macoskey Center south elev.



1.5 KwH adjustable PV array installed first to power tools



Macoskey Center west elevation



Community and student workshop on straw bale and earth plaster construction



Greenhouse with plant based greywater treatment – student project circa 1995

The **Robert A. Macoskey Center** is my Masters Thesis project. It is a renovation / addition to an existing farmhouse which incorporates allergy free non-toxic, passive solar design, energy, material and resource efficient design and construction, composting toilets, rainwater harvesting, 1.5 kwH PV array, solar water heating and a variety of student based projects. The Macoskey center is design as a residence laboratory where students in the Slippery Rock University Master of Science in Sustainable Systems program can live work and study on an 88 acre farm which is certified organic. The program combines green architecture, permaculture and sustainability tracks in one of the first integrated green curriculums in the country. The Macoskey center is not static but is designed to host an ongoing variety of student projects. The curriculum won the first Three Rivers Award for Environmental Education in the Commonwealth of Pennsylvania.

- Technologico de Monterrey, (TEC) Queretaro and Satillo, Mexico. TEC is the largest university system in Mexico. I facilitated greening the curriculum for the architecture and engineering schools between 2009 and 2012. Work included offering multiple integrated curriculum workshops in Queretaro and hosting international workshop in Miami, FL. in March 2011, and Pittsburgh, March 2012. Invited guest lecturer and studio juror again in April 2011. I am currently in conversation with SRU regarding how we can collaborate with TEC.
- Florida Atlantic University (FAU) and the Pine Jog Environmental Education Center, School District of Palm Beach County, Florida.
 - Green design and LEED consultant on the FAU Environmental Education Center. This was the foundation for the joint development of FAU's Pine Jog Environmental Education Center and the Pine Jog Elementary School. Both are LEED Gold projects.
 - Facilitated multiple teacher workshops for the combined FAU / Pine Jog Elementary Faculty to create curriculum based on the combination of the Pine Jog Preserve and the development of the two educational facilities.
 - My responsibility included completing the requirements for the *LEED Version 2.2 Building as a Teaching Tool* credit requirement for both projects.
 - Lessons learned from these projects formed the basis for my work in greening the design guidelines for the SDPBC.
- Penn State University Fayette Campus Architectural Engineering
 - o Full time faculty position between 1992 and 1995
 - o Taught a full complement of HVAC, Lighting, Plumbing and Acoustics courses
 - o Lectured regularly on sustainable design and development and allergy free nontoxic design
- Carnegie Mellon University School of Architecture, Pittsburgh, PA
 - o Was adjunct faculty between 1995 and 2003 teaching fourth year studio. All studio assignments focused on sustainable design and development
 - Authored an elective titled *International Viewpoints on Sustainability*, which was offered University-wide. Students were required to address the role or state of education in the independent study topics they chose.



South Elevation – Before South Elevation – After Oberlin College Environmental Studies Laboratory

Oberlin Environmental Studies laboratory – Lewis Center Annex

- Served as green design consultant to the Built Environment Residential Laboratory. The
 project is a renovation of an existing residence located next to the Adams Lewis Center and
 serves as a companion project in the Environmental Studies program.
- My responsibilities included working with the Oberlin staff and students on LEED related academic exercises, and how the systems – which include composting toilets, solar thermal, PV and grey water recycling - can be worked into the curriculum.
- The project is the focus of one professor's work with the Society of Building Science Educators, a group dedicated to architecture as pedagogy and using the science of building forensics to address high performance green building issues in a rigorous scientific manner.
- The photovoltaic system installed over the parking lot of in the Annex enabled the Lewis Center to become a net zero energy building.

• Kent State University School of Architecture

Taught four years in the KSU College of Architecture and Environmental Design after serving as an invited juror and guest lecture for seven years. Courses included a number of technical electives and upper level design studios. A was pleased to receive a variety of teaching awards and recognition for service as well as mentoring a group of students who won a national design competition.

References

Mr. Paul Scanlon, PE LEED BD+C

Special Assistance to the President at Slippery Rock University pwscanlon@aol.com
724-822-5306

Professor Joe Ferut, AIA, LEED BD+C

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