“Linking Education and Architecture”

Students at the Rosa Parks Elementary School, Portland, Oregon. The award-winning school, part of the New Colombia neighborhood redevelopment in North Portland, has a diverse student body comprising children who speak 21 different languages including many new immigrants. The school is co-located with a community recreation center and after school club. Architect: John Weekes, FAIA. DOWA/IBI Group Architects. Portland.

**Studio Purpose**

This studio is founded on the conviction that building human capital through education is the most important mission of our communities and cities. Due to poverty, racial segregation, family conditions and inequality of educational opportunities, the future of many children is determined before they are even born.

Education is considered as the foundation of social justice. Excellent public education is central to the health and regeneration of cities.

Lifelong opportunities are shaped by experiences gained in education. Healthy cities are not possible without thriving places of learning, dedicated teachers and community workers, active parents and supportive learning environments.

Public education is an important foundational element of democracy, fundamental to social equity, opportunity, economic development, human dignity and living quality.
The “Thesis” Studio

The studio is a series of design investigations which focus on a strong theoretical foundation, rigorous design explorations, and a high level of architectural refinement through tectonic studies that integrate design, sustainability and building systems. The emphasis is development of a comprehensive architectural project that integrates all previous studies.

The studio invites students to select their own project within the topical framework of education and learning. Studio projects may focus on schools of all types, higher education and places of learning such as centers for early childhood education, environmental education and adult education. Projects may be sited in Portland or anywhere in the world.

The instructor will work with each student individually during Fall term to select a project that best meets the student’s individual goals.

Linking Education and Architecture

Kindergarten students at Lomas del Peye School, Cartegena, Colombia. Pies Descalzos Foundation

High School students in a project-based learning studio. Helsinki, Finland.

Public education is experiencing a revolution in thinking as educators, policy makers, parents, students and the public question the most effective means of preparing students for an uncertain global future.

Wagner’s documentary film “The Finland Phenomenon” takes an in-depth look at public schools in Finland, ranked by the United Nations as #1 in the world. Wagner’s film will make you want to become active in public education.

The Fall seminar will focus on public education, recent changes in educational philosophy and strategies of innovative programs in different urban, cultural and social contexts.

Wagner’s film is available on YouTube in four 15-minute segments: https://www.youtube.com/watch?v=VhH78NnRpp0&list=PLzsi_E489gUXFVuciYEgQ3AyrPMV AjxP

Although we are architects, not educators, developments in education will dramatically change future educational environments. The subject is wide open for research, experimentation and innovative design.

**Schools as Community Catalysts**

In many communities of the world public schools have become community centers where neighborhood libraries, recreation centers, adult education and meeting spaces are combined with traditional school programs. “Open schools” are a growing movement despite what we read about security concerns. High school and college students increasingly engage their communities through volunteer and internship opportunities. Simultaneously, community members engage the schools through mentoring and volunteer teaching assistance.

Charles Drew Public Charter High School. Atlanta. Perkins+Will, Architects. The school is part of the Eastlake community development, a racially diverse, mixed income community south of downtown Atlanta.

**Project Selection**

Students are challenged to select their own projects and sites within the framework of places for education and learning. From my past experience with thesis studios,
students have creatively responded to this opportunity with a wide range of projects and sites. Select the project you have always wanted to design.

Projects and sites may be located anywhere in the world within a few parameters:

- It is desirable (not required) that you have visited the city or place (not necessarily the site) prior to the start of the design studio in January.

- It usually works better to design a building for an existing school or learning organization such as a school needed in a disadvantaged neighborhood, or an experimental learning environment that explores a re-envisioned place of learning. There are hundreds of creative educational organizations and programs throughout the globe with web pages and ideas for inspiration and reference.

It may be possible to establish a communications link to your chosen organization for remote interviews or meetings.

- Adaptive reuse of existing buildings, or a combination of adaptive reuse and a new building is encouraged. If you opt for an adaptive reuse project it will be necessary to acquire drawings of the existing structure before design studies begin.

The diversity of projects in a class creates opportunities for comparative discussions, examining differences of culture, environment, urban context and educational programs.

Previous sites in my thesis studios have been located in Portland (approximately half), Seattle, San Francisco, Los Angeles, New York, Denver, Minneapolis, Milwaukee, Cleveland, Detroit, Baltimore, Los Angeles, El Paso (Texas)-Ciudad Juarez (Mexico), and internationally in Colombia, Venezuela, Guatemala, Vancouver B.C, Germany, Italy, Spain, Ukraine, Cyprus, China, Vietnam and Korea.

Claire Breyen. Roosevelt Island High School and Senior Center. New York
Thesis Studio. The school and senior center form an experimental program to mix two diverse groups of community residents. Students do volunteer work with the seniors, seniors take continuing education classes at the school.

**Studio Process**

**Fall Term: Preparation Research Seminar**

- Students in the studio are expected to enroll in the Arch 407/507 Preparation Research Seminar (3 units) during Fall term. This seminar focuses on education research. Students select their projects and develop a site and building program.

- A research summary and program document is prepared as a product of the Fall seminar. This is a high-quality professional document that includes a thesis statement, urban and site analysis, space program and bibliography. The program may be developed individually or by teams of students.

- The Human Context and Architectural Programming course offered by Yosa Huggins is highly recommended as a support course for students without previous program preparation experience.
Winter Term 2021: Conceptual Design Studies


- Design studies with regular class pin-ups take place approximately every week. I have found that students value peer reviews the most, therefore many pin-ups are held with a format of peer reviews in small groups.

- Media selection is up to the student. Study guidelines are issued for each phase of work. In addition to the use of traditional and digital media, physical study models, including tectonic models, are encouraged throughout the design process.

Spring Term 2021: Tectonic Design Studies

Tectonics is viewed as “The art of construction”.

Architecture is considered as “The Third Teacher” in illustrating the possibilities of building meaningful and environmentally responsive buildings.

Spring term is focused on creative development of the conceptual design proposals. Environmental strategy, structure, materials and environmental systems are studied and integrated with emphasis on the creative exploration of sustainable technologies.
Architecture as “The Third Teacher”


**Studio Consultants and Resources**

A support group of Portland professionals and community members will serve as visiting consultants and design critics during the term in individual critiques, conferences and reviews. The team will represent a diversity of individuals, special expertise and architectural firms from the city.


Redmond High School. Redmond, Oregon (right).

**Project Book / Monograph**

A design monograph is prepared as a final product at the end of Spring term, in addition to the traditional pin-up gallery review. The monographs produced by students in the studio have been highly professional publications that measure up to the quality of the best architectural offices.
End Note: Education and Opportunity. Shakira Mebarek. Pies Descalzos Foundation. Colombia. 1 min 30 sec
https://www.youtube.com/watch?v=IOdgjmavWWY

Information / Questions:

Gerry Gast  ggast@uoregon.edu  geraldgast@gmail.com

During the period before classes begin I will be happy to answer questions or discuss project possibilities by E Mail, or to confer by Zoom or phone. Please send an E mail and we can set up a time to talk.

Gerry Gast

Instructor Bio

Gerry Gast is an architect, urban designer and member of the University of Oregon Architecture faculty where he teaches Architectural Design Studios and Urban Design. He previously served as Director of the Portland Architecture Program.

Professor Gast taught for several years as Visiting Associate Professor in the interdisciplinary Program on Urban Studies at Stanford University, where he developed the two core courses in urban design. As a founding principal of Gast Hillmer Urban Design in the San Francisco Bay area, he directed public urban design and urban architecture projects throughout California and the western states.

Recent research focuses on education and schools. Professor Gast has been active in the Portland Public Schools (PPS) as a member of the Master Plan Committee and Design Advisory Group for the new Lincoln High School in Portland’s central city, the first new public high school to be built in Portland in over 50 years, now under construction.

Professor Gast is currently working with the Pies Descalzos Foundation of Colombia on schools in marginalized neighborhoods of the country, including new schools in Cartagena and Barranquilla, Colombia. In another international project, he authored the Master Plan for the new Ukrainian Catholic University (UCU) in Lviv, Ukraine. He has worked with the University on its design and development program since 2008. Five buildings have been completed, one is currently under construction.

Other professional work includes School Site Redevelopment Studies for the San Francisco Unified School District; “Uptown District”, a mixed use urban development of 313 dwellings and neighborhood retail center in San Diego’s Hillcrest neighborhood; the San Diego County Government Center on the downtown waterfront; and the Oregon Science and Technology Park (OSTP), a sustainable industrial district in Gresham and Troutdale, Oregon.