“Next Generation Urban Schools”

With a focus on public high schools in Portland, Oregon and design studies for a new Jefferson High School in North Portland

+ An Open category for a high school or post-secondary school in any city of the world.

Introduction

This is a design thesis studio of projects within the topical framework of urban public schools. The studio is a series design investigations which focus on a strong theoretical foundation, rigorous design explorations, and a high level of architectural refinement through tectonic studies that integrate urban design, urban architecture and building systems. The emphasis of the research seminar and studio is development of a comprehensive architectural project backed by a strong research effort.
Next Generation Urban Schools

Public education, in particular secondary education (Grade levels 9-12), 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. A leading researcher and voice on the subject, Tony Wagner of Harvard University, author of “The Global Achievement Gap”, “Most Likely to Succeed” and “Creating Innovators: The Making of People Who Will Change the World”, has identified a wide range of factors that create excellent schools. Weaver's documentary film “The Finland Phenomenon” (one hour in 4 parts, now posted on YouTube: https://www.youtube.com/watch?v=VhH78NnRpp0&list=PLzsi_E489-gUXFVuc1YEgO3AyrPMVAjxP ) takes an in-depth look at public schools in Finland, ranked by the United Nations as # 1 in the world. Other educators and researchers such as Ken Robinson have produced similar findings. Wagner’s film will make you want to become active in public education.

The topic is a hotly-debated issue in cities, Congress, State governments and citizen groups throughout this country and abroad.

Public education is an important foundation element of our modern democracy in the United States, fundamental to social equity, equal opportunity, urban economic development, local identity and living quality. The quality of a young person’s educational opportunities largely influence her or his future options, economic status, health and quality of life.

Although we are architects, not educators, impending and future changes in public education are likely to change the thousands of future and existing school facilities throughout this country and abroad. Already, many innovative excellent precedents have recently been built. The broad debate on education has not yet fully embraced the physical settings of schools, although
this is beginning to happen. The subject is wide open for research, experimentation, innovation and design.

Portland Public Schools

Portland’s public schools are generally rated high by comparison to other major cities in the United States. As is the case with matters of sustainability, parks, libraries and public institutions, citizens of Portland have been supportive of a strong public school system. Realizing that many of the city’s high schools are outmoded buildings in need of renewal, a series of three major bond issues is currently in progress with the intent to build or rebuild nine public high schools. Voters passed the first $482 million initiative to rebuild Grant, Franklin and Roosevelt High Schools in 2012. A second funding vote to rebuild Lincoln, Benson and Madison High Schools will go to voters in the 2016 general election. A final funding vote to rebuild Jefferson, Cleveland and Wilson High Schools will follow.

Some of these initiatives will build new school buildings; others will be major renovations / adaptive reuse.

Studio Focus

The studio will focus on urban public schools, primarily secondary (high schools) in Portland, with a design study of Jefferson High School in North / Northeast Portland. The studio will engage several public advocacy groups in a series of workshops that focus more generally on “Next Generation High Schools” in Portland. Potential participants are Stand for Children Oregon, The Oregon Parent Teacher Association, The Chalkboard Project (Oregon) Community and Parents for Public Schools (CPPS), teachers, parents, students and representatives of the school district - Portland Public Schools (PPS).

It may be possible for a student in the studio to select another one of the high schools that are scheduled for rebuilding. One other school, Lincoln High School, is anticipated as a new building project. All others will be adaptive reuse of existing structures. There will not be public engagement opportunities with the other schools although the public workshops will address future schools (the’21st Century Schools Project) in general terms.
Jefferson High School in North Portland is the city’s oldest existing high school building (built in 1909). At 5210 N Kerby Avenue, the 12 acre (12 square Portland blocks) site is a large, opportune campus fronting North Killingsworth Street, a mixed use commercial street, across the street from the Portland Community College (PCC) Cascade campus. This campus served 24,000 students during the past year. Jefferson sponsors a linkage program enabling its students to obtain college credit at PCC.

Although the original Jefferson structure has a measure of architectural integrity, it has been badly renovated and added to over the years with insensitive additions, has seismic safety problems, is an energy nightmare and is not fully used. An American Architectural Foundation charrette team of experts, along with other consultants, recommended demolition of existing the structure.
Academically, Jefferson was formerly one of the lowest-achieving schools in the city. Portland Public Schools considered closing it. After much public discussion and debate, it was decided to keep the school open and re-structure its curriculum, resulting in major academic improvements. However, the school still suffers from its outmoded physical facilities.

The Jefferson High School Neighborhood

Jefferson High School is located in the Humboldt neighborhood of North/Northeast Portland, a changing district currently experiencing gentrification. Its postwar African-American community is now mixed with new residents of young workers and young home buyers. At the moment the mix makes for one of the most diverse demographics in the city. The existing community is experiencing increasing gentrification pressure as residents are displaced by the escalation of housing costs.

The community has demanded improvements at Jefferson High School for several years. They seek long-overdue educational equity and have protested the school district’s slow pace of response.

Jefferson’s large site and its location on North Killingsworth Street provide many urban design opportunities to improve the neighborhood, potentially offering a portion of affordable housing, neighborhood retail, civic and recreational facilities.

In addition to a comprehensive architectural design project, urban design will be an important part of this studio.

Architectural Precedents

Several recent outstanding school precedents have been completed in North America. Among them are the Seabird Island and Strawberry Vale Schools by Patkau Architects of Vancouver, and the newly-completed Bainbridge Island School by Mahlum Architects of Seattle. We may take a short Fall trip (optional) to tour examples.

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Finland Schools
Urban Course Recommendations

Students coming to Portland from the Eugene campus are asked to take the “Principles of Urban Design” course offered Fall term if one has not completed a previous urban design course. Other urban courses are strongly encouraged.

“Open” Category

For students who wish to work on a design thesis project outside Portland, you are welcome to select a project anywhere in the world with the following conditions:

▪ The project must be a secondary (high school), community college, or university campus/building. The project may have an urban design or master planning component.

▪ The project must focus on a real school that exists. This is necessary as a base for program information so one can understand the educational philosophy, educational program (curriculum) and operational / functional needs of the school. Some of these components may be modified, but there must be a solid starting point. It may be possible for a student to establish a communications connection to the school with regular Skype meetings.

▪ You must have visited the city (not necessarily the site) at some time in the past or intend to visit the city before design studies begin in January.

▪ An individual project selection (outside of Portland and other than Jefferson) requires a written proposal and approval by the instructor.

▪ The Open category creates opportunities for the class as a whole to have comparative discussions, potentially examining differences of culture, environment, urban context and educational programs.

Previous sites in my thesis studios have been located in Portland (approximately half to two thirds), Seattle, San Francisco, Los Angeles, New York, Denver, Minneapolis, Milwaukee, Cleveland, Detroit, Baltimore, Los Angeles, Vancouver B.C.; and overseas in Berlin, Amsterdam, Rome, Spain, Cyprus, China, Vietnam, Korea and many other locations.
Chapman School. Special “Hands On” Community Design Opportunity

The parents organization at Chapman Elementary School in Northwest Portland recently approached the U of O Portland Urban Projects Workshop to design an expanded (partially-covered) outdoor recreational and play area for the school which recently increased its enrollment from 500 to 700 students. Although only indirectly related to the thesis studio, this project offers experience in community design and participation, and a glimpse into K-6 education in Portland.

This will be a special project under independent studies during Fall term. I would like to attract a student team of approx. 6 students to work on the project. The project will include workshops with the sponsoring parent group, teachers and possibly children. Students may register for “Special Projects Portland” for 1-3 units with the instructor’s permission. An info meeting will be held the first week of school. Design will be completed by December, construction envisioned for Summer 2016. Fundraising is currently in process by the parent group with partial funding by the School District (PPS).

Chapman serves Northwest Portland, the West Hills, Pearl District and Downtown. Although the demographics of the district are primarily middle to upper middle income residents, some of the students come from homeless families and families living in transitional housing.

U of O Portland Urban Projects Workshop Webpage:
http://architecture.uoregon.edu/content/portland-urban-projects-workshop
Studio Process

Preparation During Summer

Studio participants should arrive at the beginning of Fall term with a statement of their project interests: educational and design interests, specific project interest.

For students who choose the Open category, specific sites and projects will be selected during Fall term as research develops. These proposed projects require instructor approval. I will work with each student individually to finalize project and site selection.

Research and Thesis Preparation Seminar: Fall Term

All students in the studio are required to enroll in the Arch 407/507 Thesis Prep Seminar (3 units) scheduled for Fall term. This seminar will focus on the theoretical and conceptual issues of the studio, preparatory research and development of a program.

Additional credits may be earned for project-related research by enrolling in independent studies under the instructor.

- A Program document is prepared as a product of the Fall seminar. This is a highly professional document that contains a thesis statement, district and site analysis, and building space program. For students who elect the Jefferson High School project, the building and site program will be developed by the class as a team, although there will be program options as students creatively identify alternative opportunities.

The Human Context and Architectural Programming course offered by Yosa Huggins is highly recommended as a support course if you do not have previous program preparation experience.

Studio Structure. Winter + Spring Terms

- The design process starts with developing conceptual urban design studies for the district and neighborhood of the site through a charette process.

- Regular design studies with class pin-ups take place every week to ten days during the term. I have found that students value peer reviews the most, therefore most pin-up reviews are held with a format of peer reviews in small groups.

- Several outstanding Portland professionals serve as guest reviewers at midterm and end of term reviews. During the past academic year my studios have enlisted an average of 25 reviewers at each review. We anticipate over 50 guest reviewers at this June’s 2015 final review.

- Media selection is generally 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 emphasized throughout the design process.
**Spring Term Tectonic Studies and Consultants**

This is a comprehensive studio that spans issues from urban design through detailed tectonics. Spring term is primarily dedicated to tectonics: “the art of construction”. During this term we bring in several professional consultants for individual “tectonic critiques”. During Spring 2015 term, the consultants included:

- Anne Monnier, Andrea Hektor, Julie Hayes, and Art Johnson, KPFF Engineers (structure)
- Charles Gordon, Founding Partner, GBD Architects
- Craig Reigelnegg, Carleton Hart Architects
- Erik Matthews, Principal, Surround Architecture
- Teddy Huyck, BOORA Architects
- Nathan Corser, CH2M Hill, Architects and Engineers
- Kevin Sabeta, Univ of Oregon (previous practice in New York)

**Project Book / Monograph**

A project monograph / portfolio presentation is prepared as a final product at the end of Spring term, in addition to the traditional gallery review. These have been highly-successful publications that exceed the quality of some of the best professional offices.

In addition, a class publication is anticipated with grant support. This will be a scholarly and graphically-imaginative monograph that documents the work of the studio as a whole.

**Information / Questions**

You are encouraged to contact me with any questions you may have or if you want to discuss your interests before studio preferencing or during the summer. It would be helpful for me to know student interests in advance as potential projects are considered.

Gerry Gast   geraldgast@gmail.com

Gerry Gast is an architect / urban designer and member of the University of Oregon Portland Urban Architecture faculty. For several years he served as Visiting Associate Professor in the Program on Urban Studies at Stanford University, where he developed and taught the core course in urban design. He is a founding principal of Gast Hillmer Urban Design in the San Francisco Bay area. Recent projects include design of the new Stryiskyi Park campus for the Ukrainian Catholic University in Lviv, Ukraine, and the Urban Design Component of the Comprehensive Plan for Redwood City, California.

Other (selected) professional work includes School Site Redevelopment Studies for the San Francisco Unified School District, “Uptown District” (a mixed use inner site urban development of 313 dwellings and neighborhood retail center in San Diego’s Hillcrest neighborhood), the San Diego County Government Center master plan on the downtown waterfront, the Oregon Science and Technology Park (OSTP) in Gresham –Troutdale, OR, citywide urban design studies for San Clemente, Dana Point and San Diego, CA.

Research interests focus on recent seminal and urban design work, including a comparative study of projects in Vancouver BC, Baltimore, Berlin, the German Ruhr, Barcelona and Curitiba, Brazil.