PLACE & PEDAGOGY

How the unique character of the region and people are shaping modern educational architecture

PORTLAND, OREGON MAY 17–20, 2017
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MISSION STATEMENT & GOALS

About the Committee on Architecture for Education

The American Institute of Architects Committee on Architecture for Education (CAE) is North America's largest single authoritative voice on the planning and design of educational environments for all age groups. CAE connects more than 9,000 architects and allied professionals interested in the design, construction, and use of superior educational, cultural, and recreational facilities. Its members educate the public about the value of quality educational facility design. Learn more at aia.org/cae.

Mission statement

The CAE is a passionate group of architects and allied professionals engaged in understanding the link between teaching, learning and the built environment and advancing the impact each can have on the other. By coming together to share best practices and celebrate exemplary educational architectural designs, we encourage dialogue and build an interface between architects and educators, administrators and students. From early learning, through K-12 and Higher Education, we practice in all aspects of traditional and alternative educational environments and aim to contribute to the social fabric of the communities they serve. The CAE researches national educational facility issues critical to architects and works to strengthen relationships with allied organizations, client groups, and the public.

Goals

To bring all involved in and influenced by teaching and learning environments together to enhance the conversation and improve the outcomes for the learner by sharing best practices from an international, national, regional and local perspective. We acknowledge the best examples of educational projects in order to elevate the role of design in the practice of educational architecture.

About the Foundation

The CAE Foundation is a nonprofit organization that supports and promotes research, education, and sustainability in the creation of learning environments.

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The American Institute of Architects

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LETTER FROM THE CONFERENCE CO-CHAIRS

On behalf of the Conference Committee, we welcome you to Portland, Oregon for the CAE 2017 Spring Conference, “Place + Pedagogy: How the unique character of the region and people are shaping modern educational architecture.” We will explore the larger issues influencing the environments for teaching and learning through the lens of the Pacific Northwest.

We would like to sincerely thank the Committee on Architecture for Education, the conference planning committee, and all those who have assisted in arranging and producing content for this conference. The committee has been dedicated, thoughtful, and full of the energy required to plan a conference with rich and meaningful content.

The Pacific Northwest region has long been known for its innovative, educational architecture. From early childhood education through university, this conference will explore the driving forces behind this innovation as we tour places and spaces across the entire learning continuum.

What makes our region different? How does a focus on sustainability, community, equity, and maker culture influence the places we teach and learn? To answer these questions, we will visit early childhood learning sites, K-12 schools in the public and private sectors, a community college, universities, and alternative learning environments such as the Portland Japanese Garden and Alvar Aalto’s Mount Angel Abbey Library. We will hear from regional and national experts. It is our hope and our goal that you connect to, and are inspired by, not only the places we visit and the pedagogies we discuss, but also the people you meet, and the things we make.

We look forward to spending the next several days with you in Portland and its surrounding areas.

Sincerely,

Kim Olson, AIA
Levi Patterson, AIA

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LETTER FROM THE CAE CHAIR

On behalf of the AIA CAE, I welcome you to our 2017 Spring Conference in Portland, Oregon. In past years, we have convened architects and educators to explore how design supports teaching and learning. Following our 2016 Berlin conference, we are returning home to investigate the effects of regionalism on educational design in the Pacific Northwest.

CAE is dedicated to promoting and supporting the best in educational design. We are AIA’s second oldest Knowledge Community, and our 9000+ members represent diverse interests and practices. Early childhood, K-12, higher education, and alternative learning environments. Over the years, I have seen dramatic growth in members’ knowledge of educational pedagogy and in our potential to create resonances between the buildings we design and the teaching and learning that take place.

This conference would be impossible without the generous efforts and hard work of a group of talented individuals who donated their time and expertise. My sincere thanks go to the conference co-chairs Kim Olson and Levi Patterson, and committee members Karina Ruiz, Robert Allen, Nick Hodges, and Julie Flattery. We are also grateful for the assistance we received from AIA staff: Kathleen Simpson, Tonya Horsley, and Emma Tucker. A special thanks to our generous sponsors for this event. When you meet any of these individuals during the conference, please let them know how much you appreciate their efforts.

I hope you enjoy your time in Portland and that you encounter extraordinary examples of educational design while making some new friends within CAE.

Claire B. Gallagher, Ed.D., Assoc. AIA
DAY 1: WEDNESDAY MAY 17

WELCOME TO THE PACIFIC NORTHWEST

1:30PM Conference Check-in
2:30PM Tour Japanese Garden Expansion by Kengo Kuma and Associates
3:45PM Depart Portland, OR
5:05PM Arrive in Silverton, OR
5:35PM Tour Gordon House by Frank Lloyd Wright
6:50PM Tour Mount Angel Abbey Library by Alvar Aalto
8:20PM Presentation on Balancing Form and Function in School Design and dinner at Oregon Garden Resort
WELCOME TO THE PACIFIC NORTHWEST

Our opening day centers on the work of three of the world’s most celebrated architects. First, we’ll visit Kengo Kuma’s expansion of the Japanese Garden, a design that blends traditional Japanese design with the spirit of the Pacific Northwest in its cultural village.

Traveling south, we’ll tour Alvar Aalto’s Mount Angel Abbey Library to see how it effortlessly folds into the surrounding nature and pioneers the use of daylight in the Pacific Northwest’s gray environment. Our last tour will be Frank Lloyd Wright’s

Gordon House, in its current location at the Oregon Gardens. We’ll join together for an evening reception with a regional education expert.

Day 1 Learning objectives

1. Learn how the built environment benefits from respect and celebration of the nature that surrounds it.
2. Learn about daylighting principles and how they extend through buildings of different eras.
3. Learn about the Portland Japanese Garden expansion and cultural village, which feature the Vollum Library and a unique multi-purpose classroom.
4. Learn about issues facing the region’s education leaders and how they affect school planning, safety and security, building design, and interiors.

PHOTO CREDIT: Pixabay
Nestled in the west hills of Portland, the Portland Japanese Garden was founded in 1963, and has been loved by its citizens ever since. Thanks to the rainy climate of Portland and ceaseless maintenance by the Japanese garden designers, the Garden is widely acclaimed as one of the most beautiful and authentic Japanese gardens built outside Japan.

With the unveiling of the April 2017 Cultural Crossing expansion project, the garden embraces its new mission as a public cultural complex. A competition was held in 2010, and Kengo Kuma & Associates was selected as the designer. To protect the Garden’s peaceful environment, the design emulates Japan’s monzenmachi—the gate-front towns that surround Japan’s sacred shrines and temples. Within this model, bustling social environments are separated from spiritual sites to provide those sites the reverence they deserve. The design avoids constructing one big building, decentralizes the functions of the complex into different smaller houses, and sets a village plaza at the heart of the arrangement: the village at the gates of the existing garden. Using a combination of materials from Japanese artisans and local sources, the expansion features are informed by a cross-cultural exchange of expertise. Each new building is designed to exist harmoniously with nature and integrate seamlessly into the garden. The sloped roofs of the buildings evoke an abstract image of a Japanese village. The design leaves the garden as the centerpiece, merely providing a framework from which to view its exquisite beauty.
The C.E. Gordon House, now located in the Oregon Garden near Silverton, was once sited on a secluded farm on the Willamette River, twenty miles south of Portland. Planned for comfortable and efficient living, the compact house was designed in 1957 by Frank Lloyd Wright for Conrad and Evelyn Gordon. It is the only building Frank Lloyd Wright designed in Oregon. After deferring construction for six years, the Gordons completed the house in 1964, a few years after Wright’s death. The project was supervised by Burton J. Goodrich, a former apprentice to Wright who had been practicing in Oregon since 1948.

The house belongs to a category of modest, low-cost houses that Wright called Usonian. The concept, which the architect developed in 1936, features a versatile, standardized house plan that could be adapted to the requirements of Americans of moderate means. Without sacrificing his core architectural principle—harmony among building form and function, building site, and natural materials—Wright achieved economy in Usonian houses by reducing scale and simplifying the construction process.

It is an exemplary small Usonian. It’s T-shaped in plan, with a kitchen work space, a home office, a master bedroom, and two upstairs bedrooms in the head of the T. The stem contains an airy one-and-a-half-story multi-use great room that combines a dining alcove and living area with a fireplace and library alcove. The dominant horizontal lines of the house’s exterior are created by flat roofs with broadly projecting trellis overhangs and horizontal cedar siding that wraps the upper story and cantilevered balconies.

GORDON HOUSE

LOCATION Silverton, Oregon
ARCHITECT Frank Lloyd Wright
COMPLETED 1964
PHOTOGRAPHER David Burn

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Mount Angel Abbey Library was built by Finnish architect Alvar Aalto for the monks of the Benedictine abbey. Aalto was reportedly intrigued by the site and accepted the commission after receiving a letter from Father Barnabas Reasoner, followed by a personal visit in Switzerland by monks from the Oregon monastery. The library was completed in 1970 and is located at the hilltop Mount Angel Abbey. The Mount Angel Abbey Library is one of only two projects the architect built in the US.

The library has important religious significance. Architecturally, the library represents the relationship between humanism and modernism—an alternative to conventional modernism. The simple, single-story inner façade, constructed of pale brick, demurely continues the courtyard edge, blending with the traditional buildings on either side. Only after entering this facade and passing the circulation center is the visitor struck by the power and spirit of the plunging, uplifting arc of the central space, calmly palpable with light from above. The building is loosely organized in an asymmetrical fan shape, which radiates outward from the lobby towards the back wall of the library. Aalto meticulously designed every detail in the library, from the light fixtures and door handles, to the teacarts and study carrels. The design is particularly important—and studied—for its masterful manipulation of natural light.
DAY I SESSION

BALANCING FORM AND FUNCTION IN SCHOOL DESIGN

Good and bad experiences in varied public school settings inspired Dan Jamison to commit his life to teaching children. He fell in love with the power of teaching while working as a water babies instructor for the YWCA in Richardson, Texas. After earning a Bachelor’s degree at Washington State, he began his formal career as a language arts teacher in Independence, Oregon, and soon after was named Teacher of the Year. After 10 years in the classroom, he was asked to serve as the assistant principal at Central High School.

Dan thrived as a principal for several years in Albany, leading schools at the elementary, middle, and high school levels. During these years, he also taught several leadership cohorts for the University of Oregon in Eugene and Canada. In 2005 he became the superintendent in Sherwood, Oregon. Major accomplishments include significantly increasing student achievement, raising high school completion above 90%, and successfully passing a $98 million bond to build two new schools and modernize the high school. In recent years, he has worked at the state and national levels in educational policy. He currently coaches executives, leaders, and boards in a variety of settings.

Dan Jamison

brings a rich background in public education and service to community. One of seven children, much of his childhood was spent in the public schools of California, Alaska, Texas, and Washington. Like many in his generation, Dan hit the road following high school, working a variety of jobs to pay for college, including sheep ranching on the Kenai Peninsula, pulling wood on a green chain in St. Helens, cooking and tending bar in Dallas, and painting buildings at Washington State University.
DAY 2: THURSDAY MAY 18

CONNECTIONS ACROSS THE EDUCATION CONTINUUM

7:00AM  Breakfast at Oregon Garden Resort
8:00AM  Depart for Eugene, OR
9:45AM  Tour HEDCO Education Building by Hacker
11:45AM Tour Allan Price Science Commons and Research Library by Opsis
1:15PM  Lunch
1:45PM Presentation on *Thrive: Learning for Life, Not School*
2:15PM  Tour Lane Community College Downtown Campus by SRG Partnership
3:45PM  Tour Roosevelt Middle School by Mahlum and Robertson/Sherwood/Architects
4:30PM  Travel back to Portland, OR
7:00PM  Arrive at Hotel Monaco
         Dinner on your own
CONNECTIONS ACROSS THE EDUCATION CONTINUUM

Our first full day will take us to Eugene, Oregon, where we will visit three educational facilities that span a spectrum of education—the University of Oregon, Lane Community College, and Roosevelt Middle School.

Our day begins at the University of Oregon, where we’ll explore the nationally ranked teaching and research facility at the College of Education. We’ll meet with faculty to discuss their pedagogy and how the education complex is designed to facilitate new teaching techniques. From there, we head to the recently completed Allan Price Science Commons and Research Library to explore new teaching pedagogy in science education.

Lane Community College’s new Downtown Center is our second campus of the day. The new LEED Platinum Downtown Center of Lane Community College is a landmark project for education, business, and the local community. The state-of-the-art educational facility provides instructional programs, student services, business services, and conference and meeting facilities. Together with the Titan Court student apartments next door, this true live and learn community is a showcase of sustainability that meets the highest standards in building design and energy efficiency.

The day ends at Roosevelt Middle School, a newly rebuilt middle school that features rooftop solar panels, energy efficient lighting systems, high-efficiency HVAC, and a rainwater harvesting system. While touring the school, we will see how the design process captured three cultural traditions comprised of several building blocks that maintain the social structure of the existing Roosevelt Middle School community.

Day 2 Learning objectives

1. Learn how Roosevelt Middle School provides strong social-emotional connections across the learning studio community, the school community, and the community of Eugene.

   Learn how the material palette of Roosevelt Middle School engages the learning environment and achieves a high level of environmental awareness.

2. Explore the nationally ranked teaching and research facility at the University of Oregon, understand how the learning commons and learning labs are designed, and learn how they incorporate technology to support the teaching program.

3. Learn about new technology and digital learning environments, including the digital technology lab, in the new Allan Price Science Commons.

4. Better understand energy management systems integration and other techniques incorporated into the LEED Platinum Lane Community College Downtown Campus.
The College of Education Complex accomplished specific goals: Visual continuity between new and existing buildings, specialized learning spaces, accessibility, sustainability, and a sense of dignity befitting the education and human services professions. The project included significant renovations to existing buildings and a 65,000 sf new HEDCO Education Building. The design elements of the new HEDCO building—hip roof, vertical windows, red brick exterior, and covered walkways—are reminiscent of the original 1921 brick education buildings (designed by Ellis Lawrence) and respect the historic character of the entire University of Oregon campus.
With a glass-enclosed pavilion and a social commons café and event space connecting to a subterranean research library and landscaped courtyard, the Price Science Commons (PSC) and Research Library creates an inviting identity for the Lokey Science Complex. The PSC is a hub of student activity with a technologically robust, dynamic environment for learning and discovery that reflects a 21st-century paradigm. The student-centered design promotes experimentation, collaboration, and investigation. Spatial flexibility—classrooms that reconfigure into study groups and informal learning arrangements—extends opportunities for collaboration across diverse user groups. Science-specific group study rooms support collaboration, tutoring, and hands-on learning.
The new Lane Community College (LCC) Downtown Campus replaces a 1930s-era LCC building. The LEED Platinum academic building and LEED Gold student housing building incorporate two L-shaped structures. Academic programs occupy the “L” with greater public presence. The building faces two main public avenues, which provides a strong urban presence. A dramatic west orientated, four-story glass entry façade—shaded by an evacuated tube solar hot water array—faces the Eugene Public Library and the Lane County public transit system’s transfer station, advertising the college’s commitment to sustainability and its presence downtown.
DAY 2 SESSION
THRIVE: LEARNING FOR LIFE, NOT SCHOOL

Watching children learn is different than watching children go to school. But sometimes it can be the same thing. The key is to ask first, how does a child learn, learn deeply, learn effectively. Children learn through play and through exploration. They don’t learn through passive learning, they don’t learn through worksheets or memorization. We know what works, yet—because of our own mythic beliefs, or because of bad laws and state/national policies, or because we find change hard—we often do something else. What if we made other choices?

Ira Socol, director for Innovation and Learning Technology for Albemarle County Public Schools, leads a staff team to integrate the district’s learning technologies and modernized learning spaces with contemporary pedagogies. Pam Moran, superintendent of Albemarle County Public Schools, was honored to serve as the 2016 Virginia Superintendent of the Year. They support a thriving and creative community of adult and youth learners in a district nationally recognized as home to some of the most contemporary learning spaces in the United States. Represented by a commitment to a “search, connect, communicate and make” model for unleashing the lifelong learning potential of young people, the district encompasses 26 schools across 726 square miles of rural, suburban and urban environments. Educators from Albemarle are well known for their work to develop and infuse contemporary learning across the curricula. A district initiative to redesign learning spaces has increased opportunities in every school for learners to research, design, build, engineer, and “make to learn” as well as “learn to make” using a variety of old and new technologies accessible in libraries, mechatronics labs, media labs, arts studios, multi-age spaces, maker spaces, and informal learning settings created throughout Albemarle’s schools. The Monticello High School Library is a recipient of the Magna Award from NSBA for its premier maker spaces. The school district was featured in Newsweek’s article “Will the Maker Movement Reinvent Education?” and has been the subject of numerous articles and posts on the maker movement. The Albemarle school district has been profiled in media produced by AASA, USDOE, EdSurge, Edutopia, BAM Radio, Harvard Project Zero, and MakerEd. Graduates of Albemarle County Public Schools perform above state and national averages on multiple performance measures. The cohort dropout rate is close to 2%.
The new Roosevelt Middle School design reflects the most current thinking around effective learning environments for teenage students and is deeply grounded in the culture of the school community. The design addresses basic needs for social connectedness while taking advantage of teenage curiosity by making every learning activity visible, accessible, and engaging. Students’ social networking practice of “looping” the hallways before school informed design decisions about organization, circulation, and transparency. The building is comprised of several building blocks arranged around a central courtyard. The courtyard is activated by activity spill-out from the Science Cluster, Makers Lab, and Culture Hub.
DAY 3: FRIDAY MAY 19

AT THE INTERSECTION OF PEDAGOGY AND PLACE

8:00AM  Bus departs; Breakfast on board
8:30AM  Tour Oregon Episcopal School by Hacker
10:00AM  Tour Collaborative Life Sciences Building by SERA & CO Architects
11:00AM  Tour Portland Aerial Tram
11:45AM  Lunch
1:30PM  Tour Gladstone Center for Children & Families by DOWA-IBI Group Architects
2:15PM  Panel discussion on *Reggio philosophy*
3:30PM  Tour Trillium Creek Primary School by DOWA-IBI Group Architects
4:30PM  Panel discussion on *Growing Minds vs. Fixed Mindset*
5:15PM  Light reception
6:30PM  Arrive at Hotel Monaco
         Dinner on your own
AT THE INTERSECTION OF PEDAGOGY AND PLACE

The Pacific Northwest has long been known for its innovative, educational architecture. By examining the regional impacts of sustainability, community, and leading pedagogies, we will explore the driving forces behind this innovation. Our first tour of the day will highlight early learning spaces designed to support the Reggio Emilia approach in the Lower School at the Oregon Episcopal School. Participants will witness child-centered, inquiry-based learning that is deeply rooted in a sense of place.

Next, we’ll move to the opposite end of the education continuum with a visit to the Collaborative Life Sciences Building in Portland’s developing South Waterfront neighborhood. We’ll learn how collaboration between the Oregon University System and Oregon Health & Science University (OHSU) resulted in a state-of-the-art allied health, research, and academic building.

The Gladstone Center for Children and Families provides an example of success the “Portland Way.” This socially innovative project converted a long-abandoned Thriftway grocery store into a center that serves as the Gladstone School District’s kindergarten. The building also houses 10 partner agencies delivering services to the whole child, the whole family, and the whole community. Our panel discussion will focus on the role that design plays in the Reggio Emilia approach to learning.

Finally, a visit to Trillium Primary School will allow participants to experience how the design process can serve as a catalyst for pedagogical change and culture shift. Based on the foundational principle that children should be the captains of their learning, this facility blends elements of sustainability, connection, research and inquiry, and self-directed learning. At the conclusion of the day, educators and administrators from the day’s sites will reconvene to share their perspectives on how indoor and outdoor space design can create an environment for pedagogical change.

Day 3 Learning objectives
1. Learn about the creative process for designing learning spaces that demonstrates what architects need to know about the emerging learning paradigms.
2. Understand how the inclusion of integrated, sustainable elements in schools can be used to enhance learning opportunities for students, teachers, and the community.
3. Learn how innovative approaches to scoping projects can lead to successful collaborations between like-minded partner agencies to better serve a community through provision of holistic services for students and families.
4. Learn how authentically engaging students in the design process can lead to more empathetic solutions that respond to overall needs and contribute to creating agents of change for our world.
OREGON EPISCOPAL SCHOOL

LOCATION 6300 SW Nicol Road, Portland, OR 97223
ARCHITECT Hacker Architects
COMPLETED 2016
PHOTOGRAPHER NashCO Photography

The Beginning and Lower School serves as the new entrance for the Oregon Episcopal School (OES). It features large flexible classrooms, dedicated group collaboration spaces, state-of-the-art science labs and art studios, gathering and performance space, and ample outdoor access. Design reflects the OES community’s desire for open spaces that encourage the exchange of tools, knowledge, and creativity; flexible learning spaces that are adaptable to changing curriculum needs; gathering spaces that support interaction at different levels and scales; and the school’s embrace of nature and the outdoors as a teaching tool.
SERA Architects teamed with CO Architects and client partners Oregon Health & Science University (OHSU), Portland State University, and Oregon State University on the Collaborative Life Sciences Building (CLSB), a new allied health, academic, and research building. CLSB provides academic classrooms, lecture halls, teaching laboratories, clinical skills and simulation laboratories, medical research laboratories, retail space, and two levels of underground parking. Part of the overall building project, OHSU’s new Skourtes Tower houses the School of Dentistry’s clinical training, clinics, and research spaces.

CLSB/Skourtes Tower is the first building in OHSU’s new Schnitzer Campus at Portland’s South Waterfront. The 650,000 sf building is an innovative model of interdisciplinary health sciences education, research, and education. It engages students, faculty, and pedestrians through a concept of “science on display.” A glass atrium serves as the front entrance, providing transparent walls that allow dynamic connections between program elements and visual penetration deep inside the building from the future campus and city streets. Several ground floor teaching labs literally put science on display. The ability to be a participant in the creation of science creates interactions between staff, researchers, teachers, students, and visitors.

The project is one of only two LEED Platinum certified buildings over 500,000 gsf in the U.S.
The Gladstone Center for Children and Families (GCCF) was conceived as a partnership between public and private agencies to address the needs of families and young children from birth to age 6. It is home to several agencies: The Gladstone Health & Wellness, Family Stepping Stones Relief Nursery, Head Start, Gladstone Teaching Preschool, WIC, the Clackamas ESD, Lifeworks Northwest, Clackamas Community College, and the Gladstone School District Kindergarten. Reinventing a community landmark from a former grocery store into an early childhood center, we were able to create a natural home for the District’s kindergarten program, which was heavily influenced by the Reggio Emilia philosophy. By bringing together nine educational and social service partners, the finished center has become a multigenerational learning environment offering coordinated educational programs and social services to hundreds of area students and families. The Reggio principles of self-guidance, respect, responsibility, and community through exploration and discovery are practiced by all partners in the building in a supportive and enriching environment. When opened in January 2009, the GCCF was the first facility in Oregon to provide a continuum of services for young children from birth to age 6 and their families in one location, while also providing a center for teacher training and research.
DAY 3 SESSION
REGGIO PHILOSOPHY

The Gladstone Center for Children & Families has been inspired by the educational philosophy of Loris Malaguzzi and the approach he developed in Reggio Emilia, Italy over 60 years ago. Educators Maria Montessori and Loris Malaguzzi believed strongly that each child could and should direct their learning through choice and interaction with their environment. Hundreds of years of evidence has shown that the design of educational settings has a direct impact on learning. The experiential nature of the Montessori and Reggio Emilia educational philosophies are heavily grounded in place. The design of the Montessori and Reggio learning environments are a critical partner to the teacher guide and child. Panelists representing the Gladstone Center for Children & Families, Opal School, and West Hills Montessori School will engage in a conversation about the varied ways their environments influence learning. They will discuss their respective programs, why they chose to work within the Montessori and Reggio frameworks as the foundations for their schools, and how the design of space is a valuable contributor to the learning opportunities afforded to children in these environments.
Delia Olsson
is Assistant Head of School at West Hills Montessori School. She holds a Bachelor’s in Human Studies from Marylhurst University and an AMI Primary diploma from Montessori Northwest. Delila brings to her work many years’ experience as a Montessori Primary classroom guide for children ages 3–6, as well as experience in school administration, parent education, and staff development and training. She has served on the Board of Directors of the Oregon Montessori Association and Montessori Northwest. In addition to her Montessori work, Delila is a freelance writer with a passion for story. She is mama to a son, Elliott. In her free time, Delila enjoys writing, reading, gardening, and hiking in the forests of the Pacific Northwest.

Bob Stewart
has been superintendent of Gladstone School District since 1999. Prior to 1999, he held a variety of positions in Gladstone School District. He has been an educator for 42 years. He graduated from Warner Pacific College and completed a Masters of Public Administration at Portland State University. Bob is Past President of the non-profit Family Stepping Stones, the first Relief Nursery in Clackamas County; he is also a former member of the Clackamas County Commission for Children and Families; he was a member of Governor Kitzhaber’s Early Learning Transition Team, and a member of the Early Learning Design Team; he is chairman of the Warner Pacific College Board of Directors, a CareOregon board member, and Secretary of the Gladstone Education Foundation. He is a former president of the Oregon Association of School Executives.

Matt Karlsen
As Associate Director of the Portland Children’s Museum Center for Learning, Matt Karlsen supports Opal School’s mission to strengthen public education by provoking fresh ideas about environments where creativity, curiosity, and the wonder of learning thrive. Prior to joining the school and center, Matt worked as a teacher and leader of teacher professional development programs. As a parent and collaborator, he saw the critical role Opal School plays in expanding educators’ vision of “third doors,” through which adults and children might create more just worlds. Since 2012, he has strived to connect Opal School’s ideas to international audiences hungry for those perspectives. Learn more at opalschool.org.
During a design charrette, Trillium Creek Primary School’s design team was inspired by one student who announced, “I want to be the captain of my own learning.” That notion was used as a basis to identify features and design techniques that emphasize a student-centered building. Interior spaces are designed to intentionally blur the edges, supporting collaboration, utilizing floor space for transitions, and connecting students throughout the building to the library—the center of the school and inquiry. Collaborative learning neighborhoods emerge from these open and flexible porches, supporting partnerships and a sense of community between students and teachers. Intentional spaces and furnishings throughout the building provide independent learning spaces and areas for small group work. Classroom porches, the library, and wellness commons are designed with mobile furniture to give teachers and students flexible space to extend lessons into larger gathering spaces.

Notions of community, collaboration, and teaming drove the use of interior glazing and “see-through” building design. Visual connections reinforce the public nature of teaching and learning and invite collaboration and teaming. Splashes of bright color stem from students desires to have vibrant learning spaces. Similarly, a slide that connects the second and first floors balances students’ desire to have alternative and stimulating components of the building with opportunities to build skills around collaboration, mindfulness, and respectful use of space.
GROWING MINDS VS. FIXED MINDSET: HOW DESIGN CAN HELP CREATE A CULTURE

Today’s school buildings can be designed for contemporary educational delivery models, but it takes collaboration and leadership to create a school culture that embraces new ways of teaching and learning. The school principal and a 5th grade teacher will share their experiences from the MacConnell Award winning Trillium Creek Primary School. Using the concepts of mindset developed by Stanford psychologist Carol Dweck through decades of research on achievement and success, they will discuss the growth and nurturing of school culture and the role environment plays in this development. This panel will also focus on the role students can play in designing their learning environment. We will explore and articulate strategies to discover and listen to students that allow them to be active participants in shaping the design of their learning environments. Further, the panel will discuss how this approach to design can support new pedagogies and a positive school climate.

PHOTO CREDIT: Parallel Photography
Noelle Fels

is a key member of the 5th grade team of teachers at Trillium Creek and has been teaching at the primary level for over 10 years. She works each day to bring energy, excitement, and enthusiasm to the myriad opportunities and possibilities that each of her students face every day. In addition to being a leading teaching voice at TCPS, Noelle is also a mom of a student who attended Trillium Creek and brings that important perspective to her work.

Charlotte Morris

has served in public schools as a classroom teacher, special education teacher, curriculum specialist, and instructional coordinator. Since 1990, she has been the principal of three primary schools in the West Linn-Wilsonville School District—Cedarock Park Primary, Boeckman Creek Primary, and Trillium Creek Primary. She attended the University of Montana, Portland State University, Lewis & Clark College, University of Oregon, and the Principal’s Institute at Harvard University. In addition, Charlotte has been an adjunct professor in the education department at Marylhurst University. A highlight of her career has been opening Trillium Creek Primary in 2012 and engaging the school community in creating an environment and culture for all to learn and succeed in the 21st century.

Jeremiah Patterson, Ed.D. (moderator)

is the Assistant Superintendent for the Gladstone School District. He served as an elementary teacher in Boston, San Diego, and North Clackamas before working as a school administrator for 10 years. His doctoral work centered on school design and construction, and the relationship between design and pedagogy. His dissertation—A Delphi Method Study Forecasting a Sustainable Schoolhouse—focuses on bridging perceived gaps between school designers and practitioners, specifically surrounding the impacts of their collaborations on the built environment.
DAY 4: SATURDAY MAY 20

EQUITY IN MAKERSPACES

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>7:30AM</td>
<td>Breakfast at Hotel Monaco</td>
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<tr>
<td>8:00AM</td>
<td>Panel discussion: Makerspaces</td>
</tr>
<tr>
<td>9:30AM</td>
<td>Tour Global Homestead Garage</td>
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<tr>
<td>10:00AM</td>
<td>Community Bench Build</td>
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<tr>
<td>12:00PM</td>
<td>Lunch outside</td>
</tr>
<tr>
<td>1:00PM</td>
<td>Tour Open School East by Holst</td>
</tr>
<tr>
<td>3:00PM</td>
<td>Arrive at Hotel Monaco</td>
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</tbody>
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EQUITY IN MAKERSPACES

The day begins with a panel discussion introducing participants to issues inherent in maker culture, including the use of the pedagogy and equity among locations, participants, and stakeholders. Panelists will represent various philosophies, organizations, and institutions associated with makerspaces and will discuss their experiences. The session will cover the origins of the maker movement and its place in contemporary pedagogy and school design.

The second site visit will be to Open School East, where we’ll focus on individualized student-centered learning in a supportive atmosphere.

The day concludes with a hands-on workshop in a Portland makerspace, where participants will produce a product that will be donated to the adjacent community.

Participants will work in groups, each led by a leading voice in makerspace culture. This session will allow participants to become fully immersed in the use of a makerspace and engage in a service exercise that benefits local Portland residents.

Day 4 Learning objectives

1. Learn about the origins of the maker movement and the equity issues inherent in maker culture and makerspaces. Visit a makerspace designed specifically to support and facilitate the maker culture.

2. Learn about the pedagogy of the maker culture as it relates to the design of makerspaces within a school context.

3. Learn how the maker culture is a driver for the design of STEM and STEAM spaces.

4. Experience the connections between the pedagogy of makerspaces and the actual utilization of space.
DAY 4 SESSION

MAKERSPACES

**Suzie Boss**

is a writer and educational consultant from Portland, Oregon, who focuses on the power of teaching and learning to improve lives and transform communities. She is the author of several popular books for educators, including Bringing Innovation to School and Reinventing Project-Based Learning. She is a regular contributor to Edutopia and a member of the Buck Institute for Education national faculty. She is collaborating with award-winning global educator Stephen Ritz on The Power of a Plant, which tells his inspiring story of creating green classrooms and healthier outcomes for children and communities across New York’s South Bronx and around the world. Inspired by teachers who push the boundaries of the traditional classroom, Suzie consults internationally with schools that are ready to shift away from tests and textbooks and engage students in real-world problem solving. She has helped project-based learning take hold at schools in India, Europe, Mexico, and South America, as well as all over the US.

**Alex Gilliam**

is the Founder and Director of Public Workshop, an organization that helps clients and community partners throughout the US create unique opportunities for youth and their communities to shape the design of their schools, neighborhoods, and cities. Uniquely combining his skills as a designer, teacher, expert builder, and social entrepreneur, Alex leads multigenerational design-build community projects, develops placemaking initiatives that bring people together in new ways, constructs makerspaces for people of all ages, devises transformative youth design leadership programs, and creates innovative participatory design tools.

**Mark Lakemann**

is a national leader in the development of sustainable public places. In the last decade, he has directed, facilitated, or inspired designs for more than 300 new community-generated public places in Portland, Oregon alone. Through his leadership in Communitecture, Inc., and its various affiliates—The City Repair Project, The Village Building Convergence, and the Planet Repair Institute—he has been instrumental in the development of dozens of participatory organizations and urban permaculture design projects across the United States and Canada. Mark works with governmental leaders, community organizations, and educational institutions in many diverse communities.
Sarah Smith

is Program Director and Co-founder of Sawhorse Revolution, a Seattle non-profit that teaches teens carpentry and design through inspiring community projects. Sarah has a Masters in Education from Harvard Graduate School of Education, where she studied project-based learning, adult education, and learning and the brain. When not at work, she can be found reading, cooking, or playing with her new French Brittany puppy, Casper.

Katie Hughes

runs Girls Build, a non-profit that promotes curiosity and confidence in girls through the world of building. A carpenter herself, Katie has taught girls and women the fun and skill of building for over 10 years. She loves watching the light in little girls’ eyes as they use a drill, saw, or hammer for the first time, and launched Girls Build in February 2016. As it turns out, she loves her job.
Shop People, founded in 2005, is Portland’s original community makerspace. In 2016, Shop People was purchased and placed under the umbrella of the Global Homestead Garage. Re-established as a Benefit Corporation, this 19,000 sf facility is rebuilding its community to 40+ members and providing unlimited access to large wood and metal shops and a jewelry studio. Their goal is to provide a safe, healthy, professional space for people to fulfill their business or personal vision. The space is expanding to offer a sculpture garden, co-working lounge, meet-up space, industrial design center, event space, and a community storage facility. The Global Homestead Garage’s mission is to provide community members a platform to grow big ideas using shared resources. Their vision is to integrate natural systems and innovation within design to create more sustainable lifestyles.
Developed by the nonprofit educational organization Open School, Open School East is an innovative new school model that prepares students for success in college, career, and community. Open School East features a robust program to help students who are struggling in the traditional school system re-engage with academics. The program is designed to inspire spark learning and transform lives through open learning, a mix of advocacy, equity, and academics. The project increases the organization’s ability to meet rising standards and prepare more kids for a successful life beyond high school. The architecture reinforces this model of learning, support, and openness: it provides 11 classrooms, 2 science labs, an art studio, and administrative spaces arranged on two floors around a double-height central space. A cascading bleacher stair in the central space connects both floors, seats 200 people, and is intended to host a wide range of activities that include presentations, informal gatherings, and group learning.
DAY 1

WELCOME TO THE PACIFIC NORTHWEST
DAY 2

CONNECTIONS ACROSS THE EDUCATION CONTINUUM
DAY 3

AT THE INTERSECTION OF PEDAGOGY AND PLACE
DAY 4

EQUITY IN MAKERSPACES
Classrooms shouldn’t have to sit still either.

KEEPING THE BODY MOVING IS SMART. Same goes for learning spaces. Being able to reconfigure classrooms on the fly is not only a convenience, but a catalyst for engagement. We offer the deepest product line to accomplish that. Our flexible ergonomic systems allow for a diversity of lesson plans, body types, emotional and social needs. And when the bell rings, classrooms can turn on a dime. Healthier, happier active minds and bodies. That’s our thing.

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