

The architect lives in fascination and with a sense of lack that s/he seeks to remedy.
— adapted from Maurice Merleau-Ponty, “Eye and Mind”

French phenomenologist Maurice Merleau-Ponty characterizes the artist as someone sensitively attuned to the beckoning of the larger world and compelled to address this engagement through ongoing creative expression. In this vein, my job as an architectural educator is to invite students into a sustained state of openness to the world—and to guide them to respond to its invitations and demands through well considered and rigorously developed creative acts.

The field of architecture draws from and responds to the cultural, social, physical, natural, technical, and artistic world. In addition to understanding the art of architecture—its subtle and varied expressions of line, plane, mass, space, shadow, and light, there is an immense body of technical information to grasp—issues of structure, economy, sustainability, public health and safety—and a rich history of ideas to consider. In the face of this complexity, my goal as a teacher is twofold: to ingrain in students a passion and a methodology for lifelong learning, and to instill in them the ability to develop and sustain a coherent train of thought. In today’s efficient, fast-paced, and multi-tasking world, both goals are more difficult than they sound. I want my students to pursue both breadth and depth in their work, fueled by curiosity and passion—and I hold my teaching to the same standard.

Architectural design. The studio environment is the ideal place to begin a passionate search, and I’ve been privileged to teach and coordinate a foundational program in architectural design for over twenty years. As I’ve gained experience and perspective, my teaching has evolved from presenting facts to posing questions. I believe that even in lower-level undergraduate courses it is essential for students to engage course material through active means that require integrative and original thought.

In the studio, this means allowing room for error, false starts, course corrections, and critical rethinking of the work. It means setting out a rich and complex problem that gets at the fundamentals of design, yet not giving the students a formula for solving it. Instead of short-circuiting the learning process by teaching students a quick way to arrive at answers, I require them to look beneath the surface problem and confront its hidden depths through observation, drawing, building, analysis, and refinement. Instead of discrete projects exploring isolated aspects of design, I lead students in reiterative and open-ended design query that addresses design basics as an integrated whole. The initial open-endedness gives the necessary breadth to design, and the reiterative nature of the process—rethinking and refining based on critical assessment of the developing work—gives it depth.

In architecture there is never a single, correct answer, but a wealth of possibilities. My job is to encourage students to keep their search open, and to resist the instrumentalizing temptation to jump to a quick and thin answer. I want them not to search for certainty and the end of the process but to make room for doubt and puzzle out the way through—thus aligning with the origin of the word *education*, *e + ducere*: to lead out, not to lead to. My emphasis on openness and self-direction manifests in broadly defined projects with open parameters, giving students a chance to dwell in uncertainty long enough to gain a deep and authentic knowledge about what underlies their decisions. Students are not told what to do; they are led to understand what questions to ask and how to ask them.

My foundational design students interweave the conceptual and perceptual underpinnings of architectural design. They engage the theory and experience of color, basic structural principles, properties of materials, and the ideation and experience of space through drawing and full-scale, hands-on construction. My upper level design students engage these same principles at more advanced levels, making proposals for buildings and neighborhoods enlivened by foundational principles of design.

My design pedagogy has been recognized internationally, nationally, and locally, winning 3rd prize in an EAAE (European Association for Architectural Education) worldwide competition for writing in architectural pedagogy, receiving an ACSA Creative Achievement Award for studio teaching, being named a Grisham Master Teacher, receiving two MSU Alumni Association Teaching Awards, being featured in three ACSA Special Focus Sessions on Beginning Design, publishing in the US and abroad, exhibiting work at two national Conferences on the Beginning Design Student, and reviewing student work at SCI-Arc and the University of Cambridge, among other places. I was also invited to develop and run a workshop in Ottawa demonstrating phenomenological principles of a beginning design studio at the Back to the Things Themselves annual meeting at Society for the Study of Existential and Phenomenological Theory and Culture, Congress of the Humanities and Social Sciences.

Architecture history. Courses in the history, theory, and philosophy of architecture may not seem as suited to this open-ended and reiterative approach, but they can be rethought to incorporate it. My undergraduate survey and elective courses stress critical thinking and written expression, linking built form with religion, philosophy, culture, and the physical environment. My history students do not learn buildings as a progression of styles, but as manifestations of the cultural and physical forces that produce them. My teaching relates architectural history to the design studio and enframes it within the history of ideas, tracing the transformation of human culture from mytho-religious to rational-scientific thought and the attendant changes in the nature of architecture.

History I (prehistory through Gothic) examines the progression of architecture as it parallels the slow intellectual evolution from mythic to rational thought. It relates history to today's design principles, from the Minoan emphasis on variable experience to Roman principles of order to Gothic strategies for infusing architecture with light. History I is still in traditional lecture format (which introduces students to concepts of architectural history in a familiar format), although exams are essay format and require integrative thinking rather than memorization. For example, instead of asking a student to list the stylistic differences between Romanesque and Gothic architecture, I will ask a question like this: *It is the year 1200 and you are a master builder charged with updating an existing Romanesque church to express current (High Gothic) ideals. Draw and annotate sketches of a plan, façade, and interior elevation to explain what changes you would make and on what grounds you would justify them.*

It is typical to present Renaissance, Baroque, and Neoclassical architecture (History II) as a progression of styles, but my course enframes Renaissance architecture within the Neoplatonist Great Chain of Being, of which the architect formed the central link by using geometric principles to bring divine order to mute stone. Although Neoclassical buildings share a vocabulary and ordering principles with Renaissance architecture, I enframe them within their quite different world view, the scientific paradigm of the Enlightenment. The course explores the growing fissure between the classical style and industrialized culture, exploring a relationship between form and technology still relevant to today's designers. History III addresses the principles of modernism and postmodernism, again enframing the architecture within the larger culture of ideas and in reference to the students' own design work.

In History II and III, I have transformed the traditional history lecture survey into an interactive series of discussions where students engage the material through critical, synthetic thinking and original research. I post weekly illustrated lectures and reading assignments online along with homework questions requiring integrative, original answers. In addition, each student completes two six-week research projects per term, examining a particular architect or building in terms of contemporaneous aesthetic, cultural, and technical issues. I monitor the students' progress in weekly small-group pin-up critiques where they post and discuss marked-up photocopies of historical sources indicating their ongoing research. In the final history project, each student researches a 21st-century building, identifying its past and present historical connections. These questions of historical inspiration for current architecture inform the students' own current work as emerging 21st-century architects.

Although the history small-group critique format requires more face-to-face time on my part than a lecture format, it is well worth it. Students learn that architecture history—even in an undergraduate survey—is not something I deliver to them weekly, but something they search out for themselves, coming to grips with ideas that they discuss and debate publicly. It also allows traditionally at-risk students to excel through reiterative work. This format has been recognized both internationally and locally: a presentation on this unorthodox history format was one of three accepted into a highly competitive ACSA session on Rethinking History (12% acceptance rate) and inspired a TSD Teaching Award from the MSU Tau Sigma Delta Architectural Honor Society.

Theory and philosophy of architecture. My courses in theory and philosophy of architecture are organized similarly to the history courses, leading students through the active discussion of ideas rather than having them passively attend lectures. The courses are writing intensive and emphasize repeated drafts of work to increase rigor and coherence. The Philosophy of Architecture course received among the highest student evaluations of any undergraduate course in the MSU School of Architecture.

This integrated teaching approach, which focuses on open-ended and reiterative learning, has been validated by my receiving the first College of Architecture, Art, & Design Faculty Teaching Award and two IMAGE (Increasing Minority Access to Graduate Education) mentorship citations. As I invite students to respond creatively and rigorously to the surrounding world, I am educating architects to meet the world's demands with insightful and passionate work that contains breadth, depth, and heart—the very qualities I strive for in my teaching.