



by Nathalie Rozot

Cultural and societal shifts can also transform what and how we teach

We surely deserve to celebrate the upcoming International Year of Light, because lighting design is now better known than ever, and we might have even reached critical mass. Our educational and evangelical efforts have greatly contributed to the growing recognition of our discipline: In our community, many teach and many more preach for the expansion of lighting design education.

However, we have also settled into assumptions about lighting and design education, and we must ensure that our teachings do not perpetuate the status quo. Much of education serves the trans-generational transfer of knowledge, but educators also act as agents for the development of new aptitudes. Design studies are adapting to the complex problems and changing contexts that students face, and evolving to meet the demands of contemporary environments. With that, we need to rethink how we teach design and lighting.

OUT OF TUMULT COMES PROGRESS

Design practices have long been largely an elite's "inside job," but democratic innovation has entered the design equation, and progressive design programs have historically emerged from societal transitions. Ongoing shifts in science, technology, politics and economy constantly reshape the cultural contexts within which we perceive and practice design. In the 1950s, America was segregated and replete with 50 percent of the world's cars, telephones and radios; in the global context of decolonization in the '60s it experienced powerful civil rights and anti-war movements; and in

the '70s, it ran out of gas and New York out of cash. Meanwhile, subatomic energy, genetics, the sight of Earthrise from space and Rachel Carson's *Silent Spring* expanded our perception of the world. Design education reacted to the transformations that occurred during these decades; post-modern pedagogical models dissolved disciplines and engaged in social and environmental issues. In doing so, they have set precocious foundations for current trends in design studies such as the integration of social engagement and ecological literacy.

Many programs now promote design activism to serve social justice, but there is also a broad consensus in academia that we need to change what and how we teach. New models of design education abound, and academic institutions compulsively test new curricula to prepare the next generation for systemic problems that range from environmental to societal, political and economic; that defy simplification; and that are mostly connected. Contemporary education needs highly skilled generalists and specialists, and educational infrastructures need flexibility: Coalitions between and within design schools are emerging and cross-pollinating programs.

"Design" is now decreasingly seen as knowledge, skill or ability, and increasingly as a *method* to curate these. Chris Conley, professor at the Illinois Institute of Technology's Institute of Design, wrote in *The Core Competencies of Design* that these are "the ability to recognize a broad range of potential in a given problem statement, to work at varying levels of abstraction, to model and visualize solu-

tions before all the information is available, to problem solve by creating and evaluating multiple alternatives, to add or maintain value as elements are integrated into a whole, to identify and respond to relationships between a solution and its context, to use form to embody ideas and communicate their value.” Similarly, authors Kevin Kelly and Steven Johnson once described in *Wired* magazine that ideas are like networks.

A BROADER LENS

When educational models transform, transversal notions can replace formerly narrow studies. The evolution of the sustainable narrative in academic and professional practices is a good example, and one I experienced throughout my career: Back in my student days, “sustainability” was a focused area of interest in instruction and practice alike that was related to various areas of research. Over time, it has transformed into diffuse ecological literacy across design studies and practices. The patterns and processes that organize living systems, defined by environmental scientist and theorist Fritjof Capra—i.e. networks, nested systems, cycles, flows, development and dynamic balance—are now syntax for ecoliteracy.

We too need to be proactive agents of change in the face of transitions in design education, and I suspect that one of our challenges is to change how we achieve light literacy and design competence. Lighting and design educators should dare imagine and enact a more widespread fluency in spectral distribution, materials’ properties and the physics of color, the physiology of vision, and light and

health. For instance, the shared curricular framework of Parsons’ recently revamped undergraduate design studies focused on the stuff of artifactual environments such as space, time and materials, but light was missing (there is now talk to include light and energy in the list).

My colleagues and I know from experience that design studies across disciplines need more literacy at a foundational level: In graduate theses, we regularly witness how deficient knowledge and awareness negatively impact any student’s ability to explore an area of interest, understand a problem and identify the related areas of research before developing design propositions and defending an argument.

Glenn Shrum, assistant professor and incoming director at Parsons’ graduate program in lighting design in 2015, has long been engaged in lighting education and he actively supports credentialing for the practice of lighting design. He believes that criteria for lighting design competence are global and that they relate to design applications and expand beyond the completion of a few courses or the “book knowledge” acknowledged by the Lighting Certification (LC).

Arriving in time to orchestrate the 30th anniversary of the MFA, Shrum’s vision is “for Parsons to develop and propagate greater understanding of the distinct issues, process and applications pertinent to architectural lighting design.” He enthusiastically envisions that the school’s design programs will uniquely advance areas such as the integration of natural and artificial lighting and the transition to luminance metrics.

Luminance is a perfect example of literacy in the medium of light, but it means

learning the physics and ergonomics of light. Primary and secondary education are boosting scientific knowledge and many educators find it necessary and ethical to integrate scientific literacy in design studies, but science remains a thorny issue in liberal arts education: architectural schools have durably cultivated the sophistication of concepts and pruned the culture of science. Yet other design disciplines are incubating innovation in inspiring programs that embrace scientific courses and processes—e.g. in the Design Lab at the University of California directed by Don Norman, a cognitive scientist known for advocating human-centered design, where teachings in cognitive ethnology and neuroscience are integral to design studies.

WALK WITH ME

This is my last column for *LD+A*. These pages have been an outlet to alert the lighting community about trends I find alarming, and to advocate for improvement in areas of lighting education such as critical thinking skills, transdisciplinary design abilities, scholarly research, social engagement and research funding for part-time teaching scholars.

I am passionate about the topics I covered and I walk the talk. As I conclude my service as education columnist, I hope you will walk with me.

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