Where Design is Heading

The growing consensus among design educators and academic researchers by Terry Winograd

For the past couple of years we’ve been starting up an exciting venture in design education called the Hasso Plattner Institute for Design at Stanford (known as the “d.school”). It is imbued with the spirit of design through iterative prototyping and we’re developing and changing our ideas as we go. We want to teach “design thinking” to students across a wide range of disciplines in an academic setting. From our talks with many other designers and design educators, we know that we are far from alone. Design education is in the midst of big changes, provoked not just by new technologies and media, but also by a shifting view of the role that design and designers have in society.

Ambidextrous asked a few prominent design educators whose programs are moving in new directions to muse about the future of design education. We were fascinated by both the shared directions and diversity of views.

How do I think design is changing? I see it moving away from a hardware centered focus, and toward experiences.

–Bernie Roth

This structure of bounded, licensed professions has served fairly effectively to guarantee competence and integrity of practitioners in markets where buyers of design services have no other good way to judge, but it is now obsolete and increasingly counterproductive. Often you don’t know, at the outset, whether the solution will be a building, a piece of software, a communication system, some combination, or something else entirely.

–Bill Mitchell

Design is being recognized as a discipline that can play a role in many different contexts—from designing businesses to designing organizations. Service design is emerging as a critical force.

–Shelley Evenson

One major issue is whether design is a profession or whether it is an academic discipline, which is what a number of designers would like. Today, the part of design that is most easy to pass academic muster is that of criticism and history. Design methods? A theory of design? A science of design? There are fledgling efforts, but miniscule. Mostly, design is taught as an art form, with mentors and studios. It is not yet an academic discipline.

–Don Norman

The big goal of design research and education is to get really useful general principles where they exist, and to know where they don’t exist.

–Bernie Roth
Rather than being driven by a market- or business-based brief, designers can learn to work (and gain power) from a broader cultural and social base. A core role of design as a muscular occupation is the ability to identify opportunity spaces where design can create delight, eliminate pain or instantiate progressive values through cultural intervention.

—Brenda Laurel

Computation. Fabrication. Complexity. Sustainability. These are what is changing design. Computation has opened new design spaces in the mind. Fabrication opens up new languages for design—the logic of what is feasible changes when cost of variety is near the cost of standard component. Mastering complexity is critical in contemporary practice. And sustainability is becoming a major constraint on change; we simply cannot follow exponential growth in ideas with an exponential growth in consumption.

—Robert Woodbury

Currently design research focuses on history, criticism, and some theory. These are all critically important to the design community, but we need more. We need research that produces design exemplars because this is what communicates most strongly to the design community.

—John Zimmerman

We need to develop both Design Criticism—what is needed to understand and interpret present ways of being—and Critical Design—what is needed to ensure that our actions lead to sustainable future ways of being.

—Eli Blevis

The continuing dominance of the consultancy model for design work turns design into service for others and transforms “hours-worked” into the economic currency. If instead designers focused more on making their own products, on creating new and leading legacy product companies, then the focus moves to making good and successful things.

—I would say the big goal is to foster the next generation to be non-commercially minded in an increasingly commercialized world.

—John Maeda.

While the typical themes for design studios of the 1980s and 1990s were elite topics like museums and villas, today, the design of topics such as green and sustainable environments, low-tech emergency shelters for refugees, mobile microbanking architecture for the poor, are moving to the foreground.

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In almost all professions the new ideas emerge from research labs in graduate schools and are then transferred to practitioners. In general, graduate schools of design have been avoiding this role, instead acting like advanced undergraduate schools where they end up trying to catch up to where the profession was ten years ago.

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Research is needed in areas like: faster and deeper ways of doing user observation, a theory of prototyping, the link between the creation of user value and economic value, a theory of interaction design— and the list goes on.

—Patrick Whitney

We need to stress the creation of models and prototypes as ways of codifying knowledge.

—Jodi Forlizzi

The design studio is creative, collaborative, and most-of-all highly material— that is the space is dominated by material objects, surfaces for sharing ideas and inspiration, making ideas and activities visible and tangible. . . . [It] serves as collective memory and external cognition for the design teams. There is a beehive effect in a fully functional design studio.

—Eli Blevis

One big problem is the gap between the designer’s view of what is obvious in usability and the lay person’s view.

—Bernie Roth

Ideas that were quite recently seen as radical (e.g. use of green materials, sustainable methods, and smart energy design) have quite suddenly (and wonderfully) become mainstream.

—Brenda Laurel

The traditional brainstorming techniques (used by IDEO, for example) have been shown repeatedly to be less effective than modified creative methods, but this knowledge seems to remain in the hands of the scholars and has not passed into the profession.

—Don Norman

Looking back to the fusion of art and craft, you’d have to say that “design” is the original hybrid discipline. Design is uniquely positioned to assimilate and integrate all sorts of practices in order to save the world.

—John Maeda.

I prefer the model of the theatrical ensemble. Team members all have highly developed skills -- that’s what gets them a seat at the table. But the spirit is that anyone can comment on or question anything (no restriction to their established domains of expertise), and that there are no out-of-bounds, “stupid” questions.

—Bill Mitchell

The single most important agenda for design education in the future, in my opinion, will be about design leadership, i.e. future designers must learn not only to work in a team, but also, and most importantly, develop abilities to lead design teams, articulate a strong vision and coordinate different specialists from different disciplines across different locations towards a coherent goal.

—Jef Huang

If we could find good methods, measures and ways of communicating we could all benefit from the research. So much of the professional time is wasted reinventing.

—Shelley Evenson

We need to become more skilled at co-production. Designers are not designing the events, products or services—they are designing the resources for others to design with.

—Jodi Forlizzi
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