

Do design schools support research?

schoolsurvey: 2005

Research—Its Role in North American Design Education

By Laurie Manfra

In reporting on architecture and design, we have found that notable advancements often result from systematic inquiry: a study of visual perception might produce a new wayfinding system, or an analysis of the human body may lead to an innovative task chair. But we also realize that design is essentially an intuitive, not a methodical, process. So where does *applied* research—a formal investigation to find a solution to a specific practical problem—fit in?

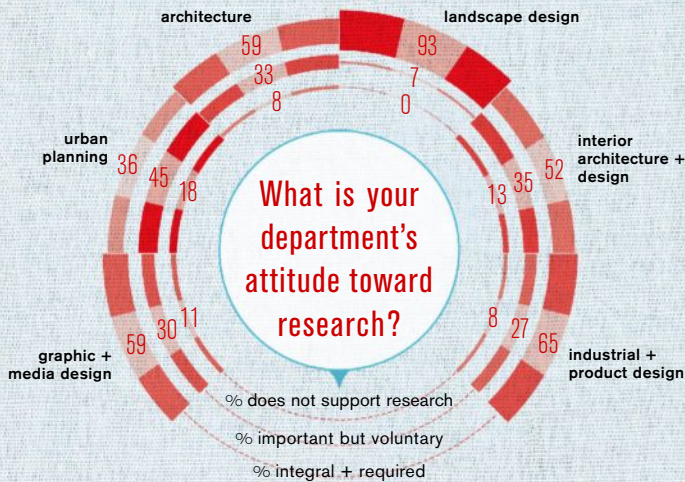
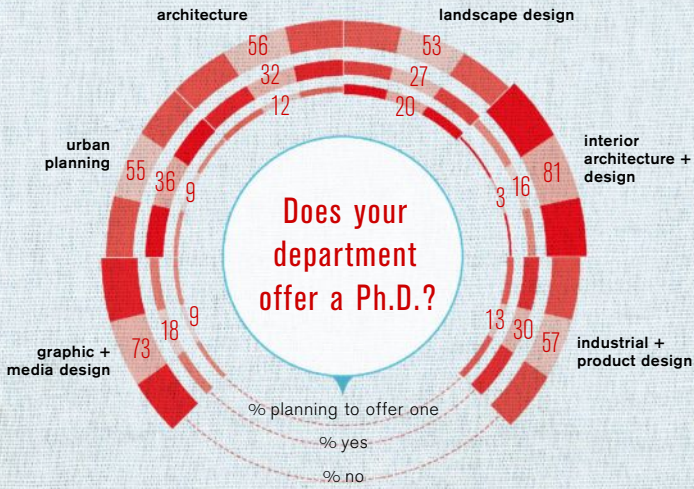
We dedicated our annual education survey to answering this question and examining how research is perceived and carried out in the design fields. Between April 6 and May 20, 1,051 design educators, students, and practitioners in six disciplines completed our Web-based survey, which in addition to posing general questions asked respondents to give a definition of design research and cite recent projects that have incorporated it. Their answers revealed that while most academics and professionals consider research fundamental to their work, opinions of what counts as research vary widely.

Designers in all disciplines list surfing the Internet as one method; other cited methods include canvassing materials and finishes or looking at historic precedents. Critical-thinking exercises and history classes qualify at the undergraduate level. “The research that my students do can best be described as trolling the ocean of information with nets of their own construction,” one respondent remarks.

Where applied research *is* being done, at the graduate and professional levels, quality and consistency seem to be lacking. “When I compare the research that my sister’s chemistry students do to what my design students do, my approach seems like a desperate attempt to pump education into a vacuum rather than an orderly process based on shared knowledge,” one frustrated educator says.

Look at these pages to find out how design research is being funded, where findings are published, and what areas are in need of further study. You can go deeper into the results on the *Metropolis* Web site.

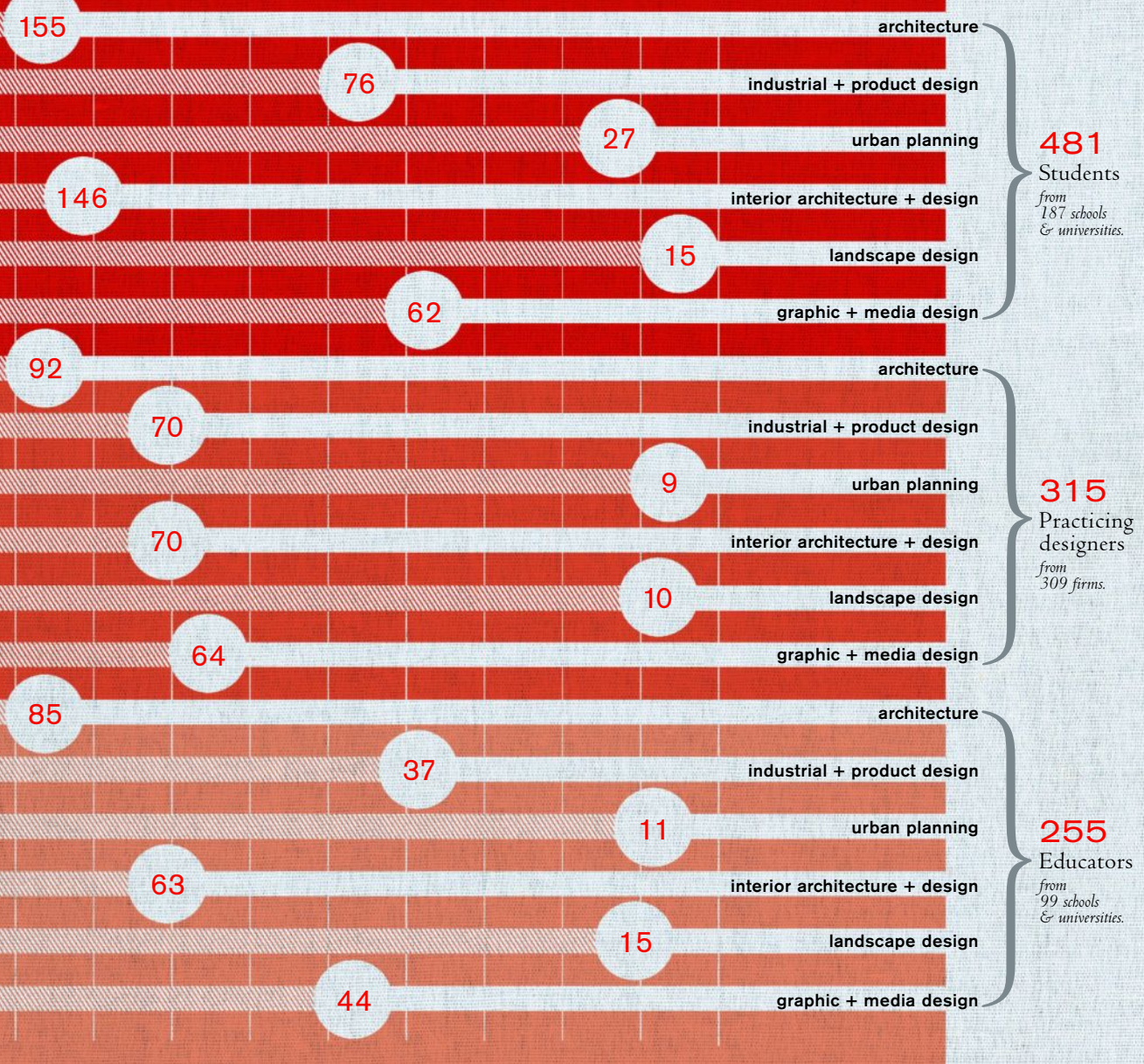
□ www.metropolismag.com



Are American design schools dedicated to research?



WHO TOOK THIS YEAR'S SURVEY?



65 percent of department chairs said that research is an integral and required part of the curriculum.

81 percent of practicing designers engage in research on a regular basis.

While most design academics and professionals consider research fundamental to their work, opinions of what counts as research vary widely.

Information analysis and graphics by Robert Pietrusko and Andrew Prinz of Simultaneous Workshop for *Metropolis*

Are design schools sharing their research?

How accessible are the results of design research at your institution?

At other institutions?

very accessible
and easy to find

often accessible

sometimes
accessible

accessible
with effort

inaccessible
and hard to find

% STUDENTS

% TEACHERS

% STUDENTS + TEACHERS

7 7 10 16 8 4 10 13 9 8 2 4

8 3 7 3 3 3

15 40 21 21 24 26 26 20 11 5 29 15

13 23 14 10 21 16

33 33 27 15 33 31 11 40 18 30 22 36

34 49 31 46 37 44

34 20 31 37 24 26 28 27 46 30 34 33

34 27 40 27 31 28

11 0 11 11 11 12 25 0 16 27 14 13

11 33 8 14 8 9

urban planning
landscape design
graphic + media design
industrial + product design
interior architecture + design
architecture

Approximately 80 percent of students and teachers said that research results are accessible but not easy to find at their schools. Nearly 90 percent gave a similar response when asked about the accessibility of other schools' research.

WHERE IS DESIGN RESEARCH PUBLISHED?



A



B



C



D



E



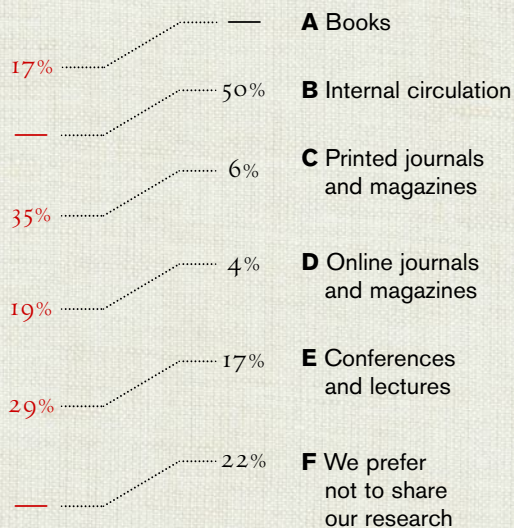
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255

315

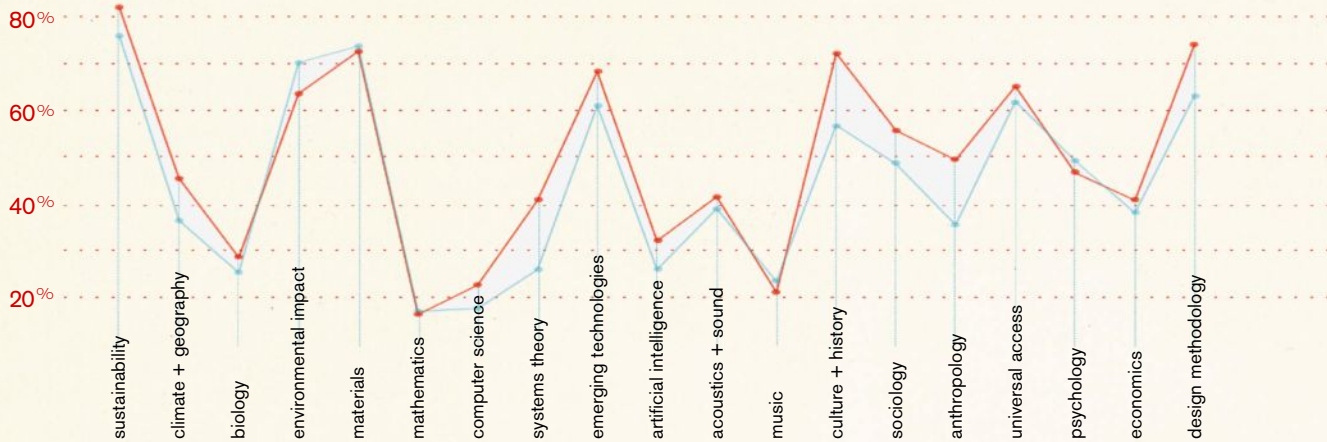
TEACHERS + DESIGNERS were asked:

How do you disseminate findings?



Which of the following areas should undergo extensive design research?

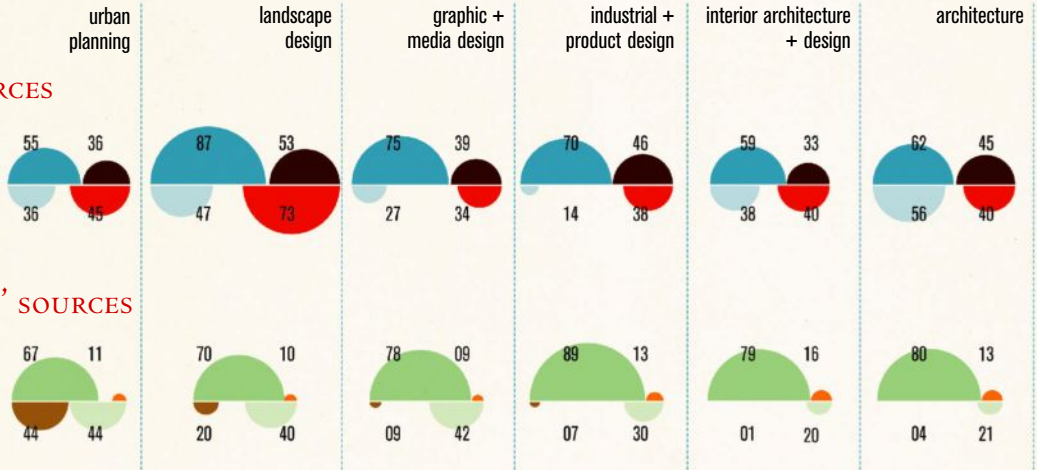
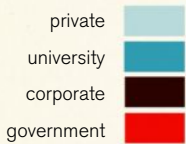
Teachers and Practicing Designers place sustainability, materials, and design methodologies at the top of the list, but the data contains some telling inconsistencies. Responses to sustainability were high, but systems theory low, suggesting that those who teach and practice design do not recognize the interdependence of these fields. Similar patterns were evident in responses to universal access compared to anthropology and biology, and emerging technologies compared to artificial intelligence and computer science.



HOW DO SCHOOLS AND DESIGN FIRMS FUND RESEARCH?

Respondents could select more than one source

% TEACHERS SOURCES



% PRACTITIONERS' SOURCES



The university funds the majority of academic design research, but designers in professional practice are left to fend for themselves. More government grants go to urban planning and landscape design than any other discipline.

How is academic research funded?

35% university grants

22% corporate grants

22% government grants

21% private grants

81 percent of practicing designers fund their own research.

70 percent don't collaborate with students on research that is important to their business.



Design research is work or play in any topic that will reveal a new technique or approach.

Using designed objects or interiors to gain insight into cultural and social phenomena.

The discovery and documentation of how human behavior can be modified through design.

The exploration of a design concept not yet rooted in mainstream theory or practice.

The study of how people interact with the built environment in historical, cultural, and sociological contexts.

How do **students** + teachers define design research?



Unlike research in the sciences, which is thorough and exhaustive, much of what is considered design research is a haphazard compiling of philosophical one-liners and ideas grabbed from linguists and cultural critics.

The process of traveling, recording, mapping, and documenting through photography, collage, drawing, and the testing of hypotheses.

Learning from past design implementations and from a careful analysis of concepts and consequences.



52 percent of architecture teachers oppose a unified theory of design.

48 percent of interior designers support a unified theory of design.

Would you and your students benefit from a unified theory of design?

