Part I: Research-Based Practice

Description
This Web site tutorial is an introduction to research methods and how you might use research in design practice. As you work through the material, you will see (1) why and how research is, and can be, used in the design process, plus (2) how research findings can be interpreted into design criteria. Both of these approaches will benefit your practice. Three parts comprise the tutorial:

Part I. Why should I, as a practitioner care about research methods?

Part II. What is the common vocabulary in research-based practice and academic research?

Part III. What methods might serve as core methods for the design process in your firm, as well as help you understand the quality of a research method that produced new knowledge that you might use in designing places?

Why should I continue reading? Why should I take this tutorial?
Knowledge of research methods is useful in any business, and the practice of design is ever evolving. Currently, changes seem embedded in our “information society.” Clients want information in addition to design. They want to know the substance of decisions, the “why” behind what you designed. While the design community has long held that programming is design research, researchers maintain that design research in its academic interpretation complements not only programming but other stages of the design process as well. Think of the two as partners where programming interpretations are site specific and design research adds a universal understanding of the issues and problems addressed in the project.

When these processes merge, new energy and new knowledge come to a project. Design research enhances your credibility as a reflective planner/designer. Design research provides you with new ways to tell the story and sell your designs. Equally, clients and users see new value in such a service. The design itself emerges in a new light when you weigh the universal and theoretical explanation with the specific, individual case.

This tutorial does not attempt to explain everything there is to know about design research. We simply want you to understand the context and opportunity available to you when choosing to use research. We want to “demystify” research and arrive at commonly held definitions of research and have you become more skilled and comfortable in using research methods in all phases of the design process.

Tutorial Objectives
1. To develop an understanding of the context for design research in design practice.
2. To develop a vocabulary of research terms to aid in the understanding of research articles and InformeDesign’s Research Summaries.
3. To develop an understanding of the relationship between research methods and their applicability to practice.
The Best Way to Use this Tutorial

First, read each section. Second, reflect upon your own practice and work. Think of a project that you recently completed and ask yourself the following questions:

- What knowledge did I need to solve the problems in this project?
- What was paramount to the client? What was paramount to our design team? What was paramount to the site?
- Did I use or provide substantive information as well as produce a great design?
- What other resources and information did I use to answer the questions I had?
- Did I consider the source of that information or the quality of how my sources got their information?
- At any point, was I stuck, and could I have used additional information to point me in a new direction?
- At any point, did I need a reality check—a way of testing my ideas against knowledge about the topic that others have found?

Next, re-read the section. Finally, take an issue that you dealt with in the project and go into InformeDesign’s Research Summaries to read other research and see the design criteria that were transformed from the work. Does this work support your solution? Are the articles clearer to you because you read the tutorial? We hope you find the tutorial not only interesting, but that it will assist you to better utilize the research presented on InformeDesign’s Web site database.

Prerequisite

A curious mind and interest in design are necessary!
have expanded. At the same time, the expectations of the client have grown.

In research, the knowledge of a systems approach to environmental design is well established, requiring collaboration and a team approach. This brings experts from several fields together and their shared knowledge, vocabulary, and skills develop potential changes in the scope of projects that are awarded.

Finally, the expectation of continuing education for professionals places practitioners in learning and teaching roles throughout their careers. It suggests that the designer is not just a consumer of information, but becomes an inquirer. The client, likewise, places a new expectation on the designer to be knowledgeable, to be current, and to be able to deliver. A climate is created that provides an opportunity to reflect; to find new facts, models and ideas; to renew oneself; and to teach the client about the substance of the design. This offers a healthy environment of open dialogue and fresh discovery for clients and designers alike.

B. Broader understanding of the client and concern for the user.

As previously stated, the interest in the view of the client and user has become the norm. Whether this is a function of the consumer movement, the development of business strategies such as strategic planning, management by objectives, or new market research, the reality exists that competition demands that you determine your practice niche and understand the needs, mission, and values of clients. In turn, practitioners become more clinical, e.g., need to see symptoms of problems; need to listen; need to observe and test; and need to diagnose, evaluate, and provide resolutions.

Such a model further suggests that practitioners may be an initiator of issues to be researched, or they might act upon research findings that are already published. Diagnosis has a built-in expectation that one reflects upon known facts, research findings, interventions, and prevention treatments to predict a better solution.

C. Need to be informed.

As mentioned in the rationale for this tutorial, our society is no longer an industrial society, but is an informational society. Society, its businesses, institutions, associations, and citizens have both knowledge of the world (a global view) as well as an understanding of the local experience. You might think of this as reading both the New York Times and the local newspaper, or as listening to MSNBC news on a topic and then seeing what someone puts on their own Web site concerning the matter. With these technology networks, barriers to information break down, and individuals may move across disciplinary lines to share and learn information.

You can see this happening all around us. New design hybrids and new knowledge integration opportunities are occurring. Even higher education is changing
from a shaft of specialized knowledge to a matrix that has depth and relationships across areas of knowledge. The liberal arts approach plus a thorough professional knowledge is becoming even more necessary to understand our world. For example, chemical engineering is now chemical and biological engineering. An engineer in that field needs to see the biological and chemical relationships together.

D. Practitioners’ views of design and the hybrid model of reflective practice.

New hybrids (as mentioned above) are occurring in architecture, interior design, and related areas. The term “research-based” practice is being used by many design practitioners. Some writers and practitioners make reference to evidenced-based practice, or scholarly practice, or practice-based research. What is apparent in all of these terms is the desire to close the gap between research and practice, to see practice as a contributing partner to research about the field, and to have a level of discussion and reflection that moves practice from a vocational skill model to a skill/knowledge model where choices and directions reflect theory and researchable findings.

E. A balance between research and design.

This hybrid brings about a balance among use of research, use of professional experience, and use of creativity. Knowing more about research will help you know when and how to use research in your practice. It can be used in all stages of a project: pre-design, programming, schematic design, design development, and even construction documents and contract administration. However, research is more beneficial in the earlier stages so your initial design solution can be based on evidence.

Research, according to researchers, is systematic discovery of knowledge or a systematic inquiry. Researchers and educators often limit their use of research literature to articles that appear in refereed journals, research reports from foundations, or conference proceedings that are based on physical or social scientific research.

Design practitioners define research in a more applied way, the acquisition of information that assists in the development of a design solution. They use many different sources of information including manufacturers’ data, representatives’ knowledge, practitioner periodicals, or professional organization studies. A problem that can occur with the practitioners’ use of these information sources is that they can have product bias, incomplete analysis, or inappropriate data collection methods.

Design researchers try to avoid these issues by following prescribed data collection and analysis methods, basing their inquiry on theory, and reporting the results objectively in scholarly journals. Yet, this research is often inaccessible to design practitioners and written in a language that is unfriendly to them. Also, the findings are seldom translated into design criteria, which would allow practitioners to apply them in a design problem as evidence-based design solutions.
E. Translating design research findings into design criteria.

There are some research studies from academic sources that do take findings and interpret them into design criteria. The intent of this work speaks to the need in the field to “make the research work” for you. In addition, there is a number of methods and an increased acceptance in higher education of community-based research, often termed “action research.” Many times, there has been a desire to take research and get it into the hands of those who can make a difference in our social settings, but the vehicles for doing so were unclear. InformeDesign provides such a vehicle. It is built upon the premise that the field wants solid, theory-based research, while the field also wants the information in a form that speaks to practice. The time for translation has arrived. InformeDesign provides this translation of scholarly research findings into practitioner-friendly Research Summaries.

Continue this three-part tutorial and reacquaint yourself with the research vocabulary used by researchers. This will help you understand the research methods used in the Research Summaries and see for yourself the value added to your design practice by being a user of InformeDesign.

Authors:
Denise Guerin, Ph.D.
Department of Design, Housing, and Apparel
University of Minnesota

Joy Dohr, Ph.D.
Department of Environment, Textiles, and Design
University of Wisconsin-Madison

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For additional references and vocabulary words, go to the InformeDesign Glossary of Terms. References to research-related books can be found under the Glossary of Terms under the Reference List link.

The Mission
The Mission of InformeDesign is to facilitate interior designers’ use of current, research-based information as a decision-making tool in the design process, thereby integrating research and practice.