

Boling Research Group

Visual Elements of Instruction and Design Pedagogy

Purpose of the Group

To plan and conduct research in two related areas:

- Visual elements of instruction, including literacy for learning with visuals
- Design pedagogy in instructional systems, including the nature of design and design knowledge

Functions of the Group

Assemble and evolve our own knowledge base

Evolve and carry out a research agenda

Disseminate results of our work

Support emergence of research agendas for members of the group

Manage data archives

Membership Types

Lurker: first semester student deciding on primary focus; required to master the basic readings and participate in adding to the knowledge base

Member: participate in research projects

Senior member: mentor others; lead research projects; manage own research agenda

Application Process

After one semester as a lurker, individuals who want to join the group should submit a statement of research interests for review.

Requirements

Learn about current knowledge in the area

Produce short papers summarizing new additions to knowledge base

Work on one or more research projects as assigned

Meet with the research group every week

Project Description

For the past year the group has been reading intensively in the area of visual elements for instruction, and carrying out a set of related research projects aimed at our current central question, "What are the processes whereby learners make meaning out of instructional illustrations?" We have just completed and published a multi-year project establishing that viewers of simple illustrations do not necessarily interpret their meaning as intended by the designer, even when they recognize the content of the images. Our current studies include investigations of practicing teachers' use of visuals in teaching, observation of learners making meaning from instructional illustrations, analysis of the visual content of textbooks from around the world, and the design issues addressed by novices when they produce public information displays.

The second major focus of the group is design pedagogy and the nature of design knowledge. Our reading program is underway in this area, as are the design of an experimental studio course and conceptual presentations on the topic at several conferences.