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i-Conference 2005 – The essentials

The scope of i-schools and the definition of information studies. How the structure of the field creates interaction points with other disciplines

Definition of information studies

Information studies is concerned (1) with research into the nature of information, its creation, organization, and use, and (2) with the design of systems that facilitate information sharing and access and information assimilation, learning, and processing. In an interdisciplinary approach it brings together and advances basic thinking about the structure of knowledge, the structure of problems, approaches to problem solving and decision making, human information processing, and the functioning of social groups and organizations, creating a new synthesis. It studies information needs and the nature and processes of intellectual and physical interaction between people and information, how presentations in many formats inform, engage the mind, and entertain; it studies information for a wide range of audiences and user tasks. Information studies combines conceptual structures with appropriate technology to create systems for retrieving and communicating information. In addressing these research and design issues, information studies draws on many fields:

- mathematics and statistics:
- computer science, especially data structures and search algorithms;
- human-computer interaction and computer-supported collaborative work;
- cognitive science with the main constituents artificial intelligence, psychology (especially cognitive psychology), linguistics and human language technology, and philosophy (especially epistemology and philosophy of knowledge);
- communication, journalism, and literary analysis;
- graphic design and art more broadly;
- education;
- sociology and anthropology, including ethnographic and social networking methodologies;
- economics and management, public policy.

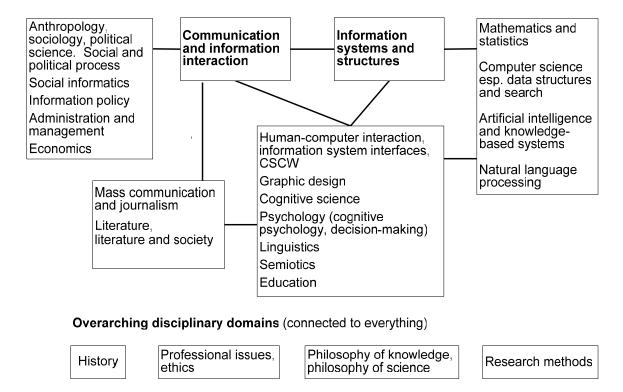
The structure of the field: disciplinary domains and context domains (Figure 1)

The field is structured along two dimensions: disciplinary domains and context domains. A **disciplinary domain** is characterized by a set of concepts, approaches, and techniques that are applicable across information contexts;. A **context domain** adapts, applies, and integrates these concepts, approaches, and techniques to a specific institution, application, subject area, user group, or type of material; the objective is to develop information systems and practices within the chosen information context.

Both types of domain are important in information studies and for linking i-schools to other disciplines and units in the university.

Figure 1. Domains in and around information studies

Disciplinary domains



Context domains

Information contexts can be established or described according to many dimensions; for example:

- Groups or organizations using information, such as children, scholars, clinicians, and organizations serving them, such as school library media centers, academic libraries, government libraries, business information systems, corporate intranet
- Origin of information, such as government information or corporate information
- Subject disciplines, such as medicine or art, and the subdisciplines dealing with information, such as medical informatics, bioinformatics, agroinformatics, legal informatics, arts informatics
- Technical means of providing access, such as paper, digital, print, video, as handled in paper libraries and digital libraries
- Types of information, such as bibliographic data, multimedia, electronic business records, patient records
- Types of organizations providing information, such as libraries, archives, museums, intranets, data centers
- Uses of information, such as research, decision making, learning.