Reimagining the Information Profession
iSchools, The Way Forward?

Shalini R. Urs

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Looking Back,
TO LOOK FORWARD TO THE FUTURE

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Circa 1990

- "As our society moves more deeply into the information age, a time in which knowledge workers weave our future in the midst of a deluge of information, it is important to understand these people and their social roles?" (Richard Mason)

- Information professionals apply their special knowledge about information and information technology with one basic purpose in mind: to get the right information from the right source to the right client at the right time in the form most suitable for the use to which it is to be put and at a cost that is justified by its use (Mission Statement)
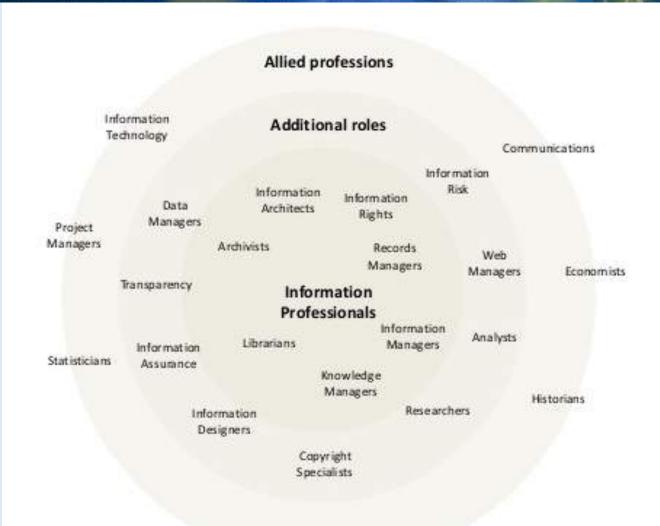
Mason, Richard O. "What Is an Information Professional?" *Journal of Education for Library and Information Science*, vol. 31, no. 2, 1990, pp. 122–138.
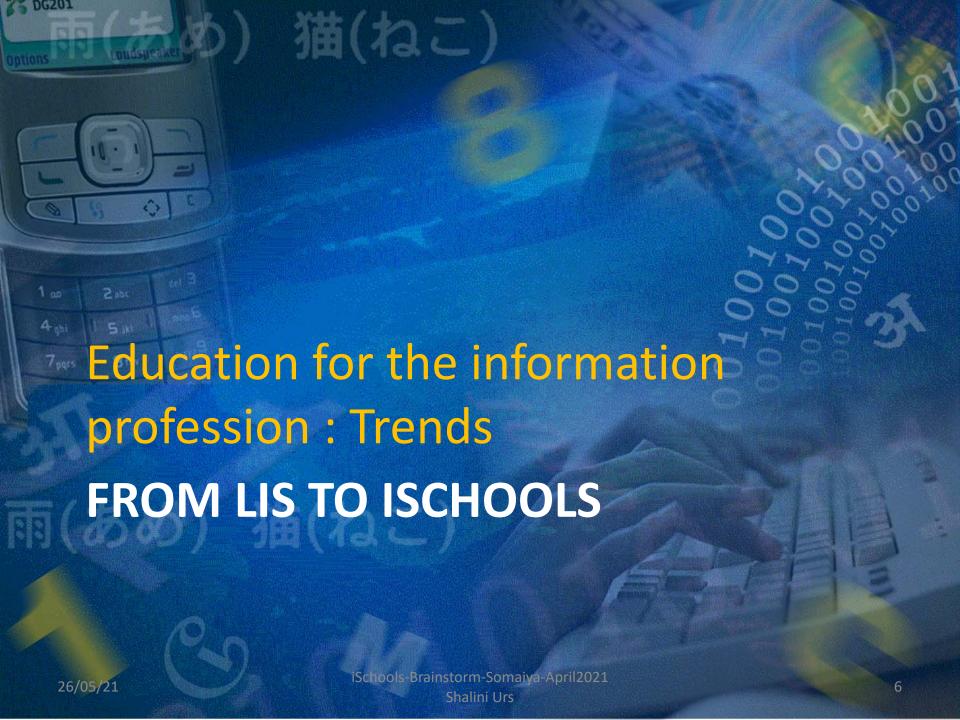
Information Careers in 1990

- This mission statement is to be discussed in light of seven illustrative information careers: account, archivist, librarian, records manager, information systems analyst (MIS), management scientist, and museum curator.

- In addition to possessing technical knowledge, an information professional must render judgments in situations that are unique, uncertain, equivocal, and laden with value conflicts. Thus, ethics joins knowledge, methods, and history as a necessary component of the information professions.

Challenges of defining the boundaries of information profession : Information professionals, need to keep evolving, adapting, innovating and advocating for the value and impact of products and services delivered.

Allied professions

Additional roles

Information Technology

Communications

Information Risk

Information Architects

Information Rights

Data Managers

Project Managers

Archivists

Records Managers

Web Managers

Economists

Transparency

Information Professionals

Statisticians

Information Assurance

Librarians

Information Managers

Analysts

Knowledge Managers

Historians

Information Designers

Researchers

Copyright Specialists

Education for the information profession : Trends

FROM LIS TO ISCHOOLS

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Reimagining LIS Education

1
- Content/Curriculum Changes

2
- Structural Changes in Programs and Program Delivery

3
- A new paradigm for LIS–iSchools?

KALIPER Project

- KALIPER—the Kellogg–ALISE Information Professions and Education Renewal project—is the most extensive examination of the library and information science (LIS) curriculum since the 1923 Williamson Report.

- KALIPER was ALISE's ground breaking two-year project, conducted between 1998 and 2000 by a team of twenty scholars from thirteen programs in the U.S., Canada, and England.

- The purpose of the KALIPER project was to analyze the nature and extent of major curricular change in LIS education.

- The KALIPER scholars found a vibrant, dynamic, changing field that is undertaking an array of initiatives.

KALIPER Report

- Six trends are shaping curricular change in library and information science programs

- TREND #1: In addition to libraries as institutions and library-specific operations, Library and Information Science (LIS) curricula are addressing broad- based information environments and information problems.

- TREND #2: While LIS curricula continue to incorporate perspectives from other disciplines, a distinct core has taken shape that is predominantly user-centered.

(KALIPER : Kellogg–ALISE Information Professions and Education Renewal project)

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ASSOCIATION FOR
LIBRARY AND
INFORMATION
SCIENCE
EDUCATION

KALIPER Report (2000)

- **TREND #3:** LIS schools and programs are increasing the investment and infusion of information technology into their curricula.

- **TREND #4:** LIS schools and programs are experimenting with the structure of specialization within the curriculum.

- **TREND #5:** LIS schools and programs are offering instruction in different formats to provide students with more flexibility.

- **TREND #6:** LIS schools and programs are expanding their curricula by offering related degrees at the undergraduate, master's, and doctoral levels.

iSchool Movement : Origins and Orientations

- iSchools are considered as a strategic response of the academia to the twin challenges of the Big Data/Data Management engendered by the Information Revolution post Internet era and the changing landscapes of the academia.

- An effort to put the 'I" at the Centre stage of IT and move beyond Technology. It is Information and Technology and not just IT

- The central axial principle of iSchools is – connecting 'Information"; "Technology"; and "People/Society"

iSchools: Origins

Evolution of the iSchool movement

Year	Event	Members
1988	Gang of Three (G3)	Pittsburgh, Syracuse, Drexel
1990	Gang of Four (G4)	Pittsburgh, Syracuse, Drexel, Rutgers
2001	Gang of Five (G5)	Pittsburgh, Syracuse, Drexel, Washington, Michigan
2003	Gang of Ten (G10)	G5, Illinois, North Caroline, Florida State, Indiana, Texas
2005	iCaucus/iConference	G10, Berkeley, Irvine, UCLA, Georgia Tech, Indiana (LIS), Maryland, Toronto, Rutgers, Penn State

Although iSchools differentiate themselves from traditional LIS schools, they are deeply rooted in LIS. Majority of them include LIS in their programs

F. Shu and P. Mongeon :" The evolution of iSchool movement (1988–2013): A bibliometric view". *Education for Information, November 2016*

Emergence of iSchools: significant milestones

- 1964: The Graduate Library School, University of Pittsburgh became the Graduate School of Library and Information Sciences (first to add the term information)

- 1968: The new University of California Irvine campus established a "proto-school" called Information and Computer Science

- 1974: Syracuse rechristened the School of Library Science as the School of Information Studies (first instance of dropping the Library word.)

- 1996: The University of Pittsburgh rechristened its school as the School of Information Sciences, and the University of Michigan officially sanctioned the School of Information.

The University of Michigan School of information

- In 1992 University of Michigan appointed well known computer scientist and innovator Dan Atkins to be dean of the School of Information and Library Studies (SILS).

- The W. K. Kellogg Foundation invested, over more than $15 million in the school and the information movement in general.

- Under a Kellogg-funded initiative called CRISTAL-ED (Coalition on Reinventing Information Science, Technology, and Library Education, Dan Atkins gathered leading educators and thinkers from the library field and the broader information world to strategize the transformation of the SILS into something broader leading to the establishment of School of Information in 1996

Michigan used the new moniker-- Information without science or studies which were the most common forms. A first. A school without the qualifying noun such as 'studies,' 'science,' or 'management.'

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Olson, G. and Grudin, J. "The Information School Phenomenon." *interactions* 16, no. 2 (2009): 15--19.

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Alternative Paths : Berkeley, Indiana, and Penn State

- The University of California at Berkeley : In 1994 recruited noted economist Hal Varian from Michigan, to be dean of the new School of Information Management and Systems and changed its name to School of Information in 2006.

- Indiana and Pennsylvania State University adopted the start-up approach: In 1999, Indiana started its School of Informatics and was independent of its School of Library and Information Science; Penn State's College of Information Sciences and Technology coexisted alongside its Department of Computer Science.

- University of California, Irving: Donald Bren School of Information and Computer Sciences is another very different model—with Computer Science and Informatics as two separate department within the school

- Start-up mode.

- Co-existence of related departments : CS; LIS; Informatics

iSchool members are spread across the world

North America (55)

Europe (34)

Asia-Pacific (31)

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iSchools—a count of schools retaining the Word 'library'

Region	Number of iSchools	Number of Schools with the word Library in their names	Percentage
North America (includes Brazil and Columbia)	55	6	9%
Europe (Includes Turkey and Uganda)	34	4	11%
Asia-Pacific	31	11	34%

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iSchools and their Categories
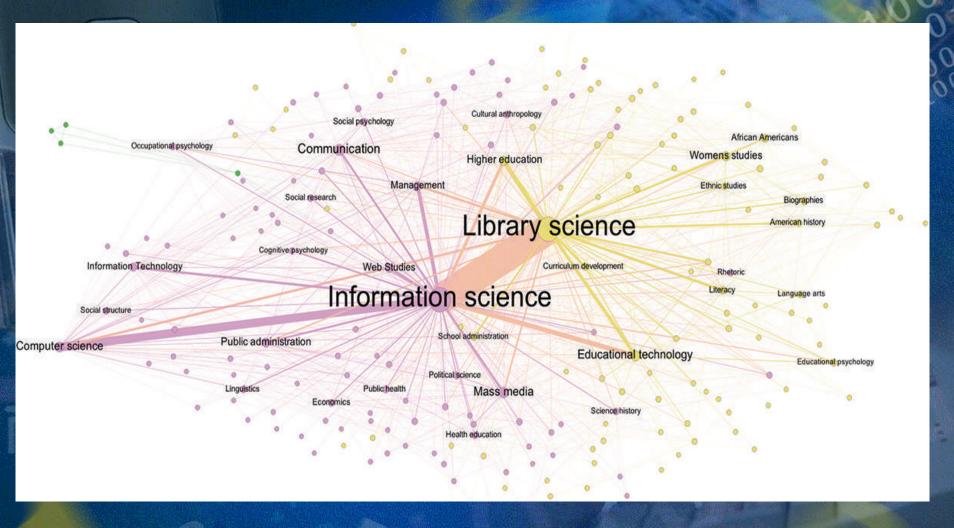
- The three categories the iSchools belong to are: LIS; CS; and Business Management

Table 1. iSchools categories (* indicates that the school is accredited by the American Library Association)
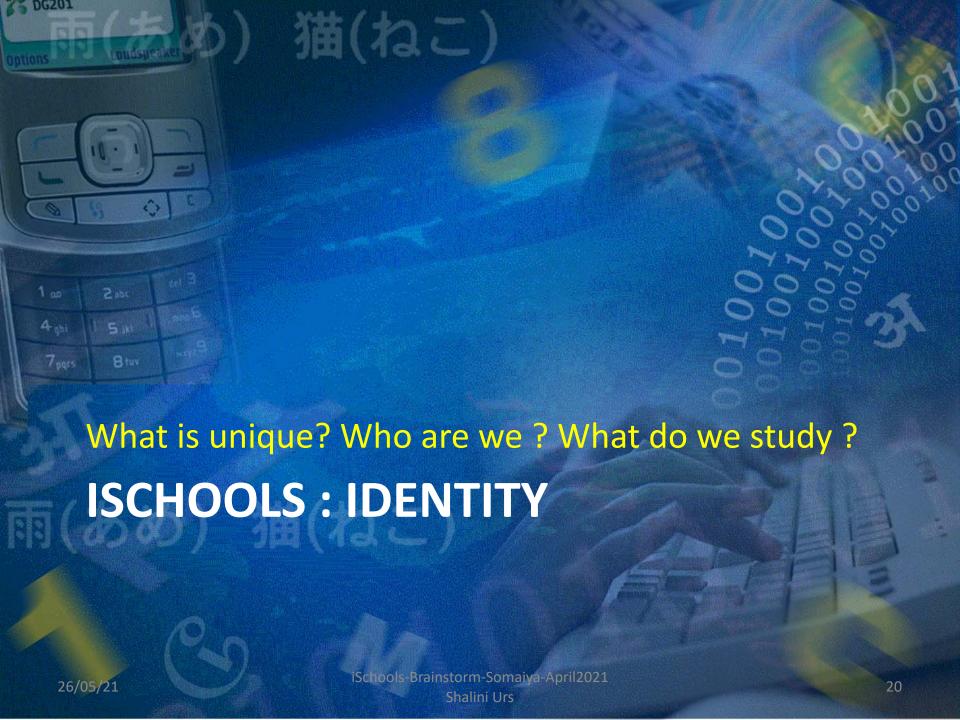
Category	No.	School	Category	No.	School
Library and Information Science (LIS iSchools)	1*	University of California, Los Angeles	Library and Information Science (LIS iSchools)	15*	University of Toronto (Canada)
	2*	Drexel University		16	Wuhan University (China)
	3*	Florida State University		17	Humboldt-Universität zu Berlin (Germany)
	4*	University of Illinois		18	Royal School of Library and Information Science (Denmark)
	5*	Indiana University (School of Library and Information Science)		19	University of Sheffield (UK)
	6*	University of Maryland		20	University of California, Irvine
	7*	University of Michigan		21	Georgia Institute of Technology
	8*	University of North Carolina at Chapel Hill	Computer Science (CS iSchools)	22	Indiana University (School of Informatics and Computing)
	9*	University of North Texas		23	The Pennsylvania State University
	10*	University of Pittsburgh		24	Carnegie Mellon University
	11*	Rutgers, the State University of New Jersey		25	University of California, Berkeley
	12*	Syracuse University	Management (BM iSchools)	26	University of Maryland, Baltimore County
	13*	University of Texas, Austin		27	Singapore Management University (Singapore)
	14*	University of Washington			

ISchools eXperts Samvada April 2022
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Co-occurrence analysis of research interests and assignments to disciplines

F. Shu and P. Mongeon :" The evolution of iSchool movement (1988–2013): A bibliometric view
Education for Information, November 2016

What is unique? Who are we ? What do we study ?
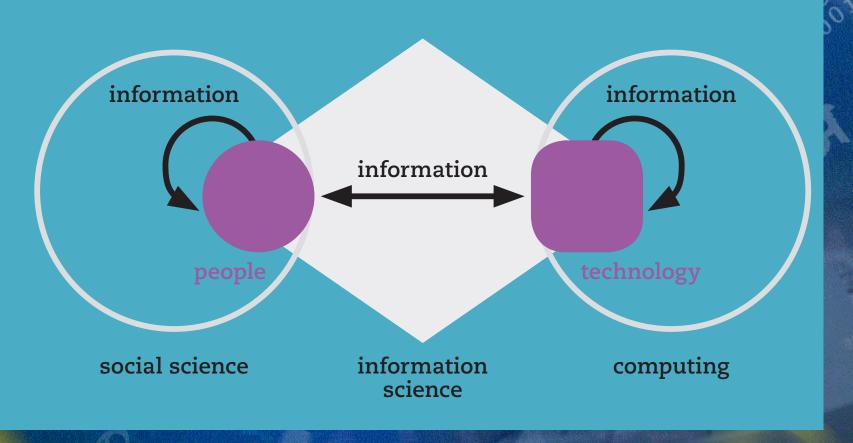
ISCHOOLS : IDENTITY

The field of Information or the iField

- Three young faculty of an iSchool raised this fundamental question: What should they (faculty of iSchool) do?

- And go on to answer: One thing seems clear: It is not enough to answer these questions simply by saying, "We study information."

- "For starters, there is no such thing as an informationless field of study, degree, professor, or student.

- By trying to claim "information" as our own, we may alienate (and mystify) faculty and students from other disciplines.

- "Another problem is that non-academics regard information as both obvious and confusing—a bad combination. It is obvious in that people have experienced having or lacking information"

Source : Wobbrock, J., Ko, AJ., Kientz, JA. "Reflections on the Future of iSchools from Inspired Junior Faculty." *Interactions 16, NO.5 (2009)*

Intersection of People and Technology

Source : Wobbrock, J., Ko, AJ., Kientz, JA. "Reflections on the Future of iSchools from Inspired Junior Faculty." *Interactions 16, NO.5 (2009)*

My definition of information

- Information is that " that changes the cognitive structure of individuals" and is caused by "interactions within and outside one's own cognition"

- This definition dove tails with the Distributed Cognition (DCog)--a theoretical and methodological framework developed by Hutchins (1995) explicating cognitive activities as embodied and situated within the settings in which they occur.

- Distributed cognition is an approach that deploys models of the extended mind by taking as the fundamental unit of analysis "a collection of individuals and artefacts and their relations to each other in a particular work practice".

External Cognitive Resources : People, environment Books, Computers, Devices

Social Sciences and Technologies

Interaction

Information

People (Internal Cognition)

Distributed Cognition

Information products

iField and focus of iSchools

Individual Abilities

iField : The boundaries

- There are no disciplinary boundaries for the iField. We study information from cognitive to cultural dimensions; from psychology to sociology; from information economics to information technology

- As Luciano Floridi (2011) says in his book *Philosophy of Information,* we the academics involved in the field of information, are primarily concerned with "how information should be adequately created, processed, managed, and used."

- As he notes, we also need to study what happens when "the process of information is defective."
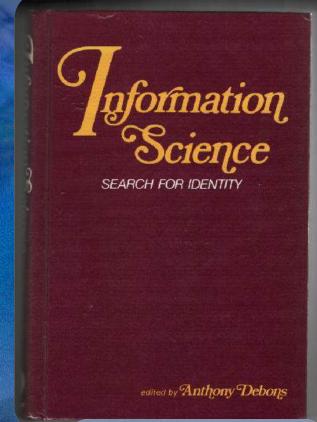
iField: **Multidisciplinarity and Emergent**

- Multidisciplinarity draws on knowledge from different disciplines to forge a new discipline of profession.

- The forging of the information science has been multidisciplinary from the very beginning

- "Emergent" means it is in the process of coming into being or becoming prominent. *The emergent* is also one that is both momentary and developing.

- iField is and will be emergent

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Information Science

Search for Identity : Proceedings of the 1972 NATO Advanced Study Institute in Information Science Held at Seven Springs, Champion, Pennsylvania, August 12-20, 1972
By Nato Advanced Study Institute in Information Science · 1974
Edited by Anthony Debons (1916-2013)

- Professor at the Pittsburgh iSchool and labelled himself an Information Scientist
- Anthony Debons is an experimental psychologist who helped develop the U.S. Air Force's command and control systems during the 1950s and early 1960s.
- An expert in psychology, engineering, and the social significance of computers. His speciality was human information processing.
- Debons earned a Ph.D. and an M.S. in Psychology from Columbia University in 1954

ISchool brainstorm-summary by Prof. Shalini Urs

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Some exemplars of

ISCHOOLS AND THEIR PROGRAM OFFERINGS

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- **University of Michigan School of Information:**
  - Bachelor of Science in Information
  - Master of Science in Information
  - Master of Health Informatics
  - Master of Applied Data Sciences
- **University of Washington School of Information**
  - Bachelor in Science both major and minor in Information (focus is on HCI)
  - Master of Library and Information Science
  - Master of Library and Information Science, Law Librarianship(meant for law graduates)
  - Master of Science in Information Management
- **UCB School of Information**
  - Master of Information Management and Systems (MIMS)
  - Master of Information and Data Science(MIDS)
  - The Master of Information and Cybersecurity
- **UCLA Department of Information Studies**
  - Master of Library & Information Science (MLIS)
  - Undergraduate courses

- **Syracuse University, School of Information Studies**
  - Bachelor's degree program in Information Management & Technology
  - Bachelor's degree program in Information Technology, Design, and Startups
  - Master's in Applied Data Sciences
  - Master's in Information Management
  - Master's in Library and Information Science
- **University of Maryland, College of Information Studies**
  - B.S in Information Science
  - Master of Information Management
  - Master of Library and Information Science
  - M.S in Human Computer Interaction
  - Master of Professional Studies in Game, Entertainment, and Media Analytics (GEM)
- **Humboldt University, Berlin School of Library and Information Science**
  - B.A in Library and Information Science
  - B.A in Information Management and Technology
  - M.A in Library and Information Management
  - M.A in Digital Data Management (Distance Mode)

- **University of Glasgow, Department of Information Studies**
  - Undergraduate Programmes:
    - Digital Media and Information Studies
  - Post Graduate Programmes:
    - Information Management and preservation
    - Managing Art and Cultural Heritage in Global Markets
    - Museum Studies
    - Slavery, Forced Migration, and Reparative Justice
- **Renmin University of China, School of Information Resource Management**
    - Bachelor's Programmes majoring in 1) Archival Studies; 2)Information Management and Systems; 3) Information Resource Management
    - Master's Programmes in 1) Archival Studies 2)Library Studies 3) Information Studies; 4) Information Resource Management ; 5) Chinese and Foreign Political Systems; 6) Information Analysis ; 7) Master of Library and Information

- Universiti Technologi MARA, Faculty of Information Management
  - Undergraduate Programmes:
    - Bachelor of Information Science (Library Management)
    - Bachelor of Information Science (Information System Management)
    - Bachelor of Information Science (Records Management)
    - Bachelor of Information Science (Resource Centre Management)
    - Bachelor of Information Science (Information Content Management)
  - Post Graduate Programmes:
    - Master of Science Information Management
    - Master of Science in Knowledge Management
    - Master in Library Science
    - Master of Science in Records & Document Management
    - Master of Science in Information Systems Management
- National Taiwan University, Department of Library and Information Science
  - B.A. In Library and Information Science
  - M.A. in Library and Information Science

- Singapore Management University School of Computing and Information Systems
  - BSc in Information Systems
  - BSc in (Information Systems) Smart-City Management and Technology
  - BSc (Computing & Law)
  - BSc Computer Science
  - Master of IT in Business
  - Master of Science in Computer Science

A cursory analysis of the Programs of iSchools reveals that the iSchools have taken one of the following directions:

A. Embrace and integrate technology into the DNA of Library and Information Science and expand their horizon and landscape and transition beyond computing.

B. Expand and Deepen the LIS by integrating with other memory institutions such as Museums and Archives and expand into digital humanities etc.

C. Expand the terrain of LIS into various aspects of 'Information' –Knowledge Management; Content Management and Media

Broad spectrum of careers

- Information architects
- Network managers
- Project managers
- Web developers
- Solution developers
- Software development engineers
- Quality assurance professionals
- IT analysts and managers Programmers

- Librarians
- Information officers
- Legislative relations
- Competitive intelligence analysts
- Knowledge management specialists
- Underwriting coordinators
- Media correspondents
- Teachers

Source : iSchools.org accessed on April 28,2021

ISiM: My experiment with iSchool

- Spurred by my interactions with iSchool movement legends like Dan Atkins (Michigan) and Ron Larson(Pittsburg), I established the first iSchool in India called the International School of Information Management (ISiM) at the University of Mysore

- I would call this experiment as a moderate success (based on many metrics) with seven batches of students passing out and doing very well—some in the technology aspects and some in the management side of 'information'

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ISiM Alumni

- Are across the disciplinary spectrum-–Computer Science to Management Science. Couple of students have gone to do PhD in computer science, and some in management science in institutions such as IISc; IIM; Dalhousie University and also are occupying faculty positions (in the Faculty of Computer Science, Dalhousie University, Canada, and another in Vellore Institute of Technology, University of Aberdeen, UK and others

- Many are in the corporate sector in companies such as HP., Capgemini and others

- ISiM had a large international student body and they are working across the world in different countries from Iran to Tanzania

Brainstorming Session

- The overarching goal of this brainstorming session is to reinitiate the iSchool movement in India and come up with a roadmap for its direction. Our expectations from the speakers are as follows: please share your experiences in terms of the following:

  1. The nature and characteristics of their iSchool, including the challenges and successes faced forging this new identity. And talk about the composition of its curriculum, faculty, and disciplinary backgrounds of their students and their career trajectories (for those belonging to an iSchool)

Expectations

- 2. From speakers from IT and other institutions share their experiences in the context of the iSchool slogan of "people, technology, information," whether such an integration of the three elements is possible; challenges faced: and solutions that they brokered.

- 3. Also, address (some of) the challenges of forging multidisciplinary studies and communities; building newer models of institutions; developing frameworks for a multidiscipline; academic and

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Thank you

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