



FIRST GLOBAL CONFERENCE ON  
RESEARCH INTEGRATION  
AND IMPLEMENTATION

SEPTEMBER 8-11 2013  
CANBERRA, AUSTRALIA  
AND ONLINE

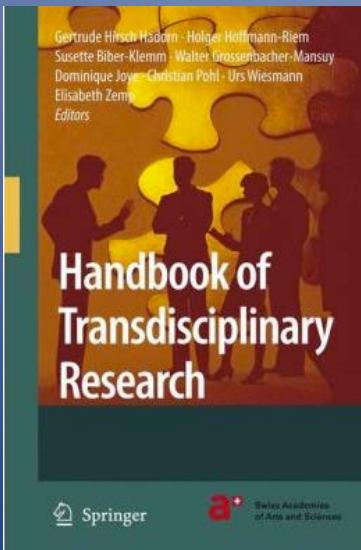
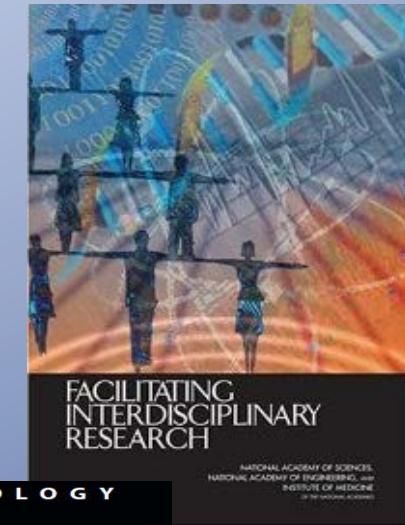
**Interdisciplinarity Then, Now,  
and Into Networked Futures**  
**Julie Thompson Klein**  
**Wayne State University (USA)**

## **Then and Now: Handout 1**

- New Fields & Interdisciplines
- New Syntheses, Theories, and Paradigms
- Prominent Initiatives
- Quiet Daily Flow of Influence
- Educational Reform

# Trendlines

- 4 Drivers of *Facilitating IDR*
- Heightened imperative
- Expanding literature

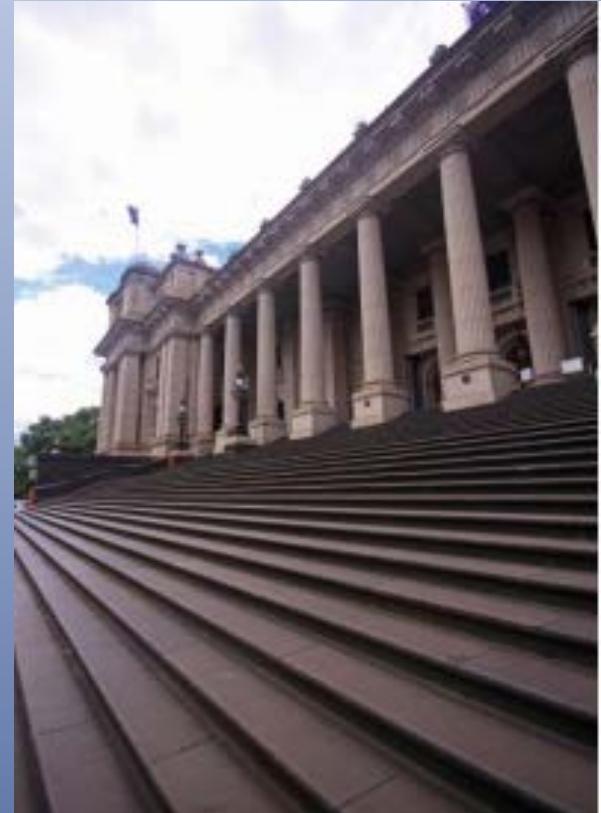


- Disciplinarity <> Interdisciplinarity
- Shadow Structure of IDR and IDS
- Ascendancy of Transdisciplinarity

interdisciplinarity management science integrated assessment  
adaptive management implementation science multidisciplinarity  
complexity science modelling and simulation policy science impact evaluation  
system dynamics sustainability science systems thinking  
public engagement action research ecological economics decision sciences  
team science theory of change project management post-normal science  
systemic intervention transdisciplinarity operations research  
mode 2 coalition theory cybernetics Integration and Implementation Sciences (I2S)

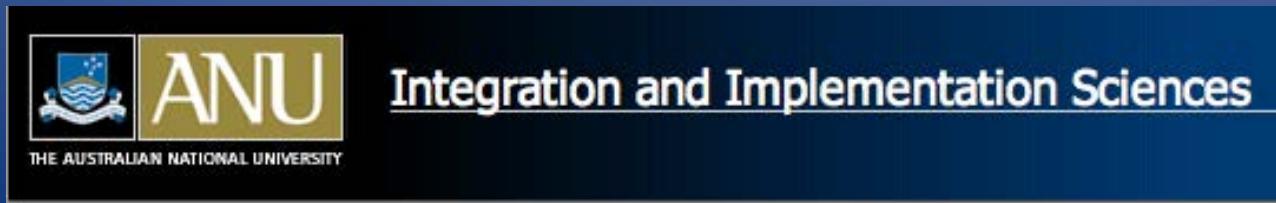
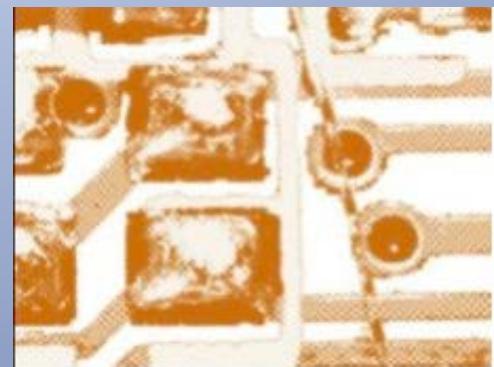
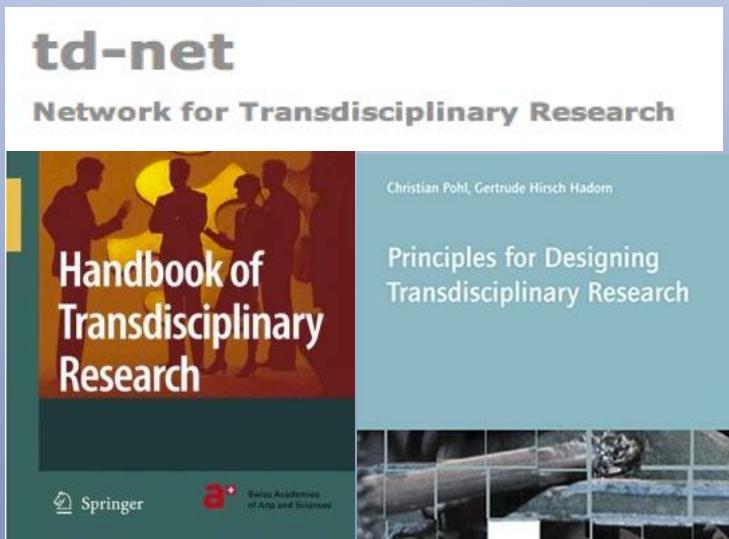
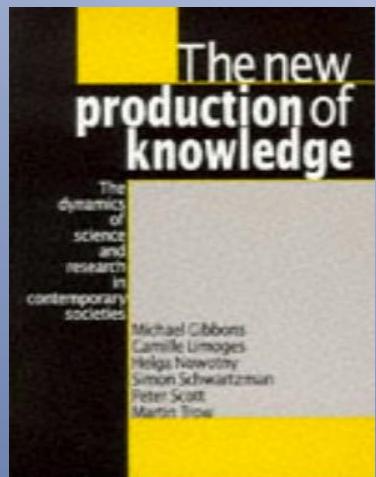
## Rethinking “Institutions”

- **Mobilizing Networks** (Cathy Davidson and David Theo Goldberg, *The Future of Learning Institutions in a Digital Age*)
- **Place versus Space** (Michel deCerteau, *The Practice of Everyday Life*)



## From Structure to Network

- Crosshatching
- Crossfertilizing
- Inter/transecting



more, most significant change is likely, involving  
new technologies, system planning, self-systems  
and design, strategic exception handling and  
new critical metrics, among just a few others.  
Second, new design techniques, often search-based  
or change techniques, informal group techniques,  
open learning, soft systems methodology, open  
problem solving and testing, principled rea-

Research  
Integration  
Using Dialogue  
Methods

David McDonald  
Gabriele Bammer  
Peter Deane

campus

A complex network graph is centered on the slide. It consists of numerous small, glowing yellow and orange dots representing nodes, connected by a dense web of thin, glowing lines representing edges. The graph is set against a background that transitions from a dark orange at the bottom to a bright yellow at the top. The overall effect is one of a digital, interconnected landscape.

## The Digital Horizon

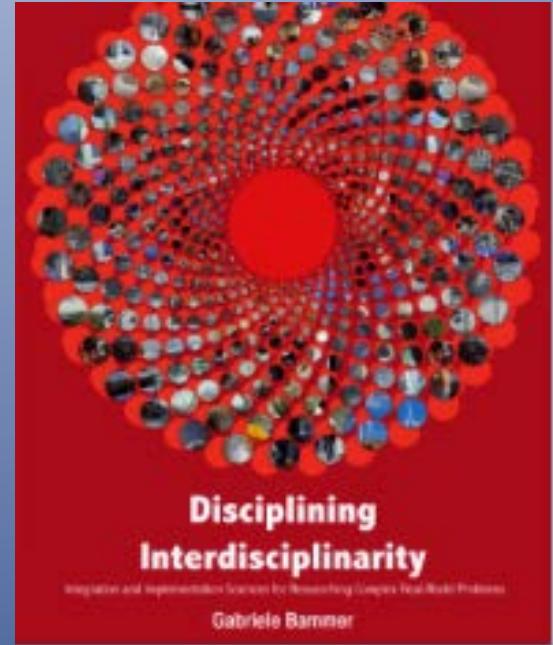
dynamic  
flexible  
transactional  
user-generated  
controlled thesauri  
semantic mapping  
tagging (clouds)  
great granularity  
crosswalks

# Interdisciplinarity and I2S Premise

Page 429: John Unsworth  
(Klein Commentary)

“The introduction of Web 2.0 shifted emphasis from the computer as platform to the network as platform, especially the network of interactions and synergies.

An I2S ‘college of peers’ beckons a networked platform that is not possible with current groups operating in separate or even in tandem.”



# Sustainability – Environment – Climate Change Agriculture – Health

799: Joint Thinking and Action

695/749/800: Integration

709: ID/TD Teams

563/785: Communication

748: MD/ID/TD  
Collaborations

**713/759/802  
Education**

577-78: The University

**582: ID Research Journeys**

601: Funding Agencies

**727: Historical Perspectives**

526/571: AIS

**696/708: Methods and Factors**

663: INIT

605: td-net