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Sheffield Hallam University
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Institutional Research as Collaborative Organizational Learning

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Institutional Researcher's Credo

I realize that I will not succeed in answering all of your questions. Indeed, I will not answer any of them completely. The answers I provide will only serve to raise a whole new set of questions that lead to more problems, some of which you weren't aware of in the first place. When my work is complete, you will be as confused as ever, but hopefully, you will be confused at a higher level and about more important things.

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What is institutional research?

What if... Pro-VC finally recognized
The value added by my never-ending labors

What if... My mother finally understood
The work I do and could explain it to her neighbors

I know I won't be getting very wealthy in this line of
work, I knew that from the very start

But I can't stop from modeling scenarios in the
spreadsheet of my heart

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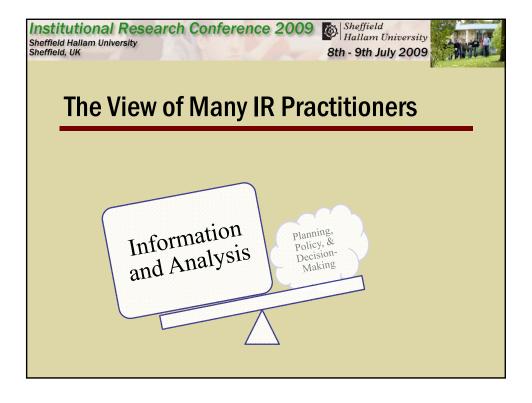### Sheffield, UK
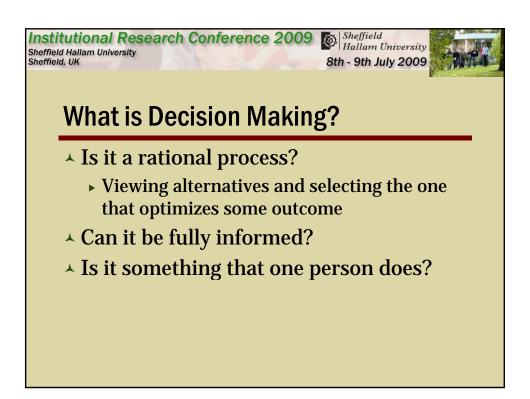### Sheffield Hallam University
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What is institutional research?

...research conducted within an
institution of higher education to
provide information which supports
institutional planning, policy formation
and decision making.

▸ Saupe, 1990 – The functions of IR

The View of Many IR Practitioners

Information and Analysis

Planning, Policy, & Decision-Making

What is Decision Making?

- ⌃ Is it a rational process?
  - ▸ Viewing alternatives and selecting the one that optimizes some outcome
- ⌃ Can it be fully informed?
- ⌃ Is it something that one person does?

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Herbert Simon on the limits of rationality

⌃ ...the complexity of the world in which we live, the incompleteness and inadequacy of human knowledge, the inconsistencies of individual preference and belief, the conflicts of value among people and groups of people, and the inadequacy of the computations we can carry out, even with the aid of the most powerful computers

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More Formal Models of Non-Rationality

⌃ Primacy, recency and other cognitive biases (Kahneman & Tversky)

⌃ Coordination problems in group dynamics (Steiner; Thibaut & Kelley)

⌃ Heightening of emotion as related to competing perspectives and agendas (Mazur; Louis, Taylor & Douglas)

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The Higher Education Context

- ▲ The professional bureaucracy
  - ▶ Composite of hierarchical/bureaucratic and collegial
  - ▶ Professional (faculty) maintain superior authority to decide major goals
  - ▶ Administrators limited to deciding means and setting performance standards
- ▲ Highly decentralized, loosely coupled authority structures

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The Higher Education Context: Meetings

In the first part of the meeting
I was looking around the room
There were Pro-VCs, and lots of deans
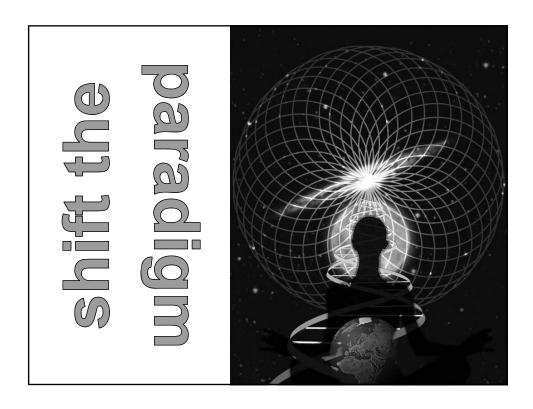There were frowns and glares and gloom

The first one I met was a new registrar
Who didn't know why she was there
The room was hot cause they talked too much
But they continued without a care

I've been through a meeting with a boss with no brain
It felt bad to watch him inflict pain
In a meeting, he can't remember my name
But that won't stop him from assigning me blame
La, laaa, laaa, la-la-la-la; la-la-la, laaa la

Who's fooling who?

- We provide information and analysis as if all were (or should be) rational and incremental outside of our work unit
- We operate within our units knowing things aren't so straightforward
- So why are we so frustrated when our colleagues don't seem to heed our information appropriately?

shift the paradigm

Collaborative Organizational Learning

- ▲ Why Collaborative?
- ▲ Why Organizational?
- ▲ Why Learning?
- ▲ Applying some OL lenses to IR
- ▲ Implications for Practice

Why Collaborative?

- ▲ Greater buy-in and transfer of learning through broad participation
- ▲ Greater collective intelligence derived from varying perspectives
- ▲ Opportunity to question limiting assumptions
- ▲ Greater likelihood insights/results are usable and put to use

Why Organizational?

- Identifying and aligning shared purposes
- Accommodating interdependencies
- Combines...
  - Doing the right thing with doing it right
  - Doing well with doing good

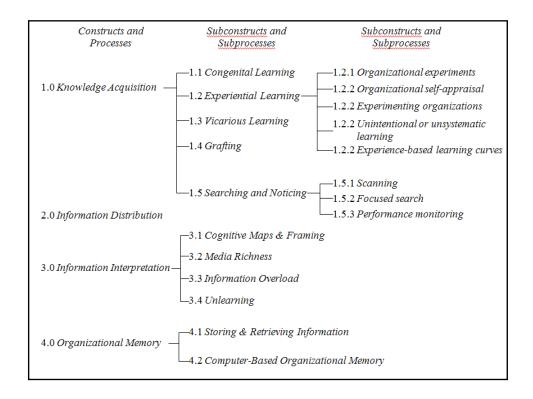## Why Learning?

- Combines rationality and irrationality
- Incorporates uncertainty, ambiguity, and multiple styles
- Individual learning and organizational learning are compatible concepts
- Learning is mission critical for all educational institutions

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Examples from the OL Literature

- Functional v. Interpretive "camps"
- Huber's (1991) Taxonomy
- Argyris and Schön's Single- and Double-Loop Learning
- Situated Learning and Communities of Practice

Constructs and Processes	Subconstructs and Subprocesses	Subconstructs and Subprocesses
1.0 Knowledge Acquisition	1.1 Congenital Learning	1.2.1 Organizational experiments
	1.2 Experiential Learning	1.2.2 Organizational self-appraisal
	1.3 Vicarious Learning	1.2.2 Experimenting organizations
	1.4 Grafting	1.2.2 Unintentional or unsystematic learning
		1.2.2 Experience-based learning curves
	1.5 Searching and Noticing	1.5.1 Scanning
		1.5.2 Focused search
2.0 Information Distribution		1.5.3 Performance monitoring
3.0 Information Interpretation	3.1 Cognitive Maps & Framing	
	3.2 Media Richness	
	3.3 Information Overload	
	3.4 Unlearning	
4.0 Organizational Memory	4.1 Storing & Retrieving Information	
	4.2 Computer-Based Organizational Memory	

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Knowledge Acquisition

- **Congenital** – inherited at conception and acquired prior to birth
- **Experiential** – both intentionally and non-intentionally acquired through reflection on action
- **Vicarious** – through what others know and have done
- **Grafting** – bringing in or co-opting experts
- **Searching and noticing** – scanning, focused search and performance monitoring

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The Rest

- Information distribution
  - ▶ What happens after the report leaves your office, if it gets out at all?
- Interpretation
  - ▶ What do people make of it?
- Organizational memory
  - ▶ How is the knowledge stored and combined with other institutional knowledge?

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Implications for IR Practice

- ⌃ Congenital information is probably the least considered and most important for learning (where is everyone coming from?)
- ⌃ Blending internal and external expertise with information gained through analysis, scanning, and benchmarking
- ⌃ Seeing institutional research as but one component of knowledge acquisition

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Implications (2)

- ⌃ Distribution: It's 10 o'clock, do you know where your data are?
- ⌃ Interpretation: What the data say is not as important as what we say (and do) about the data
- ⌃ Organizational memory: Your bookshelf is probably not the most accessible or combinable form of storage

The Clueless IR Man

He's a real IR Man
Sitting in his IR land
Making his enrollment plans for nobody.

Doesn't have a point of view,
Knows not when the survey's due
Isn't he a bit like you and me?

IR Man, please listen
You don't know what you're missing
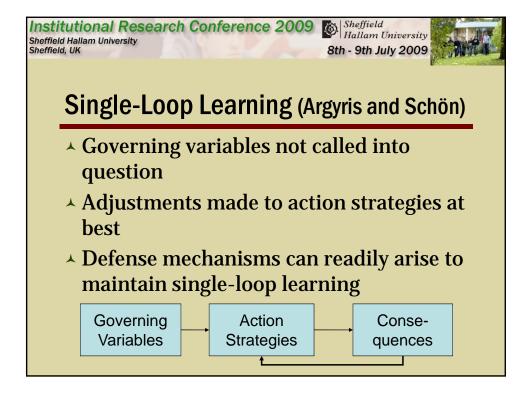IR Man, the university is not in your hand

Single- and Double-Loop Learning

- Learning is the detection and correction of error (unintended consequences)
- "Governing Variables" are those things what we feel are important to keep within acceptable limits
- "Action Strategy" is what we do or plan to do to keep the governing variables within limits
- "Consequences" are the intended and unintended outputs and outcomes
  - Intended: confirm our theory in use
  - Unintended: suggests error in our theory in use

Single-Loop Learning (Argyris and Schön)

- ⌃ Governing variables not called into question
- ⌃ Adjustments made to action strategies at best
- ⌃ Defense mechanisms can readily arise to maintain single-loop learning

| Governing Variables | → | Action Strategies | → | Conse-quences |

Double-Loop Learning

- ⌃ Questioning the role of the framing and learning systems which underlie actual goals and strategies
- ⌃ Reflection is fundamental
  - ▸ Basic assumptions are confronted
  - ▸ Hypotheses publicly tested
  - ▸ Falsification is sought
  - ▸ Ego is laid aside

| Governing Variables | → | Action Strategies | → | Conse-quences |

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Model I and II Org Learning

- Single- and double-loop learning at the organizational level
- Model I: Organizational members prescribe to a common theory in use
  - Organizational policies and practices inhibit change
- Model II: Governing values, policies, and practices promote double-loop learning

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Implications for IR

- Single-loop learning may be supported by more rational approaches but change-oriented learning requires more iterative, constructivist styles of inquiry
- Data supports reframing and questioning core assumptions, but it's much more about how the interactions transpire (and the climate for such questioning)

Situated Learning/Communities of Practice

- Constructivist learning as the root
  - ▶ Individuals construct meaning for themselves through social interaction
- How human knowledge develops in the course of social activity
- Action is situated in our role within community
- (Cognitive) apprenticeship model

Jerome Bruner	Gilbert Ryle
Learning about	Knowing that
vs.	vs.
Learning to be	Knowing how

The Social Life of Information

John Seely Brown
Paul Duguid

HARVARD BUSINESS SCHOOL PRESS

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Learning To Be / Know How

- Based on collaborative practice
  - Communities of practice (Lave and Wenger, 1996)
- Knowledge as inseparable from the knower
- Evidence as input
- Sharing interpretations as process
- Common values, practices and priorities as a result

Implications for IR

- New ideas and information can emerge throughout the organization
- New information does not need to come from leaders or research units
- Collaboration is essential and the effective IRer must be 'plugged in' and 'at various tables'
- Evaluation and assessment more effective if conducted in the context of its application

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Action Research and COL
(Hansen & Borden, 2006)

- Continuous cycle of data collection → data analysis → data feedback → action plans → data collection
- Stakeholder empowerment through active and on-going participation
- Data feedback meetings promote collaboration, dialogue, and collective analysis
- Active learning and discovery fostered by critical reflection process
- Data-driven action plans developed = research linked to action

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Example: IPAS Campus Inquiry Model
(Mousaba, 2006)

- Assess
  - Identify challenges; collect/analyze data; prioritize challenges; organize work groups
- Organize
  - Coordinate budgeting; appoint scholars; coordinate inquiry with related units
- Conduct action inquiry
  - Build understanding; scan for solutions; assess possible solutions; develop action plans; pilot and evaluate
- Evaluation
  - Teams coordinate, present, get input and reflect;
  - Share with teams from other campuses

Quotes from Handbook of Action Research by Peter Reason

- The aim of participatory action research is to change practices, social structures, and social media which maintain irrationality, injustice, and unsatisfying forms of existence.
  - » Robin McTaggart

- Participatory research is a process through which members of an oppressed group or community identify a problem, collect and analyse information, and act upon the problem in order to find solutions and promote social and political transformation.
  - » Daniel Selener

- We must keep on trying to understand better, change and re-enchant our plural world.
  - » Orlando Fals Borda

Get Together, People!

Is IR just a job we do,
To pay the monthly bills
We can make the boss look good
Or feed him poison pills
Though the budget's on the brink
And memos bring you chills

Come on people now, smile on your brother
Everybody get together
Try to learn how to do it right, now!

Parting Wisdom (1)

- Focus on use
  - What are people saying and doing about it?
- Understand the context
  - Institutional/cultural
  - Your data/information as a piece of the larger mosaic that includes...
    - Documented, experiential (provider and user), contextual and other behavioral/empirical data
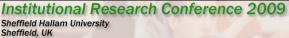
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Parting Wisdom (2)

- Work with others to define attention-worthy issues
- Try to involve appropriate others as much as possible
  - ▸ Even if it's a pain in the posterior
- Consult with others about interpretation and meaning
- Follow up to find out what happened

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Final Notes

I met a man with a fast-food name,
Who asked me to play his conference game
And pontificate on the IR experience

So I came down to Sheffield-Hallam U
To share my quirky point of view
And raise confusion with what once made sense

And in the halls HESA agents screamed
We want more data to support our schemes
For conclusions already arrived at
And please use XML format

And credentials that meet employer demands
Won't allow transfer to foreign lands
With bachelors and masters all will be grand
The day Bologna arrived

And now we're singin'....
Why, why, do our colleagues all cry
More and better data is just what we desire
Now you tell us learning more is what they require
Well this may be the day we retire.

Song lyrics courtesy of the AIR Windbreakers: http://mypage.iu.edu/~vborden/airlyrics/index.html

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