

'Thinking Frameworks'

Indicators for ESD, BRLSI, 17 March '06

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Remember...

Not everything that gets
counted counts, and not
everything that counts gets
counted...

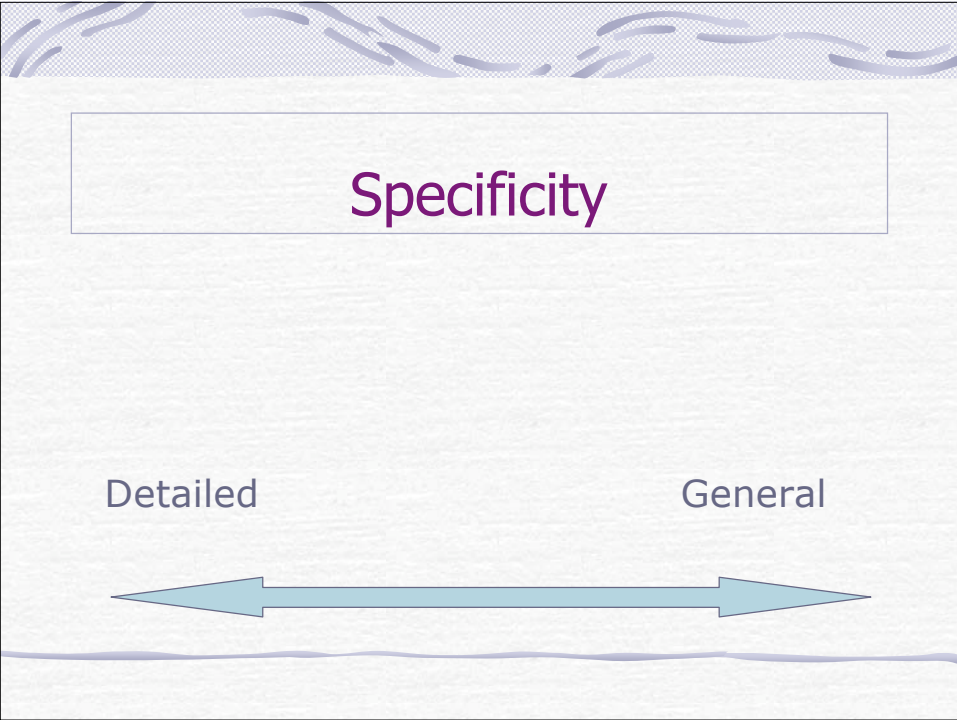
Understanding characteristics

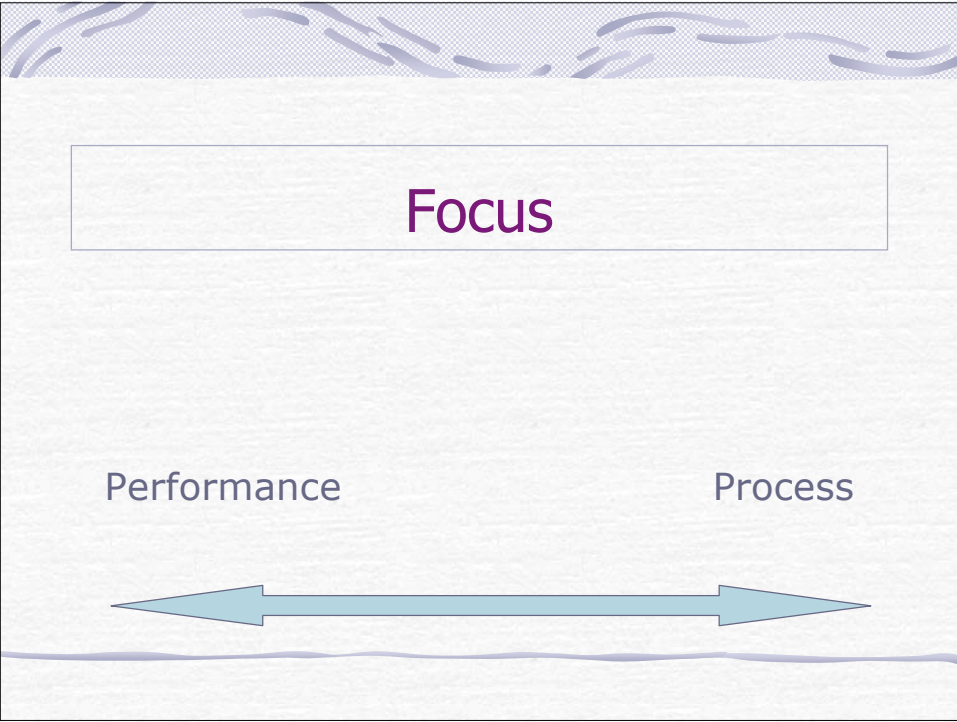
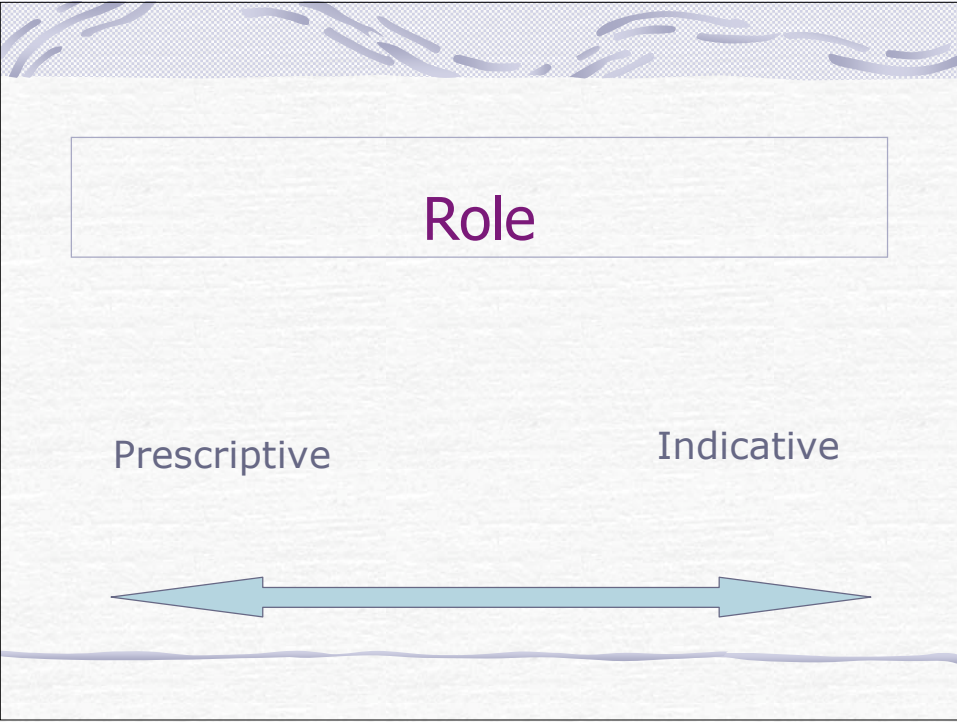
Worldviews and paradigms

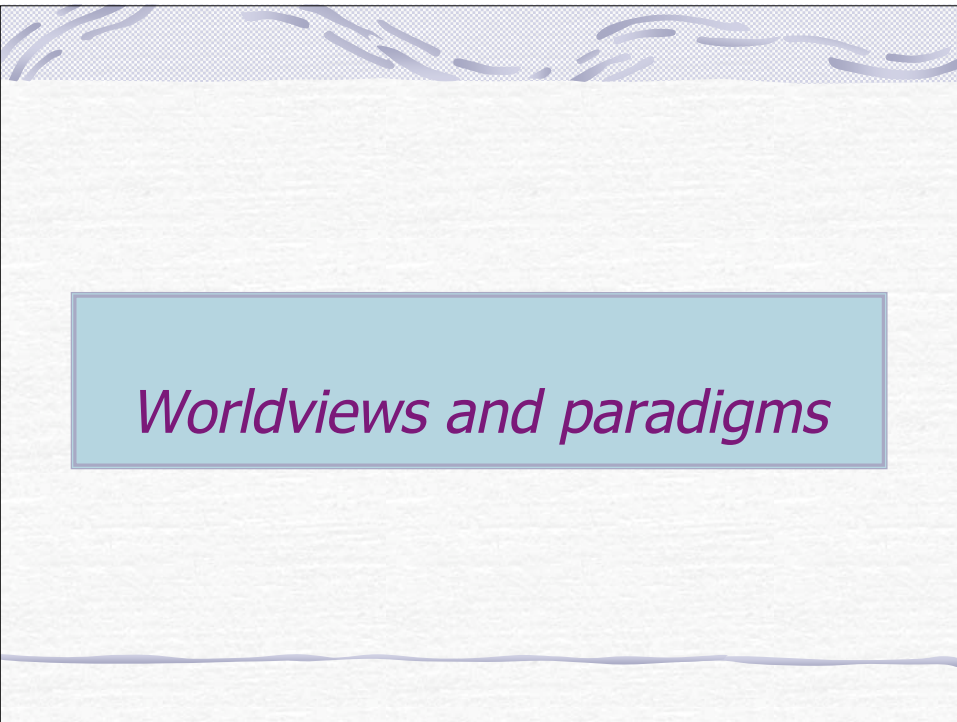
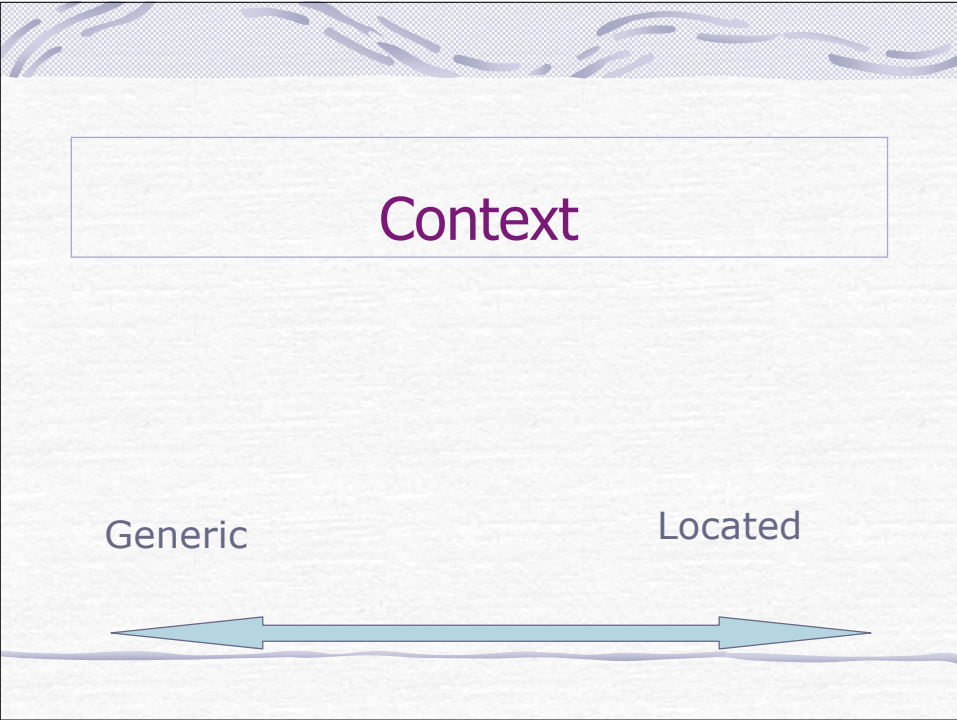
Learning

So – what?

Understanding characteristics







Worldviews

Metaphor:	Mechanism	Ecology/living systems
Epistemology:	Objectivist	Participative
Ontology:	Reductionist, dualistic	Holistic, integrative
Methodology:	Reductive	Systemic

Types of indicators

Paradigm:	Mechanistic	Ecological
<i>Specificity:</i>	Detailed	General
<i>Style:</i>	Technical	Resonant
<i>Role:</i>	Prescriptive	Indicative
<i>Focus:</i>	Performance	Process
<i>Context:</i>	Generic	Located

Assumptions and values

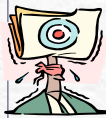


Mechanistic paradigm	Ecological paradigm
Results orientation	Quality orientation
Control/management	Participation/ownership
Instructive pedagogy	Constructive pedagogy
Skills orientation	Values/consciousness orientation
Standardisation	Diversity
Achievement	Emergence/becoming
Urgency/'must do'	Engagement/'let's do'

Pros and cons

	Mechanistic indicators	Ecological indicators
Advantages	<ul style="list-style-type: none"> • Generalisable • Precise • Measurable • Comparable • Recordable 	<ul style="list-style-type: none"> • Meaningful • Ownership and engagement • Self-determination • Motivating • Encourage emergence
Disadvantages	<ul style="list-style-type: none"> • Technocratic • 'Sins of omission' • Emergence, creativity squeezed • Too closed 	<ul style="list-style-type: none"> • Not easily transferable or compared • Imprecise and difficult to measure • Direction (?) • Too open (?)

Learning

Learning levels

<i>First order change</i>	Effectiveness/ efficiency	‘Doing things better’	
<i>Second order change</i>	Examining assumptions	‘Doing better things’	
<i>Third order change</i>	Paradigm change	‘Seeing things differently’	

Learning levels

<i>First order</i>	Cognition	Conformative learning
<i>Second order</i>	Meta-cognition	Reformative learning
<i>Third order</i>	Epistemic learning	Transformative learning

Two 'learning systems'

☞ *Resultant learning:*

- intentioned learning amongst students in formal education which arises from educational policies and practices

☞ *Attendant learning:*

- the social learning response to sustainability in organisations, institutions and their actors

So – what?

Assertions

- ☞ Most indicator discussion is informed by and reflects the dominant *mechanistic paradigm*, within *first order learning*, and with the focus on *resultant learning*.
- ☞ Education for sustainability suggests and requires a shift towards an *ecological paradigm*, which necessarily involves at least *second order learning*, and explicit attention to *attendant learning*.

Questions

- ☞ Given that a mechanistic educational culture dominates, what bridging indicators can be envisaged that open the door to the ecological paradigm?
- ☞ What indicators suggest second, and third, order learning in the areas of attendant (organisational) and resultant (student) learning?
- ☞ What is *desirable* in terms of directions, shifts and learning outcomes?
- ☞ Is there an inevitable mismatch between ESD indicators and other educational indicators?

Towards systemic wisdom: rethinking 'values, knowledge, skills'

- ☞ **Seeing** (perception): Expanded ethical sensibility
- ☞ **Knowing** (conception): Critical understanding of pattern and connectivity
- ☞ **Doing** (action): Ability to design and act relationally and integratively

Some conclusions

- ☞ Appropriate bridging indicators will necessarily be indicative, stimulate learning and be subject to re-vision through such learning
- ☞ If the word 'indicator' is claimed exclusively by the mechanistic paradigm, let's use 'quality criteria' instead
- ☞ The indicator debate is part of the ESD attendant learning process, which is good..
- ☞ But the question of *urgency* remains...