

Table 3: Summarizing the contrasting paradigms

MECHANISTIC VIEW	ECOLOGICAL VIEW
LEVEL 1: EDUCATIONAL PARADIGM	
Core Values	
Preparation for economic life	Participation in all dimensions of the sustainability transition—social, economic, environmental
Selection or exclusion	Inclusion and valuing of all people
Formal education	Learning throughout life
Knowing as instrumental value	Being/becoming (intrinsic/instrumental values)
Competition	Cooperation, collaboration
Specialization	Integrative understanding
Socialization, integrating to fit	Autonomy-in-relation
Developing institutional profiles	Developing learning communities
Effective learning	Transformative learning
Standardization	Diversity with coherence
Accountability	Responsibility
Faith in 'the system'	Faith in people
Modernity	Ecological sustainability
LEVEL 2: ORGANIZATION AND MANAGEMENT OF THE LEARNING ENVIRONMENT	
Curriculum	
Prescription	Negotiation and consent
Detailed and largely closed	Indicative, open, responsive
Discursive knowledge	Non-discursive knowledge also valued
Decontextualized & abstract knowledge	More emphasis on local, personal, applied and first-hand knowledge
Fixed knowledge and 'truth'	Provisional knowledge recognizing uncertainty and approximation
Confusion of 'data', 'information' and 'knowledge'	Ultimate concern with wisdom
Disciplines and defence of borders	Greater transdisciplinarity/domains of interest
Specialism	Generalism and flexibility
Evaluation and assessment	
External inspection	Self-evaluation, plus critical support
External indicators, narrowly prescribed	Self-generated indicators, broadly drawn
Quantitative measures	Qualitative as well as quantitative measures
Management	
Synergies & emergence not considered	Positive synergies sought
Architecture, energy and resource use, and institutional grounds neither managed ecologically nor seen as part of the educational experience	Ecological management, linked to educational curriculum and experience

MECHANISTIC VIEW**ECOLOGICAL VIEW****Management (cont.)**

Scale not considered	Human-scale structures and learning situations
Curriculum control and prescription	Curriculum empowerment and determination
Top-down control	Democratic and participative

Community

Few or nominal links	Fuzzy borders: local community increasingly part of the learning community
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LEVEL 3: LEARNING AND PEDAGOGY**View of teaching and learning**

Transmission	Transformation
Product oriented	Process, development and action oriented
Emphasis on teaching	Integrative view: teachers also learners, learners also teachers
Functional competence	Functional, critical and creative competencies valued

View of learner

As a cognitive being	As a whole person with full range of needs and capacities
Deficiency model	Existing knowledge, beliefs and feelings valued
Learners largely undifferentiated	Differentiated needs recognized
Valuing intellect	Intellect, intuition, and capability valued
Logical and linguistic intelligence	Multiple intelligences
Teachers as technicians	Teachers as reflective practitioners and change agents
Learners as individuals	Groups, organizations and communities also learn

Teaching and learning styles

Cognitive experience	Also affective, spiritual, manual and physical experience
Passive instruction	Active learning styles
Non-critical inquiry	Critical and creative inquiry
Analytical and individual inquiry	Appreciative and cooperative inquiry
Restricted range of methods	Wide range of methods and tools

View of learning

Simple learning (first order)	Also critical and epistemic (second/third order)
Non-reflexive, causal	Reflexive, iterative
Meaning is given	Meaning is constructed and negotiated
Needs to be effective	Needs to be meaningful first
No sense of emergence in the learning environment/system	Strong sense of emergence in the learning environment/system