Commentary

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Academic Landscape of Sustainability Research 2000 (14,118 papers)

#1 Sustainable Development
#2 Agriculture
#3 Fishery
#4 Tourism
#5 Forestry (Tropical Rain Forest)
#6 Business
#7 Forestry (Biodiversity)
#8 Energy

"Sustainability Science in a Global Landscape"
held at United Nations University (UNU-IAS), in collaboration with Elsevier
December 14, 2015 (Monday) - 14.00 - 15:30
Academic Landscape of Sustainability Research 2007 (29,391 papers)

1. Agriculture
2. Fisheries
3. Ecological Economics
4. Forestry (Agroforestry)
5. Forestry (Tropical Rain Forest)
6. Business
7. Tourism
8. Water
9. Forestry (Biodiversity)
10. Urban Planning
11. Rural Sociology
12. Energy
13. Health
14. Soil
15. Wildlife

Academic Landscape of Sustainability Research 2013 (89,908 papers)

14. Governmental Debt & Fiscal Policy
2. Economy & Business Systems
3. Fishery & Forestry Systems
4. Energy System
5. Water Resources
6. Health
7. Urban & Transport Systems
8. Competitive Advantage of Firms
13. Education & Sustainable Human Development
Multi, Inter-, Trans-discipline

Necessity of Integration

Environmental, Social, & Human issues

Deepening scientific knowledge

Interdisciplinary research

Transdisciplinary expertise

Sustainable society

Segmentation of scientific knowledge

Academic discipline
Framework for Innovation Management

<table>
<thead>
<tr>
<th>Layer</th>
<th>Components</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theory</td>
<td>Concept, Causality, Law, Equation</td>
<td>Generality, Logic, Simplicity</td>
</tr>
<tr>
<td>Data</td>
<td>Fact, Evidence, Analytical methodology, Modeling, Simulation</td>
<td>Reality, Reliability, Predictability</td>
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</tbody>
</table>
**Narrative as a media of new meanings**

- Value-based
- Ontological
- Historical
- Teleological
- Cosmological

[Suddaby & Greenwood (2005)]

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**Toward Realizing Sustainability and Innovation**

Network of Networks, Leadership of Leaderships

**Sustainable Society**

- Visioning
- Shared Leadership
- Diffused Interface
- Boundary Work
- Boundary Spanning
- Boundary Organization
- Epistemic Community
- Collective Mind
- Dynamic Tension
- Mutual Respect
- Trust and Reciprocity

**Obstacles**

- Existing community
- Culture, Norm
- Priority, Expectation, Incentive
- Funding (Size, Continuity)

- Talent
- Evaluation
- Recognition, Visibility
- Time

[Downing (2005)]