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Sustainable Information Science: Implications for LIS Education and Practice

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“The fact is that no species has ever had such wholesale control over everything on earth, living or dead, as we now have. That lays upon us, whether we like it or not, an awesome responsibility. In our hands now lies not only our own future, but that of all other living creatures with whom we share the earth.”

David Attenborough, *Life on Earth*

What is sustainability?

Cambridge Dictionary defines it as:

- The quality of being able to continue over a period of time.
- The quality of causing little or no damage to the environment and therefore able to continue for a long time.

More definitions

- Park and Allaby (2017) define sustainability as:

“A concept that is used to describe community and economic development in terms of meeting the needs of the present without compromising the ability of future generations to meet their needs.”

Allaby (2015) describes this term as:

“Economic development that takes full account of the environmental consequences of economic activity and is based on the use of resources that can be replaced or renewed and therefore are not depleted.”

Various forms of sustainability

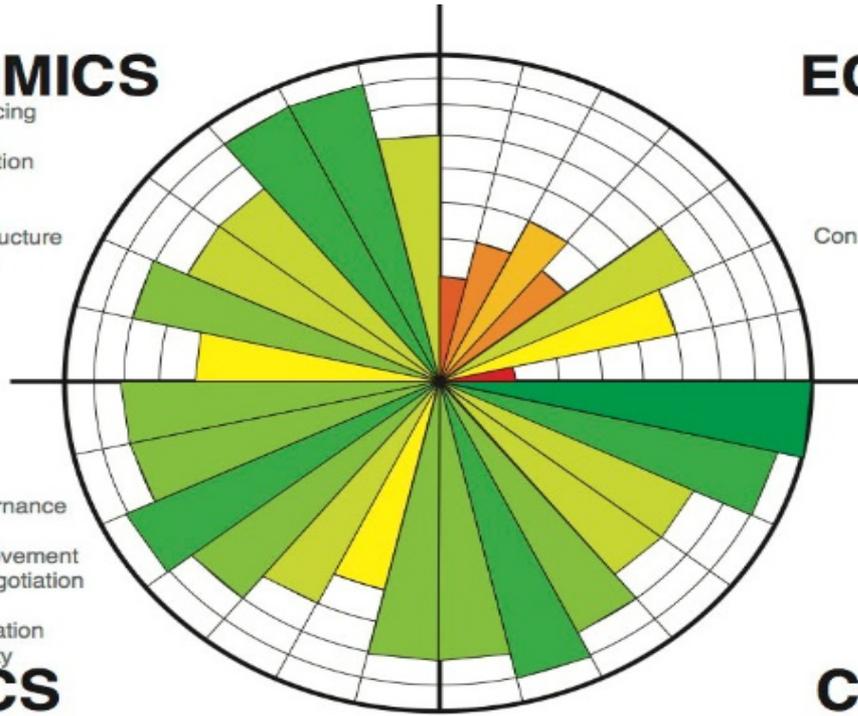
- Sustainability has different aspects including:
 - Environmental
 - Economic
 - Social
- Some scholars add the cultural and political aspects as well. In particular, cultural diversity which is the core value of cultural sustainability is considered as the fourth pillar of the sustainable development movement.

ECONOMICS

Production & Resourcing
Exchange & Transfer
Accounting & Regulation
Consumption & Use
Labour & Welfare
Technology & Infrastructure
Wealth & Distribution

ECOLOGY

Materials & Energy
Water & Air
Flora & Fauna
Habitat & Food
Place & Space
Constructions & Settlements
Emission & Waste



Organization & Governance
Law & Justice
Communication & Movement
Representation & Negotiation
Security & Accord
Dialogue & Reconciliation
Ethics & Accountability

POLITICS

Engagement & Identity
Recreation & Creativity
Memory & Projection
Belief & Meaning
Gender & Generations
Enquiry & Learning
Health & Wellbeing

CULTURE



CIRCLES OF SUSTAINABILITY

Image source: https://en.wikipedia.org/wiki/Circles_of_Sustainability

SUSTAINABLE DEVELOPMENT GOALS



The 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015.

Image source: <http://worldslargestlesson.globalgoals.org/>

Information for sustainable development & development of sustainable information

Nolin (2010) reports sustainable information consist of two components:

- Information for sustainable development, our contribution to the communicative aspects of sustainable development.
- Development of sustainable information, clean information and communication technologies that also contribute to more efficient usage of energy in relation to other technologies.

Four fundamental questions

Nolin (2010) focused on four questions:

- What has been the usage of information and information and communication technologies in the key United Nations documents on sustainable development?
- What characterizes the usage of sustainable development in the key United Nations documents on information and communication technologies?
- What are the main functions of information in relation to sustainable development?
- How can a strategic concept of sustainable information be described that is both connected to sustainable development and helpful for information science?

Sustainability among the core values in information profession

- Can you imagine any successful sustainable development project without access to relevant and reliable information?
- Information accessibility is a vital element in different stages of each sustainable project and for all stakeholders.
- Policy makers are not able to make any informed decision without access to trustworthy sources of information.
- The public also needs information to participate in sustainable development projects.
- What we as information professionals can do in relation to sustainable development?

Programs of public education to promote sustainable development

- Information professionals have already played their role in this context.
- Based on a global program from 2002 to 2014 the United Nations led a program of public education for sustainable development and during this period of time many libraries, archives and museums across the globe have run a wide range of information literacy programs to empower the public to participate in the movement.
- Also, information professionals have articulated the main functions of information in the success of sustainable development projects on different levels (local, regional, national and global).

Sustainability as a core value of librarianship

- The American Library Association (ALA) has considered sustainability as a core value of librarianship and has declared its commitment to assisting in the development of sustainable libraries. According to the ALA website:

"Libraries play an important and unique role in promoting community awareness about resilience, climate change and a sustainable future. They are also leading by example by taking steps to reduce their environmental footprint".

What is sustainable information?

Nolin (2010) defines this term as:

“Sustainable information refers to resources that either facilitates integration and participation according to the three constitutive parts of sustainable development (social, economic and environmental protection) and/or contributes to the strengthening of the process in which society is transformed according to the ideals of sustainable development”.

What is sustainable information science?

- This is a rather new theoretical framework which enables us to understand and redefine LIS from a sustainable development perspective.
- Sustainable information science reminds us that our policies and practices in this field, like any other fields, have various environmental, economic and social impacts which should be appraised based on sustainable development criteria.

What can we do in information profession?

- Support freedom of information
- Advocate freedom of speech
- Say an absolute no to censorship
- Actively bridging the digital divide
- Endorse open access movement
- Enhance evidence based practice
- Promote sustainable information technology
- Advocate cultural diversity and social inclusion
- Keep teaching information literacy skills
- Support various forms of arts and literature

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Sustainability is not just about adopting the latest energy-efficient technologies or turning to renewable sources of power. Sustainability is the responsibility of every individual every day. It is about changing our behaviour and mindset to reduce power and water consumption, thereby helping to control emissions and pollution levels. Joe Kaeser



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Celebrating
30 years in 2019

Thank you for your attention!

Any questions or comments?