

Information Development Terrain: Harvesting Knowledge Seeds

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Jesus Lau

jlau@uv.mx / www.jesuslau.com

Director USBI-VER, y Coordinator, UV Virtual Library

Universidad Veracruzana

Boca del Rio, Veracruz, Mexico

www.uv.mx/usbi_ver

www.uv.mx/bvirtual

Topics

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- **Information development terrain**
 - **Southern socio-economic development**
 - **Harvesting knowledge seeds**
 - **Information literacy opportunities**

Fertile Terrain



Arid Terrain



A Competitive World

- The world is not a charity planet, it is a highly competitive place
- International trade competition is fierce
- Developing countries need to be able to harvest knowlege to take better decisions
- Southern leaders seldom come to a negotiating table with background information
- Their information competencies tend to be limited

Cognitive Capabilities

Socio-Economic and political development terrain is best advanced by people who are knowledge competent,

and who are able to harvest the required knowledge/information seeds

Knowledge Competencies: Leaders Need Information Skills

- Governments need to know about:
 - Competitors and potential allies
 - New goods and products entering to the world market
 - New technologies
 - New entrants to the economy
- Information/knowledge is essential to compete
- Example: China has taken 20 years to become a world industrial power, but Mexico did not notice it until now

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North – South Terrain

World Social Stratatas

Wealthy

Middle class

Poor

Very poor

Wealth/Poverty Connotations

1. Income

- Gross National Income per Capita

2. Basic needs

- Food
- Health
- Housing
- Education
- Employment

3. Capability

- **Information competencies / Knowledge harvesting**
- Research
- Management

Developing Regions

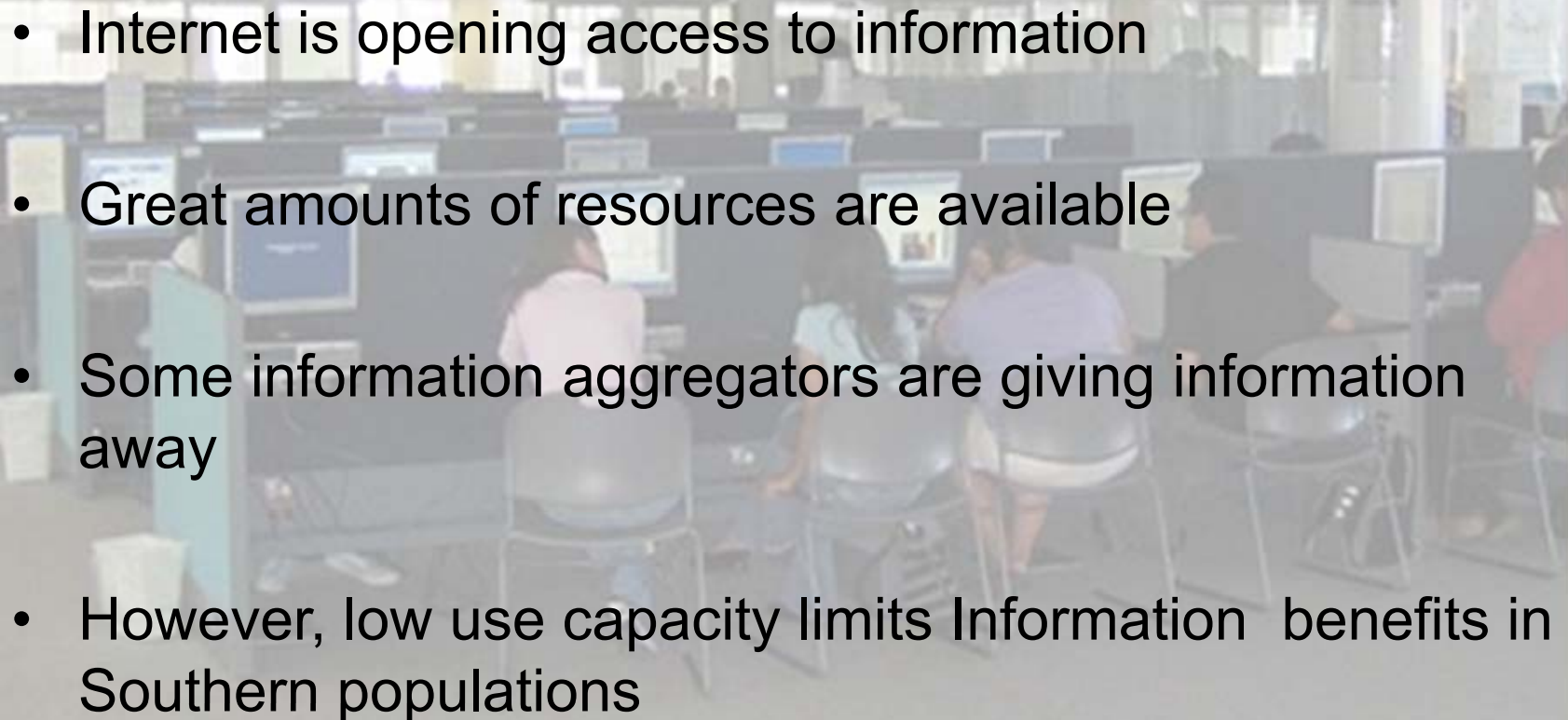
([World Bank](#), 2009)

By Income	Population	GNI per capita
High Income	1,116,551,735	38,139
Upper-middle	1,001,743,859	7,471
Lower-middle	3,810,798,383	2,298
Low income	846,141,764	503
World	6,775,235,141	8,740

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Knowledge Gaps

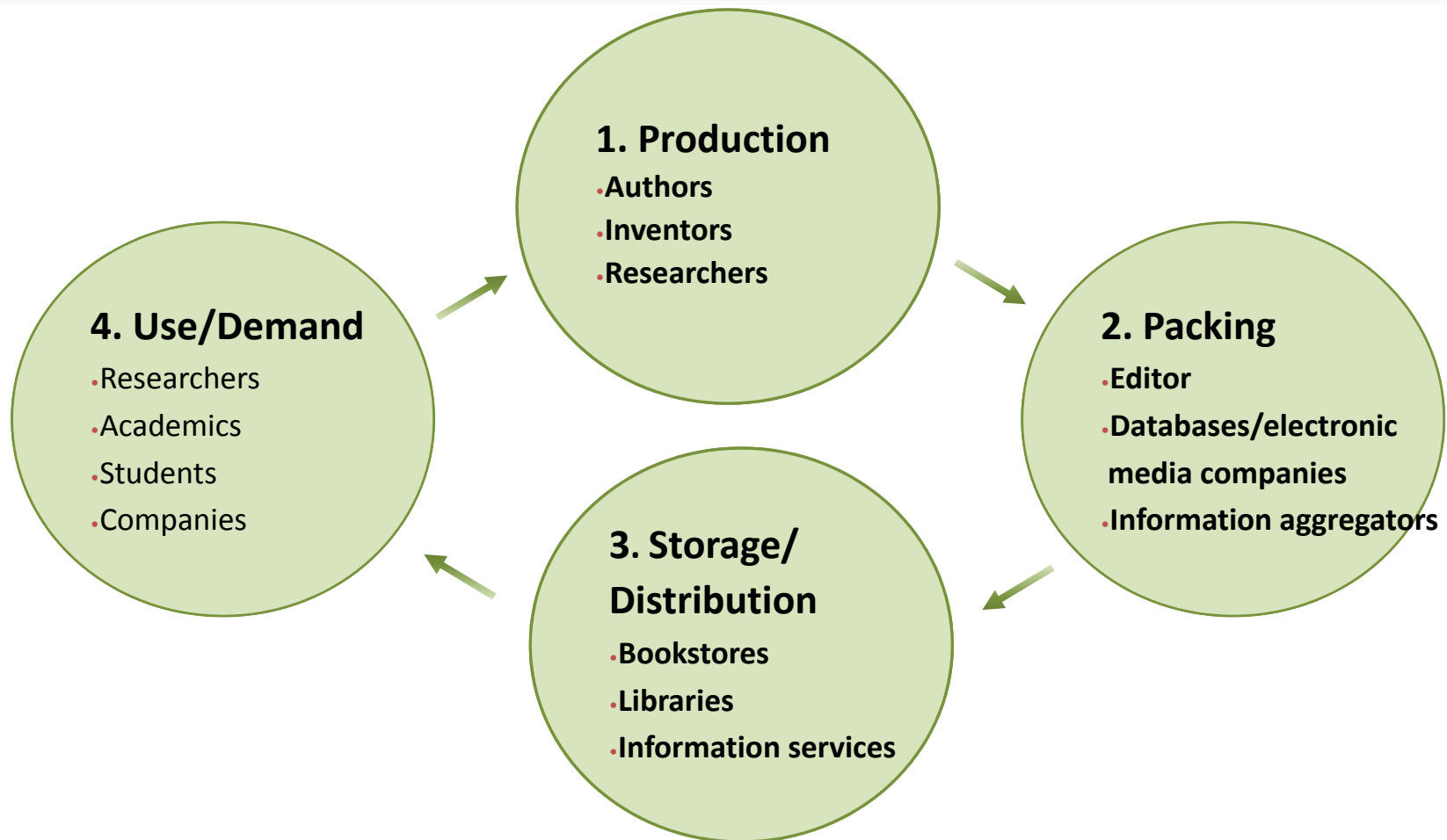
Internet: A great Venue for Information

- Internet is opening access to information
 - Great amounts of resources are available
 - Some information aggregators are giving information away
 - However, low use capacity limits Information benefits in Southern populations
- 
- A photograph of a computer lab or library with many people sitting at desks using computers. The image is slightly faded and serves as a background for the text.

Information Development in the Southern Hemisphere

- Publishing is limited
- Scientific serials are just a few
- Nobel prizes are not from developing countries
- Reference publications are also scarce

Information / Knowledge Chain



Researchers

([UNESCO](#), 2002 - 2007)

Income	Researchers per Million Inhabitants
High income	3,392
Upper-middle income	880
Lower-middle income	1,968
Low income	80
Canada	4,260
Japan	5,572
New Zealand	4,364
United States	4,663

Patents

([WIPO](#), 2008)

Income	Applications	Percentage
High	1'502,995	78.78%
Upper-middle	42,708	2.24%
Lower-middle	214,643	11.25%
Low	216	0.01%
Canada	21,330	1.12%
Japan	502,054	26.31%
New Zealand	2,594	0.14%
United States	400,769	21.01%
Total	1'907,915	100%

Serials

([ISSN](#), 2009)

Income	Serials
High	1'512,265
Upper-middle	128,222
Lower-middle	70,452
Low	3,621
Canada	131,588
Japan	37,006
New Zealand	14,221
United States	203,463

Newsprint

([PPPC](#), 2005)

Region	Consumption per inhabitant (kg)
North America	31.6
Western Europe	22.9
Latin America	3.1
Africa	1.4
Asia	3.3
Oceania	35.8
Eastern Europe	5.9
World total	6.4

National Library Collections

([UNESCO](#), 1995 - 2000)

Income	Units	Volumes
High	80	268,223,412
Upper-middle	31	204,350,175
Lower-middle	201	436,403,858
Low	31	15,032,925

Public Library Collections

([UNESCO](#), 1995 - 2000)

Income	Units	Volumes
High	85,372	2'006,726,209
Upper-middle	125,578	1'952,377,176
Lower-middle	66,586	1'672,750,578
Low	13,249	71'746,452

Internet

(Internet World Stats, 2010)

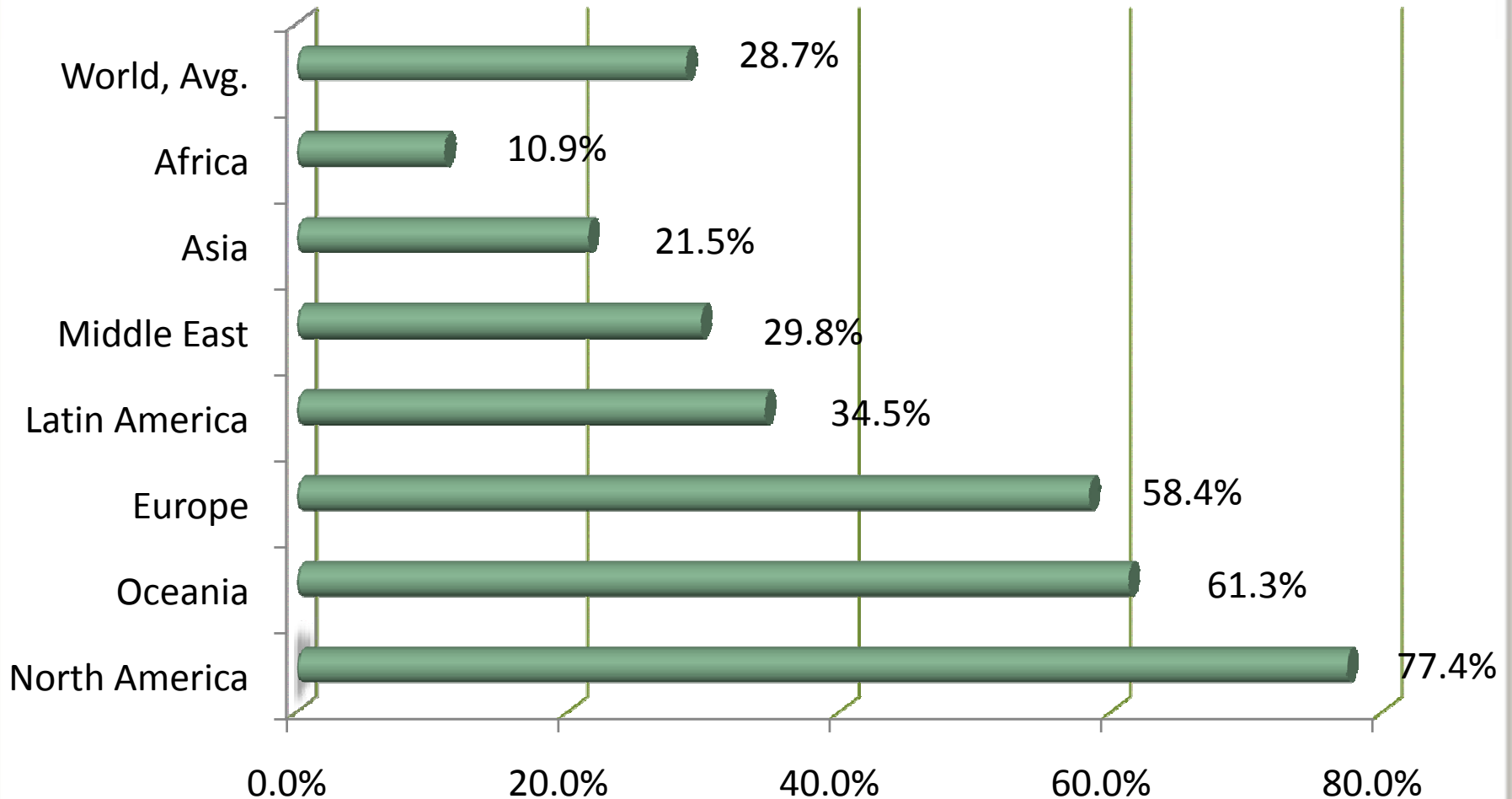
USA, Canada, Japan, and Western Europe

66% Computer servers

38% Demand

Internet Penetration Rates

(Internet World Stats, 2010)



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Knowledge Bridge

Education Scores

(OECD, Worldbank 2006)

Country	GNI per Capita	Reading Score	Science Score
United Kingdom	41,160	495	515
Japan	38,540	498	531
Canada	36,850	527	534
New Zealand	25,280	521	530
Mexico	8,730	410	410

Education - Development

- Education enables people to be better citizens
- It helps economic mobility of individuals
- It determines national progress
- Education access is a challenge
- Education quality is even a greater one
- Information development is related to education
- Education fosters information competencies

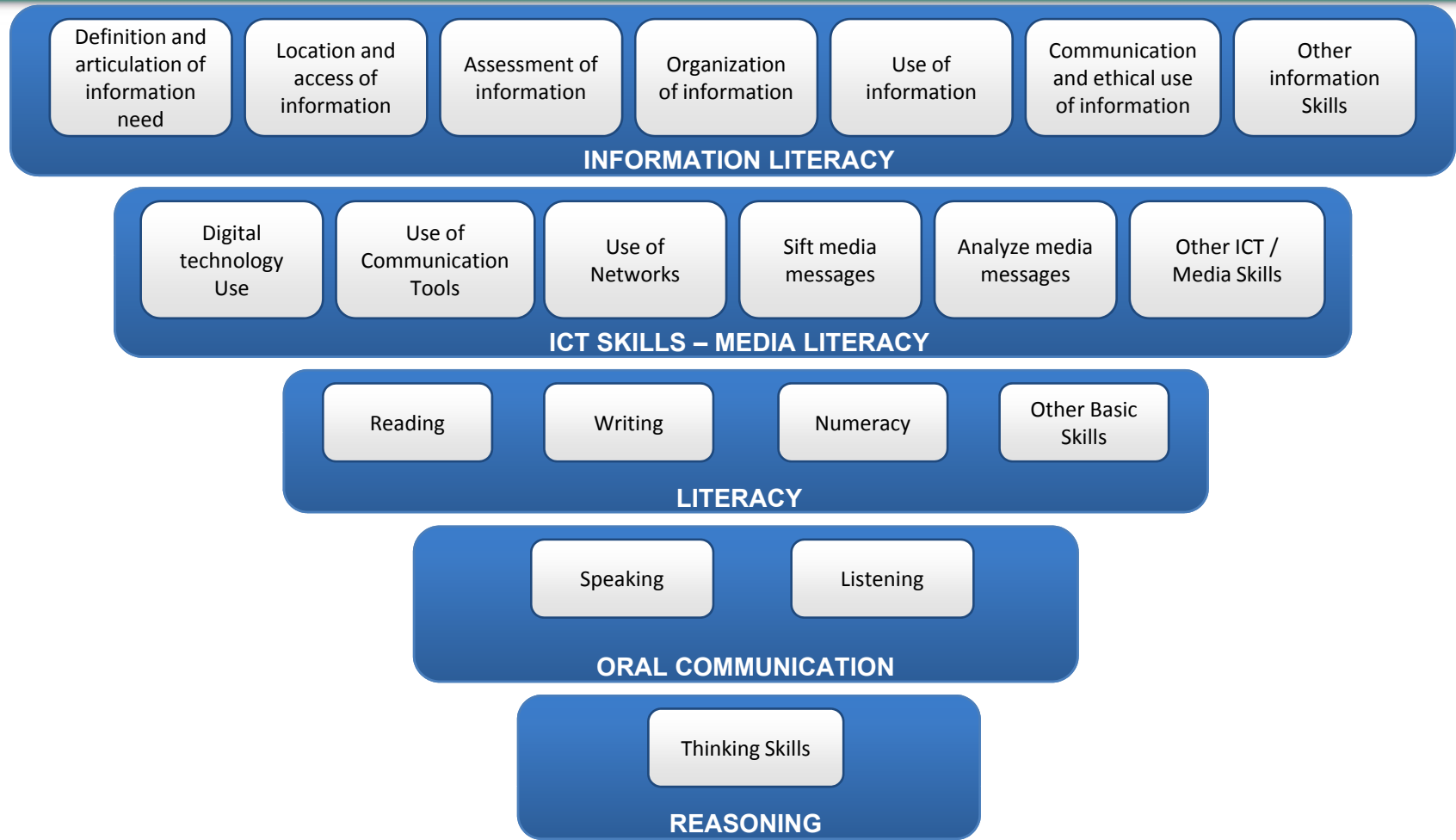
Learner-Oriented Education

- Fosters:
 - Information competencies
 - Knowledge construction by learners
 - Life long learning
 - Independent students
 - Creativity and innovation
 - Open-horizontal management
 - Contributes to create a base for democracy

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Librarians' Role

Communication Skills Constellation



Information Literacy: A Must for Socio-Economic Development

- Leaders have to be information competent
- Workers need to be more knowledgeable
- Education for future citizens is focusing on learning how to learn in information-rich environments
- New education models are based on inquiry approach to learning rather than on transmission approach to teaching
- Information competencies are critical life skills

The Librarians' Role

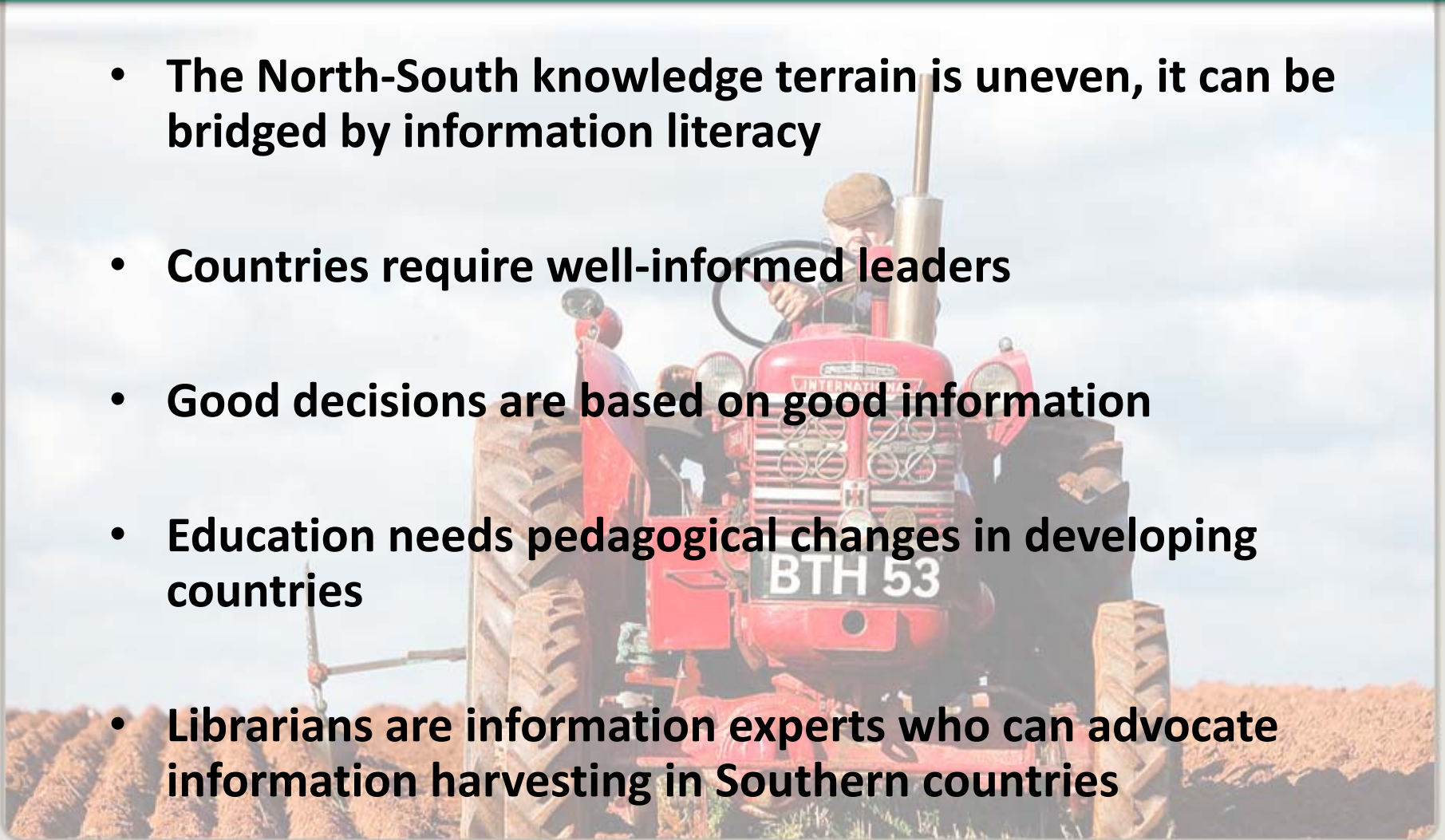
- Librarians provide essential expertise:
 - They can be champions of information literacy
 - Promote information use
- Librarians need to be:
 - Knowledge harvesting trainers
 - Learning information facilitators of their community

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Conclusions

- **The North-South knowledge terrain is uneven, it can be bridged by information literacy**
- **Countries require well-informed leaders**
- **Good decisions are based on good information**
- **Education needs pedagogical changes in developing countries**
- **Librarians are information experts who can advocate information harvesting in Southern countries**



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