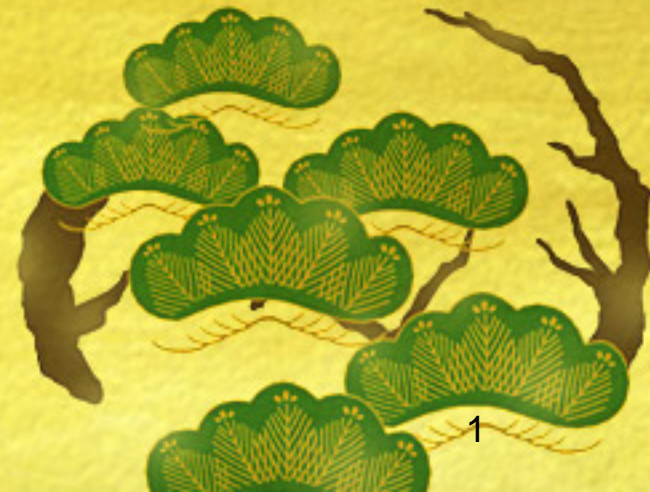




# Information and Digital Literacy: A Stumbling Block to Development?

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# ICT Developments in Asian Countries

- Significant ICT developments in all walks of life, including IT-enabled library and information services
- But the pace and level of change vary, from high in India and China to low in Cambodia and Laos





# The problem may be...

## ...Information and digital illiteracy (IDI)

- IDI = loss of productivity and of understanding
- Endemic in many Asian developing countries
- Systemic failure of education to recognise the role of information literacy education

# IDI Constraints to Development

Inadequate education system



Inability to sponsor IL programmes



Information and digital illiteracy



Lack of knowledge  
Lack of skills  
Lack of awareness  
Lack of self-confidence  
Lack of innovation  
Dependency thinking

(after Burkey 1993)





# Defining IDL in a Developing Country Context -1

Information and digital literacy (IDL) is the ability of individuals or groups to:

- 1) Be aware of **why, how and by whom** information is **created, communicated and controlled**, and how it contributes to the construction of knowledge
- 2) Understand when information can be **used to improve daily living or contribute to the resolution of needs** related to specific situations such as work or school



# Defining IDL in a Developing Country Context - 2

3. Know how to **locate** information and to **critique** its relevance and appropriateness to their **context**
4. Understand how to **integrate** relevant and appropriate information with what they **already know** to construct **new knowledge**, to **resolve needs** related to specific situations

(Dorner and Gorman 2006)





# Since this is information and DIGITAL literacy...

...we add the ability to:

5. Locate, access and use digital information in a networked environment



# Some IL/IDL Initiatives Relevant to Asia

- IfoLit Global (IFLA-UNESCO)
- IFLA InfoLit Section
- SALIS India (Society for the Advancement of Library and Information Science)
- A-LIEP(Asia-Pacific Conference on Library & Information Education & Practice)
- Information infrastructure enhancement in Asian countries

Nevertheless, IL and ILE efforts are just beginning in most Asian developing countries





# Barriers to IL and IDL in Asian Developing Countries

- Lack of support from education policymakers
- Low levels of IL/IDL education for information professionals
- Lack of IL/IDL-educated staff
- Excessive emphasis on ICT infrastructures



# Pakistan as an Example

- The most visible ICT development is in the HE sector
- Government has invested significant funds to promote the digital paradigm as a means of helping to raise the quality of HE





# Proposed National Education Policy 2008

- Produce a responsible, enlightened citizenry
- Integrate Pakistan in the framework of human-centred development

(Pakistan MoE 2008)



# Higher Education Commission Aims

- Meet the development challenges/opportunities presented by rapid ICT development
- Leverage these challenges/opportunities to address fundamental development challenges
- Focus on poverty reduction and economic development

(Pakistan HEC 2007)





# HEC Digital Initiatives - 1

## 1. HEC National Digital Library

- >30 databases providing access to >20,000 full-text journals from around the world
- Access to >150 million items through BLLD
- Open access to >10,000 e-books for researchers



# HEC Digital Initiatives - 2

## 2. PERN (Pakistan Education and Research Network)

- a nationwide educational intranet connecting premier education and research institutes

## 3. PRR (Pakistan Research Repository)

- an ongoing digitisation project for Pakistan-awarded doctoral theses to promote open access
- currently about 1600 full-text theses are available





# Adequacy of the HEC Databases

HEC-subscribed databases are ‘fundamental resources’ for on-campus e-access

**BUT** a recent Punjab University (PU) study demonstrates that:

- These databases fulfill the needs of academic staff only to ‘a moderate extent’ ( $\mu=2.58$ )
- Only 38% of e-journals meet research and teaching needs
- 52% of respondents indicated that ‘user-unfriendly’ interfaces are important in their infrequent use of e-journals

# Preferred Means of Gathering Information

Rank	Sources	Frequency	%age
1	Search general web sources	81	52
2	Physically go to the library	42	27
3	Search HEC-subscribed data bases	24	15
4	Send an assistant or student to the library	4	3
5	Call the librarian/library staff	3	2
6	Access the library catalogue/OPAC	2	1
7	Others		



# Major Weaknesses of Information Services

Rank	Major weaknesses	Pure Sci. (n=25)	Life Sci. (n =23)	Eng. & Tech. (n =21)	Pharmacy (n =6)	Freq.
1	Lack of library staff training	22	14	10	4	50
2	Poor promotion of library services	19	8	9	3	39
3	Low level of staff motivation towards services	9	7	5	2	23
4	Lack of user interaction with library staff	11	5	4	2	22
5	Poor internet connectivity speed	4	5	2		11 17



# The PU study suggests that...

1. The educated elite lack IDL and are unaware of many available databases
2. The use of general web resources is higher than the use of HEC-subscribed, quality research journal databases
3. The HEC-subscribed journals are considered inadequate
4. Perceived inadequacy of HEC journals and perceived user-unfriendliness of databases creates a significant barrier
5. Reliance on general web resources raises the question of the quality of information being used in development activities
6. The level of satisfaction regarding information professionals' performance is low





# Some Possible Solutions

- Seek government commitment to provide finance for quality IL/IDL training of teachers, academics, librarians
- Develop means to ensure that ICT and IL/IDL developments occur in tandem
- Make IL/IDL an integral part of learning programmes at all levels
- Conduct local research on contextually-relevant literacies and IL/IDL



# Tentative Conclusions

- In Pakistan, as elsewhere, IL/IDL practice and training are not the norm in libraries or in education; they are not operational priorities
- The low level of IL/IDL among the educated classes contributes to the status quo of information illiterate citizens; these well-connected individuals should be 'leading the charge' for sustainability in IL/IDL
- Becoming 'critical consumers' of information is essential for personal and national empowerment
- Continuing with the status quo impedes progress of individuals, societies and nations