Libre Learning

OER and Equality

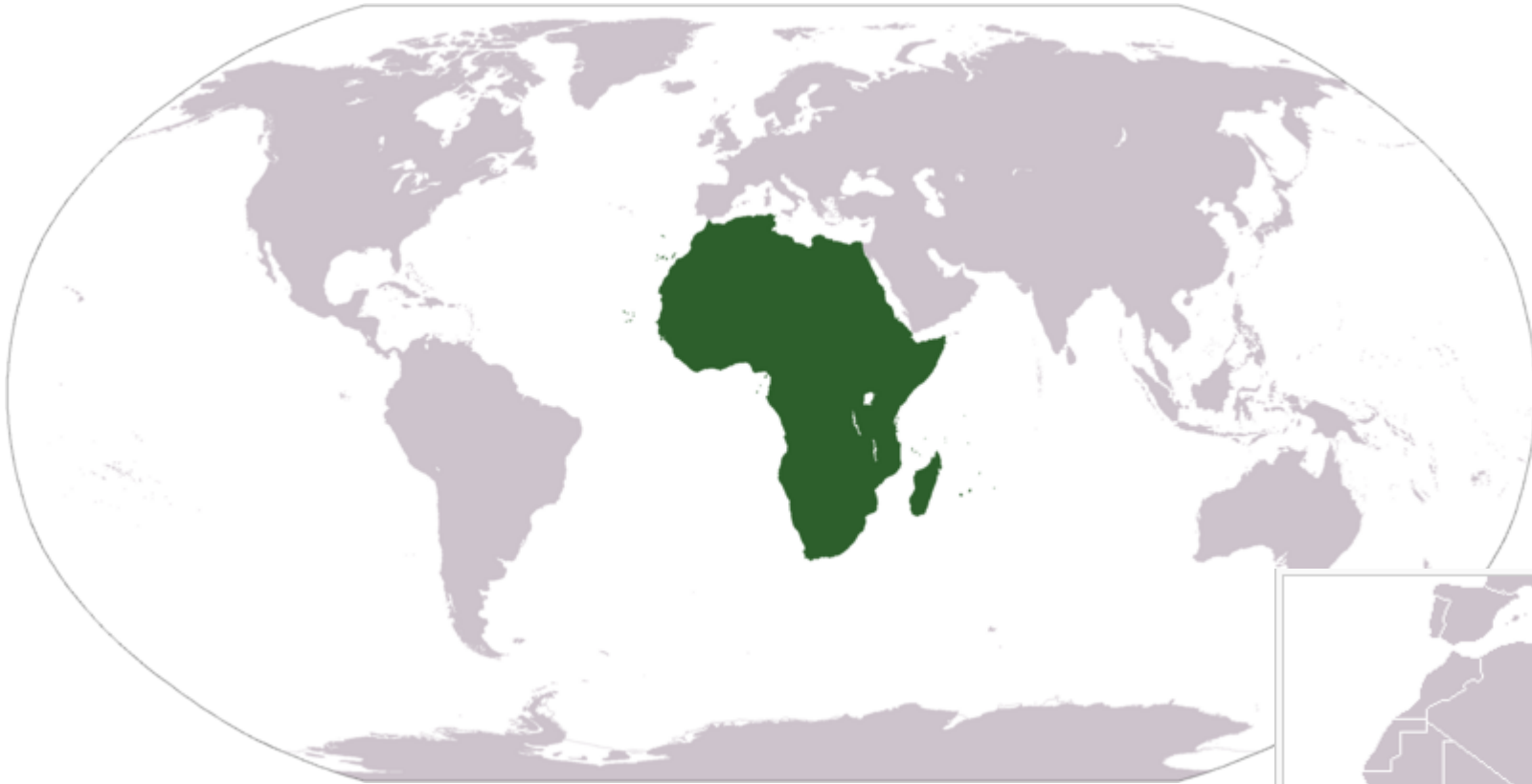Kim Tucker

(managed by the CISR in South Africa)

presented at

Open Education 2007

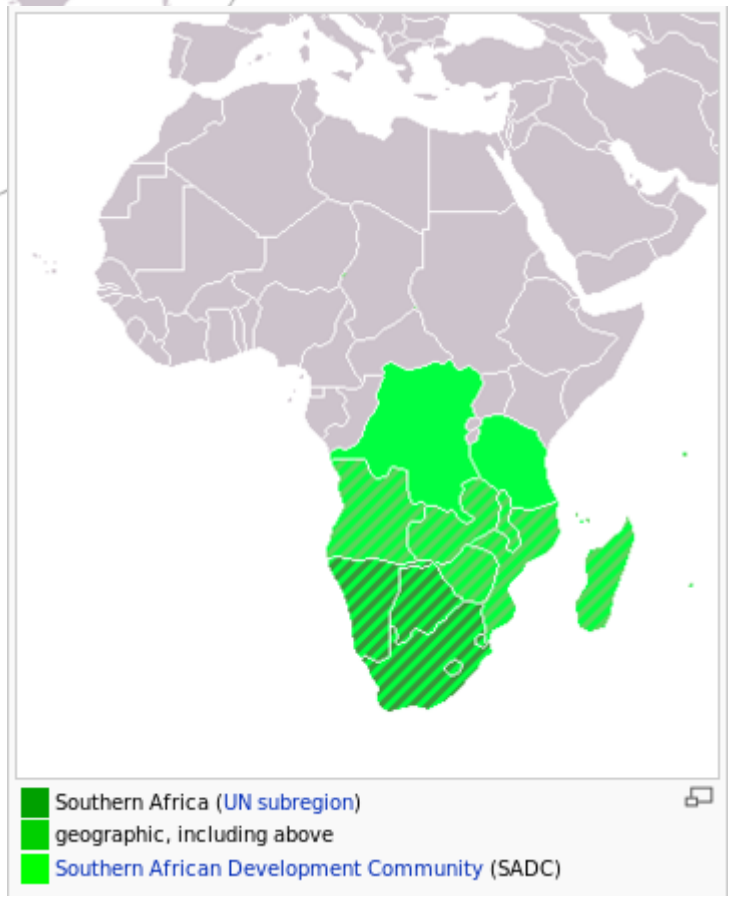Localizing and Learning

September 26-28, 2007

http://en.wikipedia.org/wiki/Image:LocationAfrica.png

Perspectives

Towards collective understanding

Southern Africa (UN subregion)
geographic, including above
Southern African Development Community (SADC)

http://en.wikipedia.org/wiki/Image:LocationSouthernAfrica.png

2

South Africa

a "developing" country

http://www.ted.com/talks/view/id/92

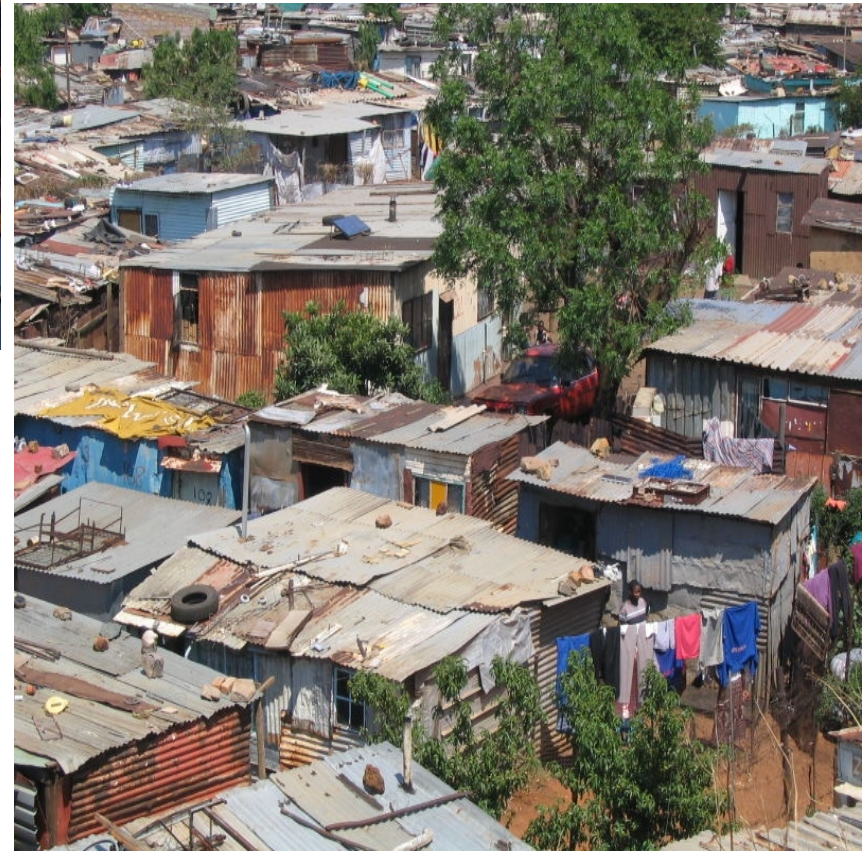a world in one country

From developed to pristine

http://en.wikipedia.org/wiki/Image:Sandton_home_01.jpg
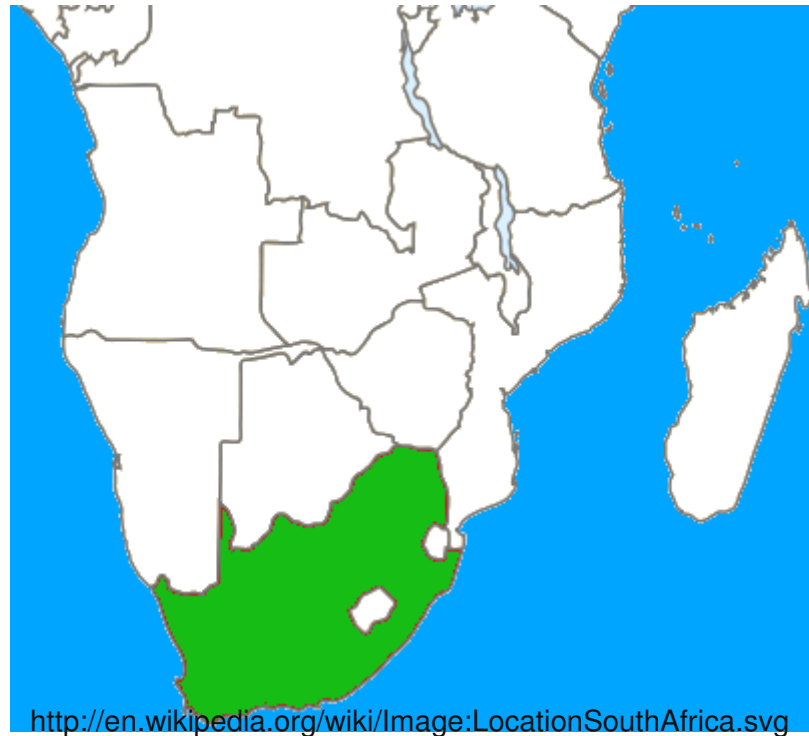
a country of contrasts

Township in Soweto
Matt-80
http://commons.wikimedia.org/wiki/Image:Soweto_township.jpg

Diversity - resiliance

Bluefin Trevally and Coral
http://flickr.com/photos/rling/438035973/
CC BY SA Richard Ling

fynbos
Uploaded on August 24, 2007
by chenlondon
http://www.flickr.com/photos/chen06/1221866029/

Welwitschia plant
http://flickr.com/photos/
squeakymarmot/134394329/
CC BY - squeakymarmot

Global (bio) Diversity

Dune 45, Sossusvlei, Namibia
http://flickr.com/photos/ibeatty/60086818/
CC BY SA ibeatty

Wildebeest
http://flickr.com/photos/angela7/294703313/
CC BY wayfaring stranger (Angela7)

7

Black rhinos at Animal Kingdom safari
Uploaded on August 28, 2006
CC BY-SA by SolGrundy
http://www.flickr.com/photos/solgrundy/227893557/

Dolphin Crest
http://flickr.com/photos/jurvetson/336157/
CC BY jurvetson

Impala
http://flickr.com/photos/zest-pk/924783392/
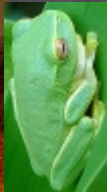CC BY zest-pk

The Kings
http://flickr.com/photo_zoom.gne?id=435343670&size=l
CC BY - Ben Tubby

Spot the frog
Uploaded on March 22, 2006
CC BY by nellring
http://www.flickr.com/photos/80415664@N00/116285264/

Global (bio) Diversity

Nepal Eagle Pokhara
Uploaded on July 2, 2007
BY SA by sluj78
http://www.flickr.com/photos/juls78/695107250/

Elephant
http://flickr.com/photos/mister-e/394312384/
CC BY mister-e

Giraffe -
http://flickr.com/photos/mister-e/394306482/
CC BY mister-e

All of this is under threat

for one reason or another

Pilsen and Pollution
http://flickr.com/photos/senor_codo/352250460/
CC BY SA
Uploaded on January 9, 2007 by Señor Codo

industrial waste
http://flickr.com/photos/inquire/351889812/
CC BY
inquirer

We are all connected

and collective wisdom

via local and global knowledge sharing

is required

for sustainability

[Economic – Social - Environmental]

Think global, act local

Equality and Education

Equal treatment – regardless of

- gender

- colour

- religion

- health

- physical condition

- age

- etc.

Equal access to ...

- Education
  - learning resources
    - ... quality
      - ... relevance
  - learning opportunities
  - knowledge

From slides of Wayne Mackintosh (COL)
presented at DEASA 42nd Regional Meeting
Swaziland, September 2007.

Kids who won't be going to school
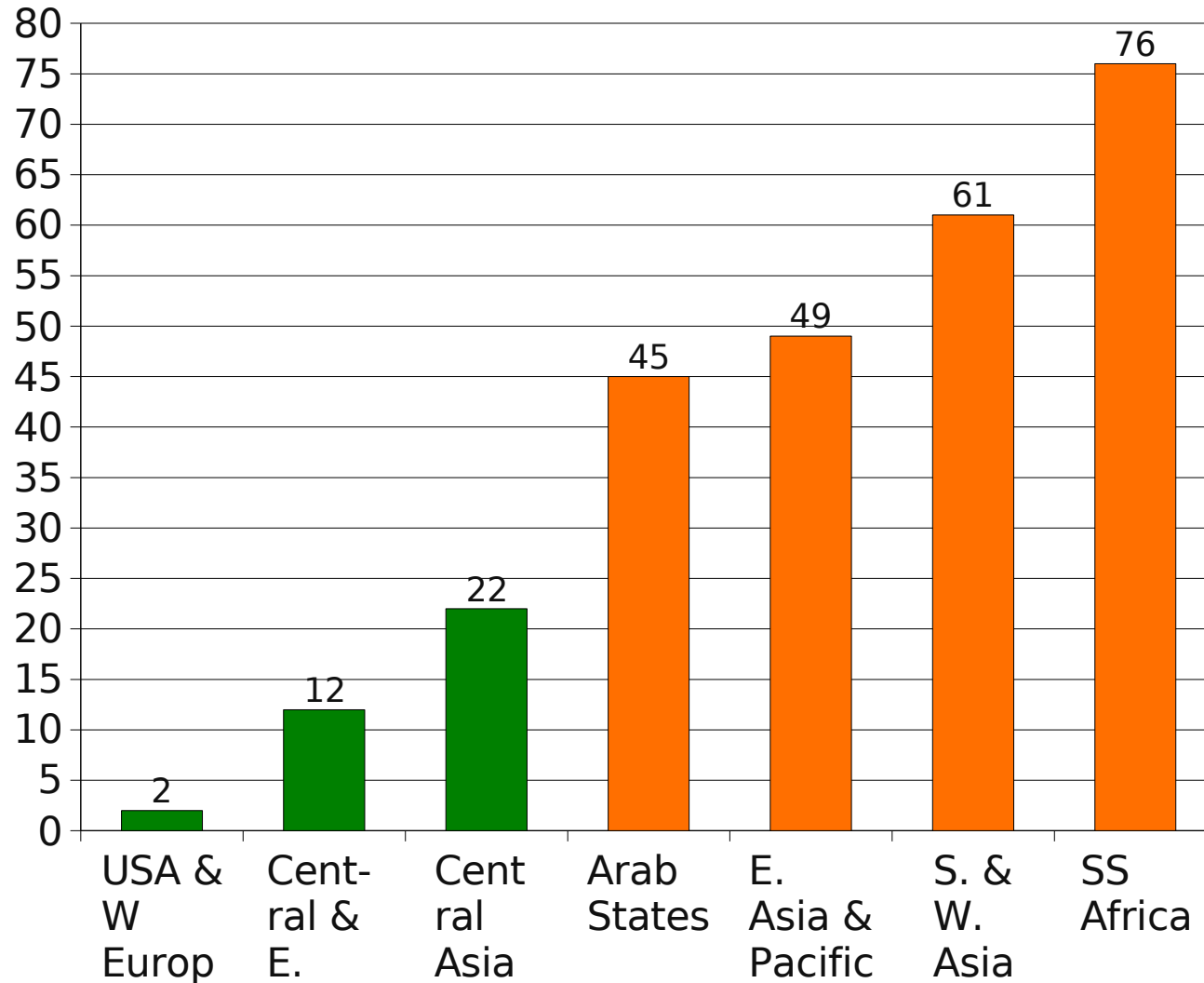
18

Equal access to ...

- water

- food

- sanitation

- health

- welfare services

- security

- etc.

Inequalities

Human Development Index

- poverty

- literacy

- education

- life expectancy

- childbirth

- and other factors for countries worldwide.
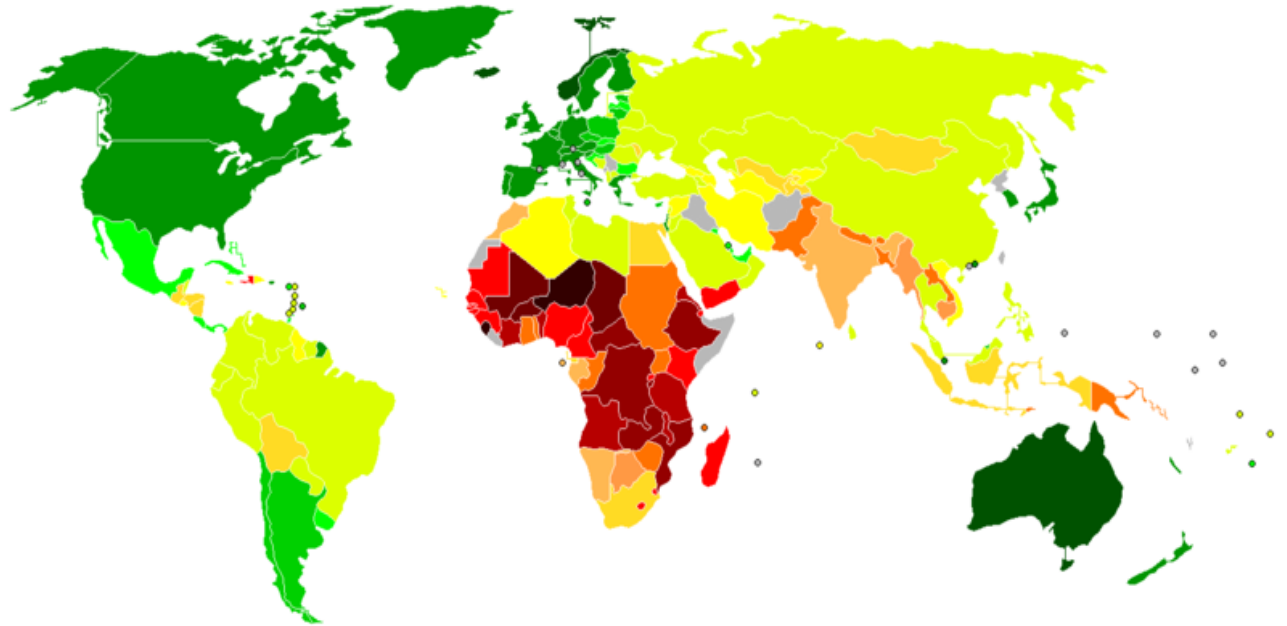
http://en.wikipedia.org/wiki/Human_Development_Index

Trends
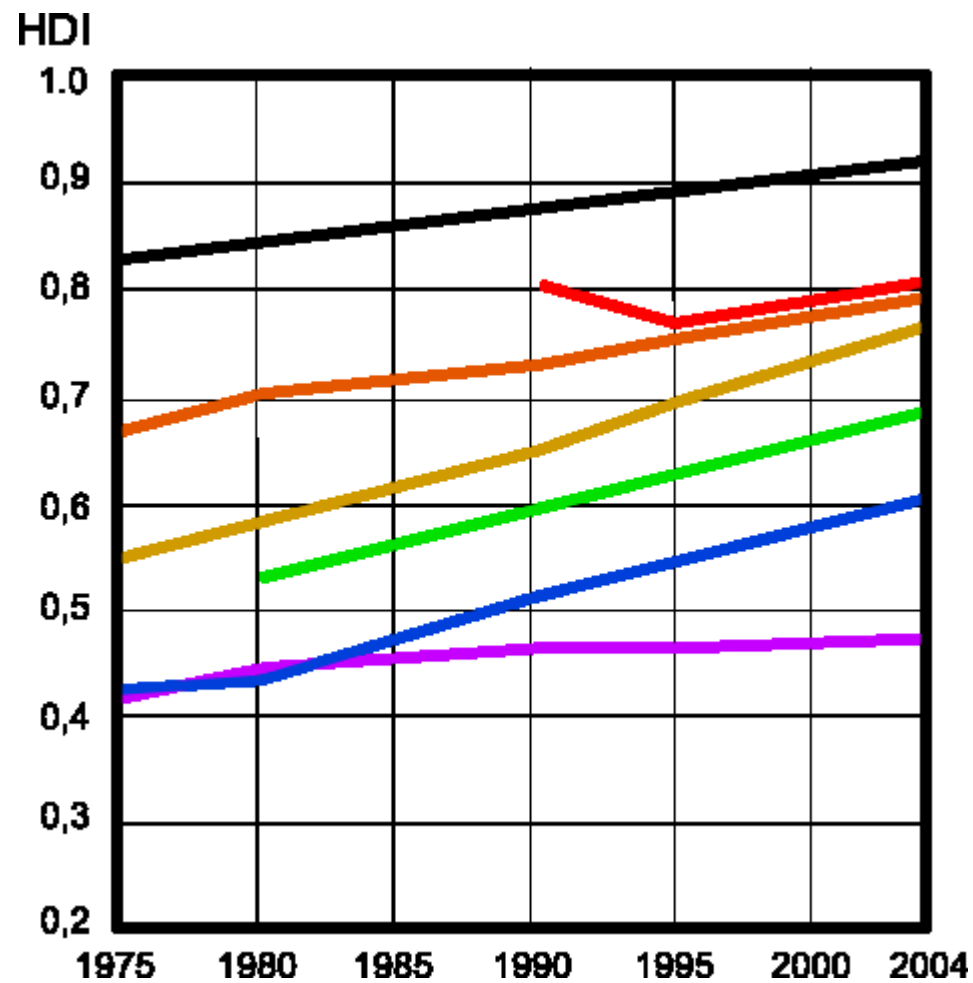
HDI trends between 1975 and 2004

- **OECD** (black)
- **Central** and **eastern Europe**, and the **CIS** (red)
- **Latin America** and the **Caribbean** (orange)
- **East Asia** (gold)
- **Arab States** (green)
- **South Asia** (blue)
- **Sub-Saharan Africa** (magenta)
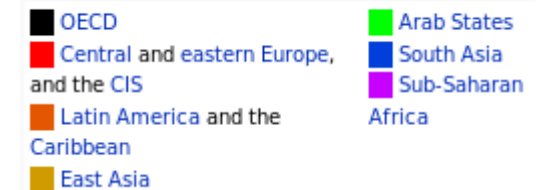
The marginalization of African knowledge

- Africa produces around 3% of books published, but consumes around 12%.

- Africa produced 0.2% of online content in 2002 – if South Africa is excluded, 0.02%.

- The major Northern scholarly journals account for 80% of articles in the Thomson indexes.
  163 developing countries produce just 2.5%.

- Africa has 0.3% of the journals in the TS indexes. 65% of African research in local, non-indexed journals

Internet Usage by World Region

Region	Millions of Users
Asia	437
Europe	322
North America	233
Latin America	110
Africa	34
Middle East	20
Australia/Oceania	19

World Internet Users

Region	%
Asia	37%
Europe	27%
North America	20%
Latin America	9%
Africa	3%
Middle East	2%
Oceania/Australia	2%
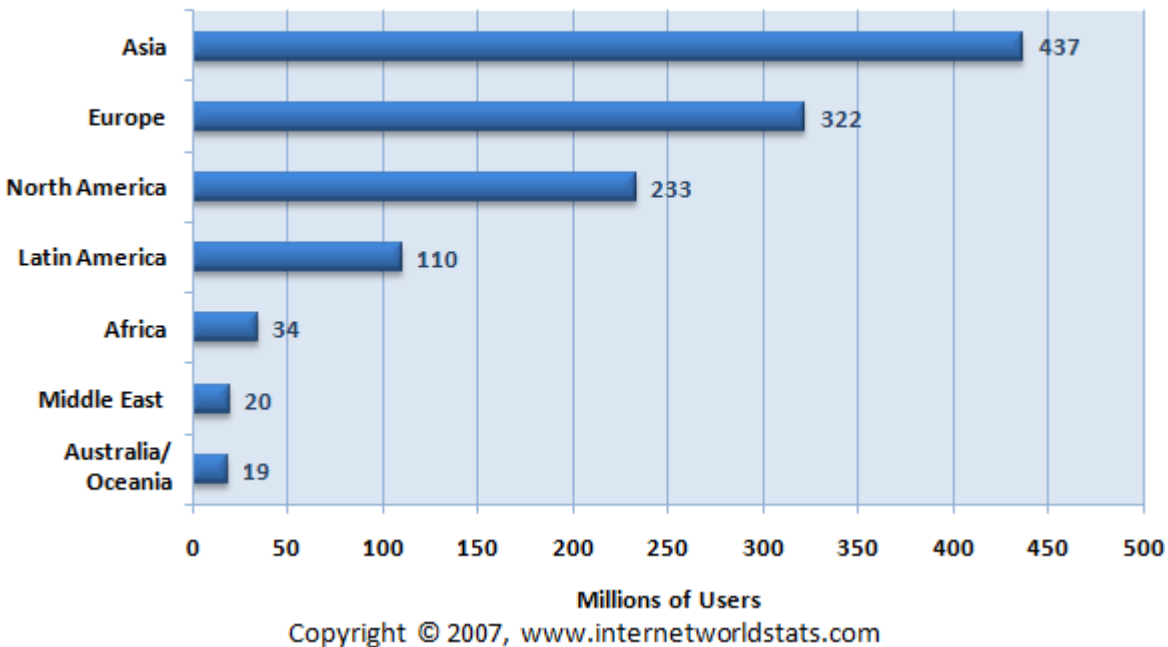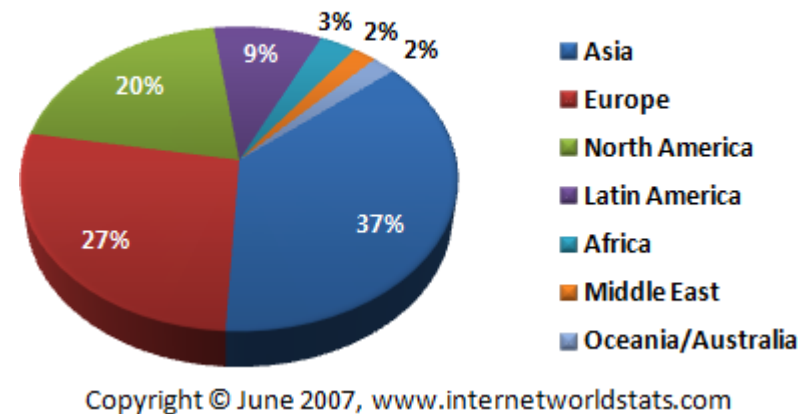
Internet Penetration by World Region

Region	Penetration Rate (% Population)
North America	69%
Australia/Oceania	54%
Europe	40%
Latin America	20%
Asia	12%
Middle East	10%
Africa	4%
World Avg.	18%
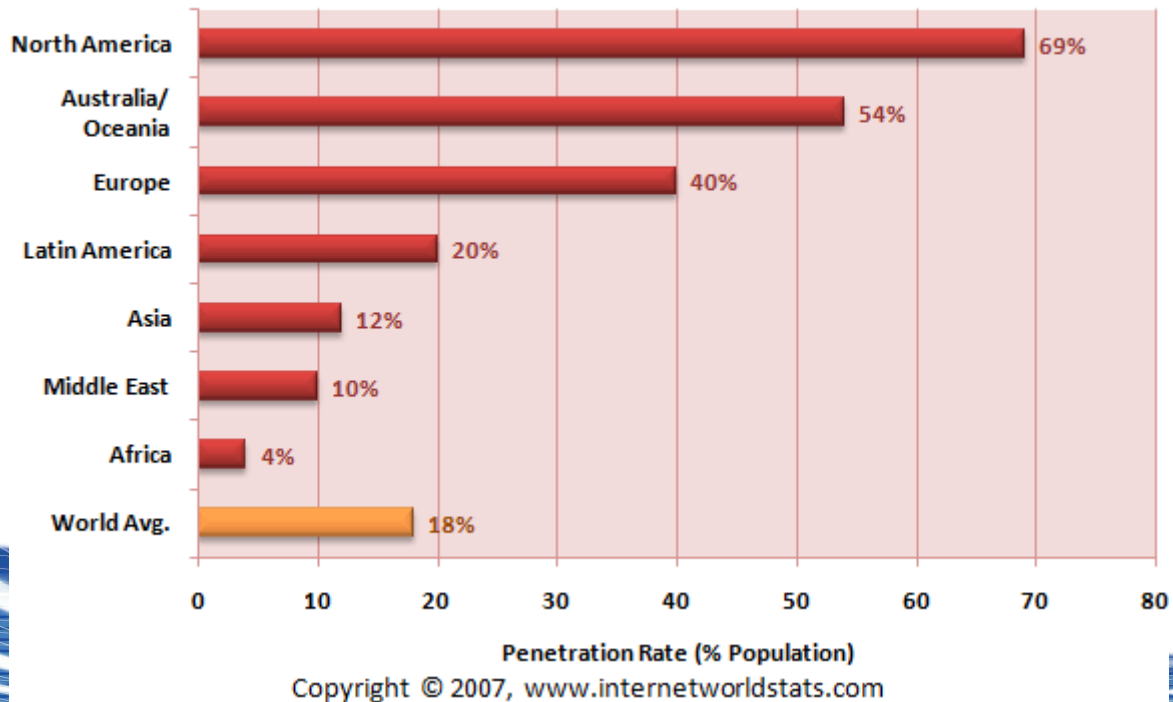
Africa Internet Users

Region	%
Africa	3%
Rest of the World	97%
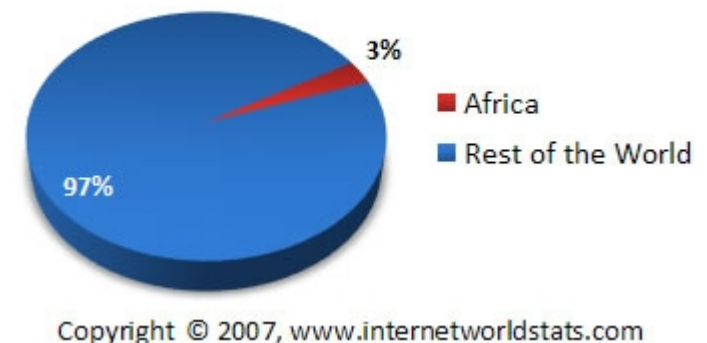
Is the OER movement part of the solution?

Can we enhance the impact?

Building Blocks towards inclusion

- Literacy

- Access to Technology (TV, PCs, phones, ...)

- ICT Literacy

- Access to Knowledge and Learning resources

- Ability to

  - use the resources – localisation

  - contribute and participate in co-generation of knowledge

  - Participate meaningfully in the knowledge society and decision making.

Local Solutions

leveraging global knowledge

Acting local

some examples

Singazenzela

"we can do things for ourselves"

a relatively new project

and a general principle

http://wiki.singazenzela.org/

WirelessAfrica.meraka.org.za

Digital Doorway

http://www.digitaldoorway.org.za/

MobilED.uiah.fi

The MobilED (mobile education) initiative
is aimed at designing learning and
teaching environments that are
meaningfully enhanced with mobile
technologies and services.

Technology
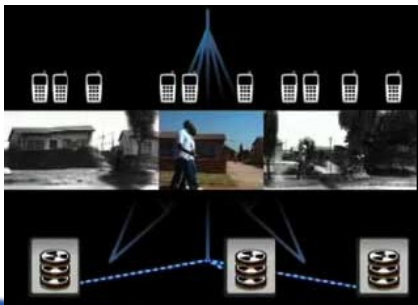
- Mobile devices: GSM phones, multimedia/smart phones, Internet tablets

- Wireless networks: GSM, 3G, WLAN

- Voice, speech and language technologies: speech interfaces, audio information systems etc.

- Social software: Mediawiki, blogs, Knowledge Building tools.

- Wikipedia: The Free Encyclopaedia.

Pedagogy

- Student and group-centred learning

- Project-based learning

- Problem solving

- Inquiry learning

Pilot 1
Stage 1

- A mobile audio wikipedia can be accessed by sending an SMS with a key word.

- The service calls back and plays the information, making use of text to speech conversion.

Pilot 1
Stage 2

- Learners could make their own audio castings on related topics.

- This information is added to the audio wikipedia for other people to listen to.

Pilot 2

- Similar lesson about HIV/AIDS, different approach, building in the results of Pilot 1 (also Grade 8)

  - More time for learners to experiment (with the phones and technology)

  - Printouts of a Wikipedia webpage

- Improvement of the technology

  - Improved speakers

  - Different text-speech system

  - Fewer bugs

Note the relevance of the content localisation

Some results from Pilot 2

- Enthusiastic support from learners (once again)

- Issues like language a "non-issue"

- Learners happy to share the cell phones in the group

- Learners comfortable with the technology in a short period of time

- Spontaneous use of audio wikipedia for other learning areas

Next Steps

- Future

  - Multimedia interaction

    - the free software is already designed for this

  - "Street Memory"

  - wider application

    - e.g. communication for disaster management

    - etc.

- Similar pilots in Finland, Brazil, Colombia, India

etc.

- Dr Math - http://l07.cgpublisher.com/proposals/848/index_html

- Human Language Technologies

  - http://www.meraka.org.za/humanLanguage.htm

- Intelligent Environments for Independent Living

  - http://www.meraka.org.za/nap

- Earth observation

  - http://ict4eo.meraka.csir.co.za/

- Fab Lab, ... intelligent toys, ..., etc.

Some great things are happening ...

- ICT in schools

  - Schoolnet Namibia: http://www.schoolnet.na/

  - tuXlabs: http://www.tuxlabs.org.za/

  - NetDay: http://www.netday.org.za/

- efforts towards Open Access in Universities, etc.:

  - http://blogs.uct.ac.za/blog/gray_area

- efforts towards connectivity and access:

  - South African Research Network:
    http://www.meraka.org.za/sanren.htm

Crimping tutorial
Uploaded on February 19, 2006
CC BY-SA by neajjean
http://www.flickr.com/photos/25205534@N00/101566675/

etc.

- Educational Wikis:

    - FLOSS4Edu: http://wikieducator.org/FLOSS4Edu

    - FLOSSLit: http://wikieducator.org/FLOSSLit

- ICT4D initiatives, etc.

    - OLPC pilots

    - http://www.translate.org.za - translation of FLOSS

    - ... in Africa

    - ... and other "developing" countries.

Digital Inclusion

Hope and opportunity

in a changing world

Earth at Night
More information available at:
http://antwrp.gsfc.nasa.gov/apod/ap001127.html

Astronomy Picture of the Day
2000 November 27
http://antwrp.gsfc.nasa.gov/apod/astropix.html

We can help each other – by sharing knowledge

Degree of Information connectivity (vertical axis)

Degree of social connectivity (horizontal axis)

Artificial Intelligence

Personal Assistants

Intelligent Agents

Semantic Webs

Semantic Web
Connects Knowledge

Ontologies

Knowledge Bases

Knowledge Management

Taxonomies

Knowledge Networks

The Global Brain

Enterprise Minds

Group Minds

The Metaweb
Connects Intelligence

Smart Marketplaces

Lifelogs

"The *Relationship* Web"

Semantic Weblogs

Decentralized Communities

Search Engines

Enterprise Portals

Content Portals

Marketplaces Auctions

Wikis

Community Portals

Weblogs

RSS

Web sites

Groupware

Social Software
Connects People

The Web
Connects Information

PIM's

Databases

"Push" Pub-Sub

E-mail

USENET

Social Networks

Conferencing

File Servers

P2P File-sharing

IM

Educational Technology

Blackboards

Motion pictures

Personal computers
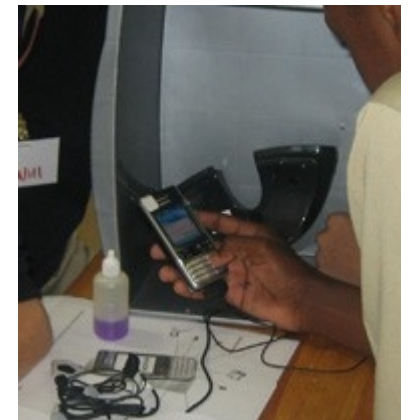
Television

Mobile phones

OLPC

Reaching out ...

Social Entrepreneurship

Prioritised sustainable projects

Relevant Life skills

Lateral/creative thinking

Communities are engaged with the programme and are catalysing Quality of Life improvement sustainably.

Fund raising and donor relationship management

Cultural Studies

Soft Systems Methodologies

Students

Project Management

Business Management

Access to Infrastructure

Community buy-in and active participation

Communities Vision

Actions

Narrative

Modules/components

ABET

Literacy

ICT literacy

Financial Management

Assets Management

Human Resources Management

Operational Processes

Business Management

Partnerships

Marketing and Business Development

Community Self-monitoring and evaluation

development and use of indicators

Community members

etc.

Fund raising and donor relationship management

Lateral/creative thinking

Communities are engaged with the programme and catalysing Quality of Life improvement sustainably.

Early days:

http://en.wikiversity.org/wiki/Portal:Social_Entrepreneurship_Network

and previously though still there:

http://wikieducator.org/Portal:Social_Entrepreneurship

speaking of inclusion ...

What kind of world do we want?
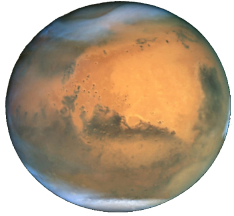
and who decides?

Conclusions

Localisation is always required.

Quality

can only be defined in local terms

... relevance and appropriateness

Free agency of people is required

for sustainable development

... equality as freedom

critical success factors:

- Keeping the vision in mind

    – Knowledge for all, freedom to learn, towards collective wisdom

- Process

    – Enabling communities to empower themselves with knowledge

[Libre Comunities vision - http://communities.libre.org]

Libre Knowledge

http://communities.libre.org/

http://communities.libre.org/philosophy/saylibre

or for participation:

http://wikieducator.org/Say_Libre

Acknowledgements

- MobilED Slides:

    – Merryl Ford: mford@csir.co.za

- Globe icon via:
  http://antwrp.gsfc.nasa.gov/apod/ap960819.html

- Wayne Mackintosh (COL) – as indicated

- The team back home in the Meraka Institute

- The William and Flora Hewlett Foundation

- Mars in opposition.
    - http://heritage.stsci.edu/2001/24/index.html
- and many others referred to on the slides, etc.

Thank you

Contact

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ktucker@csir.co.za

http://aliens.csir.co.za/~ktucker

http://www.meraka.org.za

The End

Extras

More on Libre Knowledge

Libre

- Shifts the focus towards the learners

  - freedom to learn ... social construction

  - away from "IP" - avoid this term ... eg "copyright"

- Highlights a vision to keep us focussed

- Acknowledges the need for collective wisdom

  - for a sustainable world

- Suggests the *Development as Freedom* perspective - Sen, A. 1999. Development as Freedom, Anchor Books, New York.

Development as Freedom

viewing development in terms of expanding

substantive freedoms

directs attention towards the ends that

make development important

rather than merely to some of the means

[means] such as increases in personal income,

social modernisation, technological advance,

industrialisation (and its hidden costs), etc.

Sen, A. 1999. Development as Freedom, Anchor Books, New York.

Sources of unfreedom

- poverty

- tyranny

- poor economic opportunities

- systematic social deprivation

- neglect of public facilities

- intolerance

- overactivity of repressive states

Sen, A. 1999. Development as Freedom, Anchor Books, New York.

Enablers

- Socio-economic arrangements

  - public facilities

    - education

    - health services

    - social welfare

    - local peace and order

Sen, A. 1999. Development as Freedom, Anchor Books, New York.

Mutually re-inforcing freedoms

- Freedom to

    - make a living

        - (e.g. by localising and disseminating OER :-)

        - to satisfy hunger - nutrition

        - to obtain or develop remedies for treatable diseases

        - gain access to clothing, shelter

            - water, sanitation,

            - education.

    - make a plan.

See: Sen, A. 1999. Development as Freedom, Anchor Books, New York.

Libre Knowledge – is part of the means and the end

if only we knew ...

- what the future will bring ...

- the aspirations of future generations ...

- all we can do is the best we can with the knowledge available to us.

Libre Communities Vision

- Knowledge for all, freedom to learn, towards collective wisdom

  we can only be wise together

- Enabling communities to empower themselves with knowledge

Libre Communities Manifesto (values)

- Libre communities value:

  - the members and their diverse perspectives,

  - the libre resources produced and the associated freedoms,

  - the ability of communities to collaborate on managing the quality of shared resources, and

  - the opportunity this freedom offers for networked communities to make a difference collectively, towards a sustainable world.

http://communities.libre.org/about/manifesto

Knowledge

libre knowledge

So, let's (continue to) do it

- ... starting with stories of hope

    and inspiration :-)

    and continued contribution to the various

    free knowledge initiatives.

More Extras

Look at that!

- FLOSS

  - GNU/Linux, FreeBSD, distrowatch.com, ...

  - Apache – jakarta, xml, server, cocoon, lenya, etc.

  - OpenOffice, Eclipse, Hybernate, Spring, JUnit, ...

  - etc. - http://sourceforge.net & http://freshmeat.net/

- Free Knowledge, free culture

  - Wikipedia, communities.libre.org, plos.org, doaj.org, cnx.org, ocw.mit.edu, sciencecommons.org, dmoz.org, creativecommons.org, ccmixter.org, http://www.free-culture.cc/, ...

Links (definitions)

- http://opensource.org

- http://gnu.org

- http://en.wikipedia.org/wiki/Free_software

- http://communities.libre.org/

- http://freedomdefined.org/

- http://blog.jimmywales.com/index.php/archives/2004/10/21/free-knowledge-requires-free-software-and-free-file-formats/

Links (just a few)

- http://distrowatch.com/
  - http://www.ubuntu.com/
  - http://www.getopenlab.com/
- http://www.apache.org/
  - http://jakarta.apache.org/
  - http://xml.apache.org/
- http://www.wikipedia.org/
- http://www.elephantsdream.org/
- http://www.ktdms.com/

FLOSS in Education Links

- http://moodle.org

- http://avoir.uwc.ac.za/

- http://atutor.ca/

- http://wikieducator.org/ http://exelearning.org

- http://fle3.uiah.fi/

- http://www.lemill.net/ and http://www.lemill.org/

- http://oerwiki.iiep-unesco.org/

FLOSS in Education Links

- http://cnx.org/

- http://rhaptos.org/

- http://www.greenstone.org

- http://dspace.org/

- http://www.schoolforge.org.uk/

- http://educommons.org/

- http://eduforge.org

- http://www.edubuntu.org/

- http://www.tuxlabs.org/ and http://www.schoolnet.na/

- http://www.netday.org.za/ and http://www.getopenlab.com/

Links

- ## Governments and FLOSS

  - http://europa.eu.int/information_society/activities/opensource/cases/index_en.htm

  - http://www.openia.com/resources/open-source/governments

  - http://www.oss.gov.za

- ## MDGs

  - http://en.wikipedia.org/wiki/Millennium_Development_Goals

- ## Research

  - http://flossworld.org

  - http://flosspols.org

Readings

- http://wikimania2006.wikimedia.org/

  – Lessig and Benkler u. proceedings (video & audio)

- http://www.benkler.org/

  – The Wealth of Networks (PDF available)

- http://www.free-culture.cc/

  – Free Culture – various formats and variations

- http://www.gnu.org/doc/book13.html

  – Free Software, Free Society: Selected Essays of Richard M. Stallman

Aigrain, P. 2005. Positive intellectual rights and information exchanges, in Ghosh (2005).

Atkins, D. E., J. S. Brown and A. L. Hammond, 2007. A Review of the Open Educational Resources (OER) Movement: Achievements, Challenges, and New Opportunities, Report to The William and Flora Hewlett Foundation.

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Benkler, Y. 2006. The Wealth of Networks, Yale University Press, London.

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George, S. 2004. Another World Is Possible If ..., Verso, New York.

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Hess, C. and E. Ostrom, 2007. Understanding Knowledge as a Commons: from theory to practice, MIT Press.

Himanen, P. 2001. The Hacker Ethic, Random House, New York.

Johnstone, S. 2005. Open Educational Resources and Open Content, for UNESCO IIEP discussion forum 24 October - 2 December 2005.

Lakhani, K. R. and R. G. Wolf, 2005. Why Hackers Do What They Do: Understanding Motivation and Effort in Free/Open Source Software Projects. In Feller, J., B. Fitzgerald, S. Hissam, and K. R. Lakhani (editors), 2005. Perspectives on Free and Open Source Software, MIT Press.

Lessig, L. 2000. Code and Other Laws of Cyberspace, Basic Books, New York.

Lessig, L. 2001. The Future of Ideas, Random House, New York.

Lessig, L. 2004. Free Culture. Penguin Press, New York.

Lessig, L. 2005. The People Own Ideas! NetPlus, 12, August/September, Intelligence Publishing, Cape Town.

Lessig, L. 2006. Read-Write Culture. Presentation at Wikimania2006.

Lessig, L. 2006. Code 2.0, Basic Books, New York.

Nov, O. 2007. What motivates Wikipedians, or how to increase user-generated content contribution. Communications of the ACM, (forthcoming). There is a growing body of research on what motivates free knowledge contributors. In this study, the top three motivators identified were fun, ideology and values.

Sen, A. 1999. Development as Freedom, Anchor Books, New York.

Sunstein, C. R. 2006. Infotopia: How Many Minds Produce Knowledge, Oxford University Press, USA.

Wales, J, 2004. Free Knowledge requires Free Software and Free File Formats. Blog posting.

http://blog.jimmywales.com/index.php/archives/2004/10/21/free-knowledge-requires-free-software-and-free-file-formats/

Wheatley, M. 2005. Preface for The World Café: Shaping Our Futures Through Conversations That Matter, Berrett-Koehler Publishers, San Francisco.

UNESCO, 2002. Forum on the Impact of Open Courseware for Higher Education in Developing Countries, Final report, UNESCO, Paris, 1-3, July 2002.

Permissions

Subject: Re: Mensaje de IWS
Creation Date: Wed, Sep 19, 2007 10:36 PM
From: info-iws <info@internetworldstats.com>

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Good luck with your presentation!

Enrique de Argaez
Editor and webmaster
www.internetworldstats.com
Miniwatts Marketing Group

> De: Kim Tucker <ktucker@csir.co.za>
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> http://www.internetworldstats.com/stats.htm
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The emblem signifies libre knowledge - common knowledge - or a "libre resource". ■ LIBRE

A libre resource may be incorporated, mixed or combined with other resources where the license qualifies as free/libre according to the libre knowledge definition.

Freedom to use, learn from/with, modify, and share the resources.

Libre communities prefer to co-generate libre resources with libre resources, and label the results with the libre emblem.

This implies copyleft or ShareAlike but libre knowledge does not require this.

The following licenses may be regarded as free/libre for explicit knowledge:

ShareAlike

Attribution-ShareAlike

Attribution

GNU Free Documentation License

Libre "license" at the time 20070927

Mixing resources across these licenses is tricky.

For example, resources licensed "Attribution" can be merged into resources licensed "Attribution-ShareAlike" and the result may be released as "Attribution-ShareAlike" - but not the other way round.

Keeping track of attributions can be cumbersome, and derived works will need to be licensed and attributed correctly.

Libre resources do not require Attribution, though we encourage people to acknowledge contributors when appropriate.

Libre resources are multi-licensed.

Users are free to make derived works and release these under any license which ensures all of the freedoms specified in the libre knowledge definition.

When you do this, it might be necessary to drop the libre emblem. For example, when the license for the derived work prevents the type of multi-licensing just described, or requires attribution.

The ideal is to mix libre resources which have not been relicensed and retain the emblem. This will grow the number of resources which may be mixed very easily - towards a commons of pure libre resources.

Trust the community to do the honourable thing and acknowledge contributors when credit is due.