



ICOIE2018

International Conference on
Open and Innovative Education

4–6 July 2018 • Hong Kong SAR

GLOBAL TRENDS IN OER

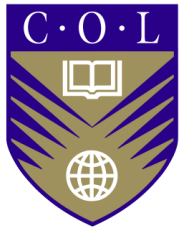
What is the Future?



COMMONWEALTH *of* LEARNING

Professor Asha Kanwar, President & CEO

Dr Sanjaya Mishra, Education Specialist: eLearning



COMMONWEALTH *of* LEARNING



To help Commonwealth governments and institutions use technologies to improve and expand learning for sustainable development





ECONOMIC
GROWTH

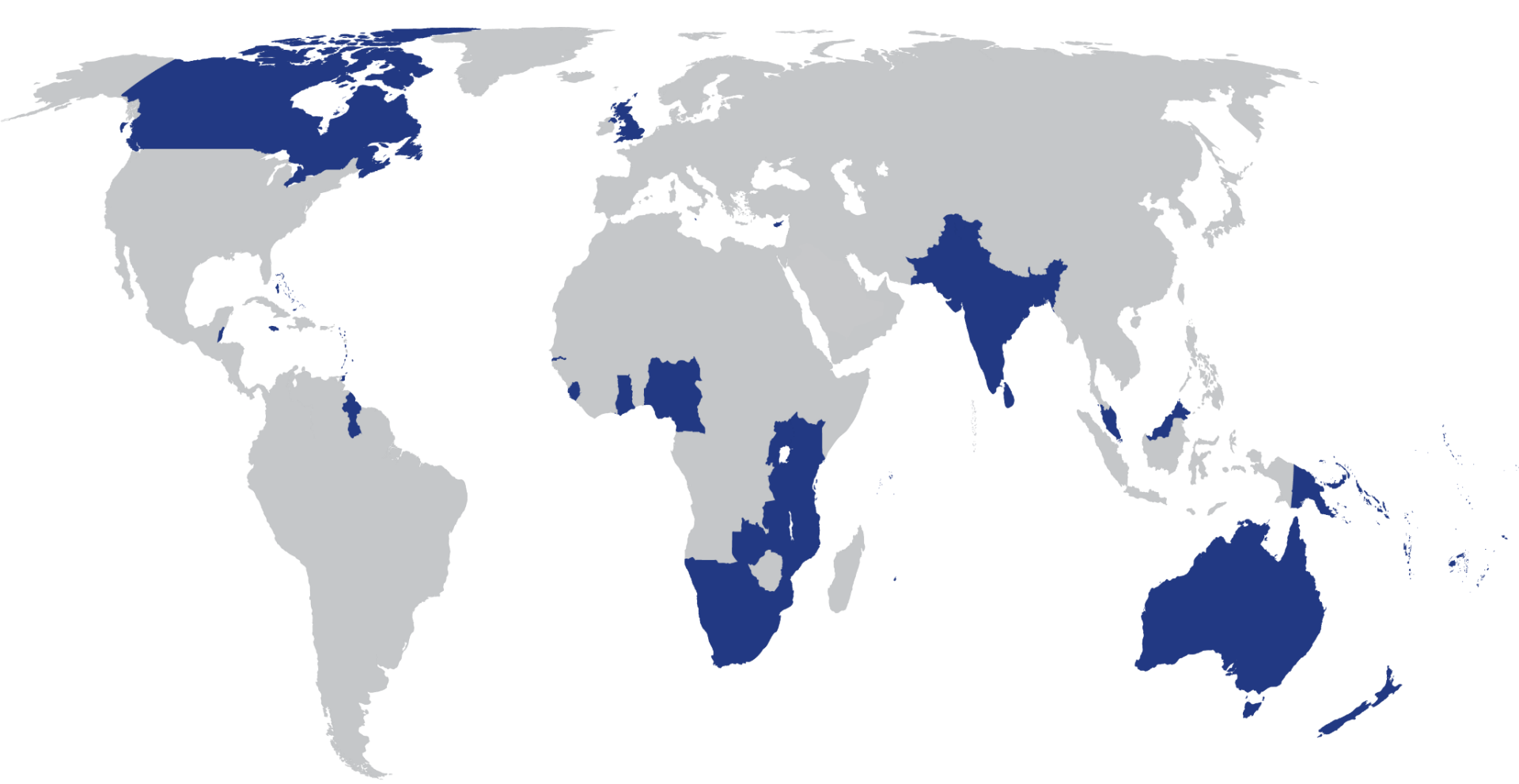


SOCIAL
INCLUSION



ENVIRONMENTAL
CONSERVATION

Learning for Sustainable Development



The Commonwealth

53 developed and developing nations around the world



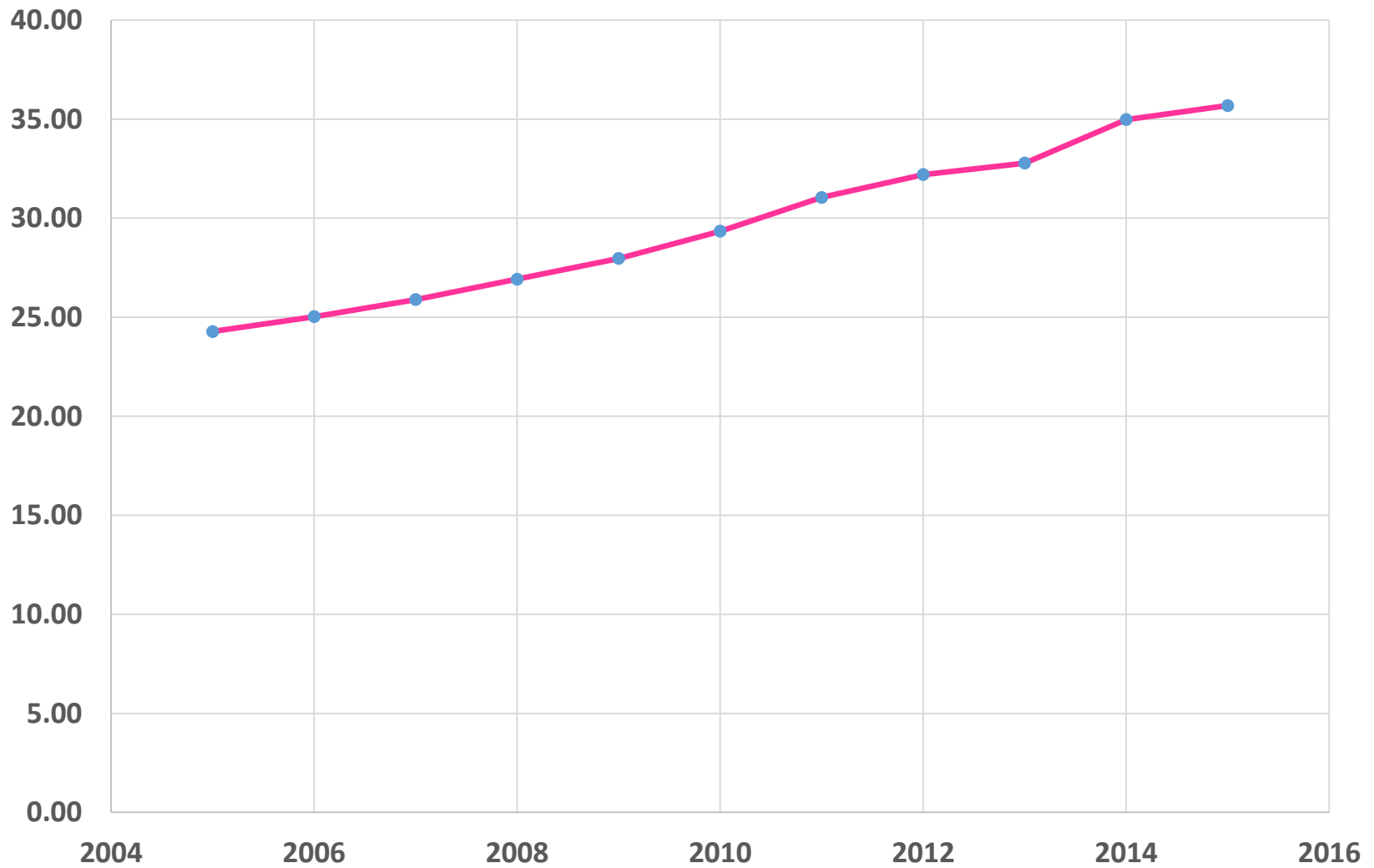
The Plan

- Context
- Brief History of OER
- Five Key Challenges
- Research Trends
- Future Directions



Context

GER Tertiary Education- Global

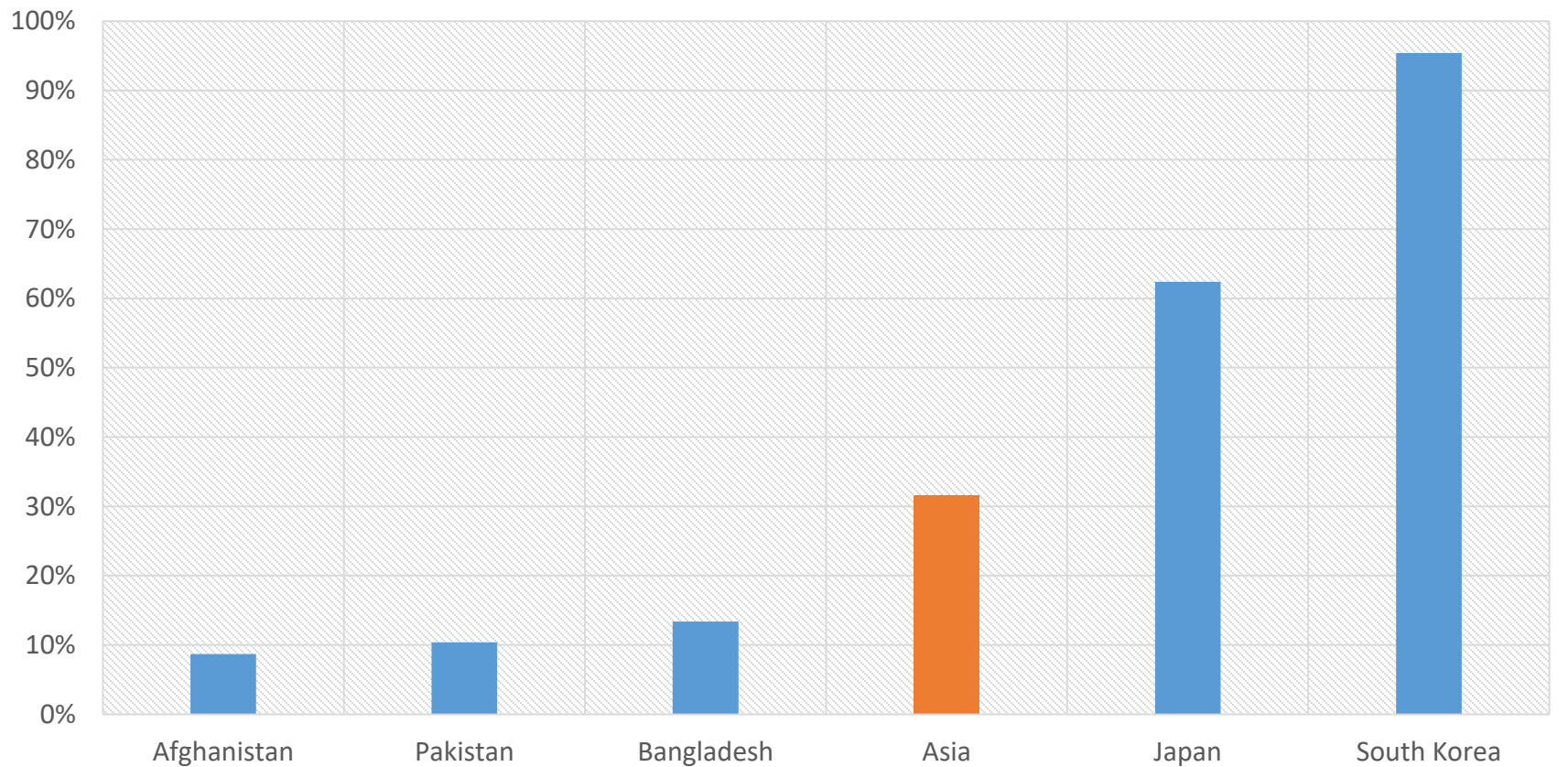


Source: [UNESCO Institute for Statistics](http://unesco.org/en/unesco-institute-for-statistics), Retrieved on 7 February 2018.



Asia: GER Tertiary

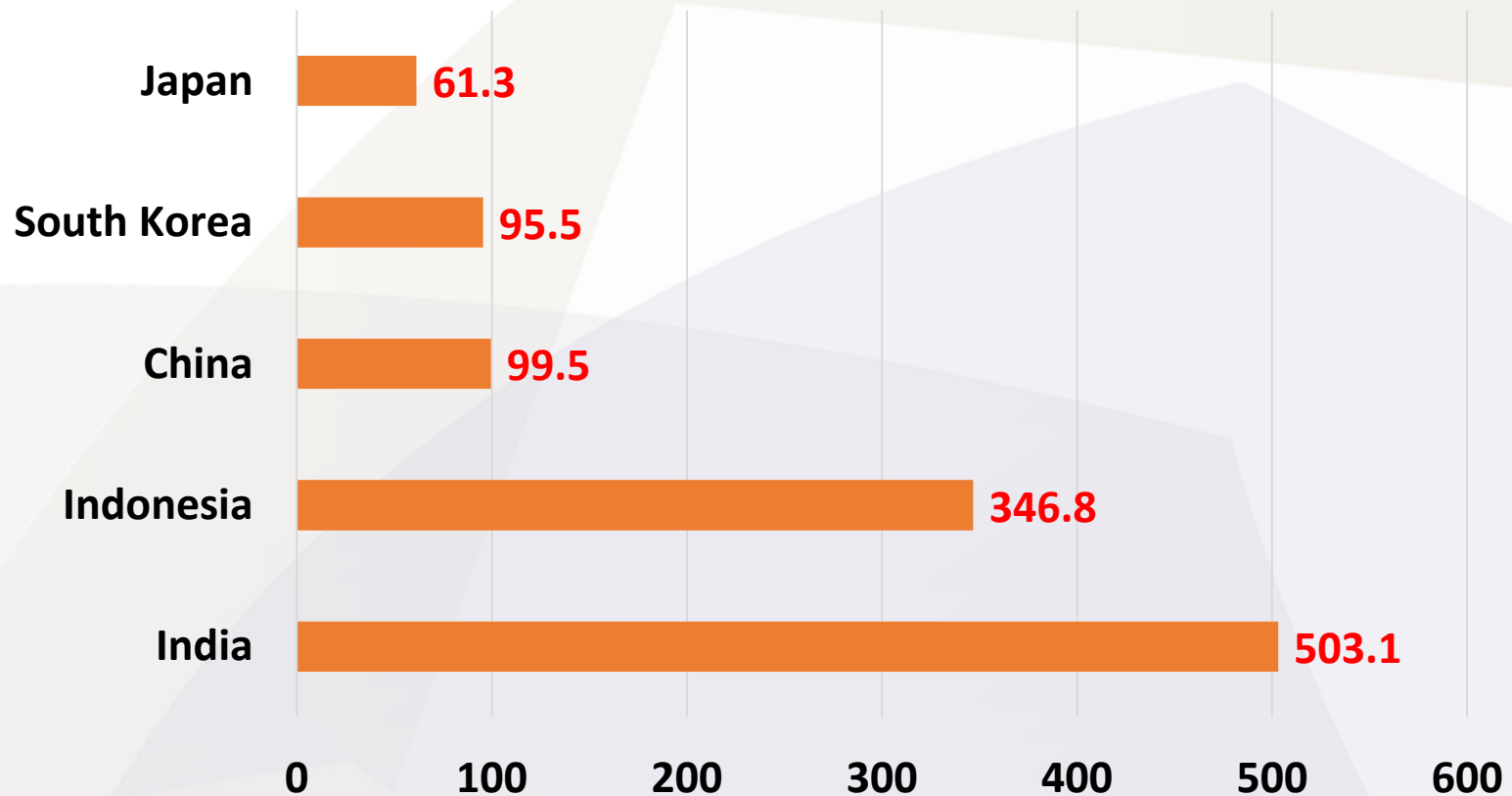
GER Tertiary in Asia



Source: http://data.uis.unesco.org/?ReportId=184&IF_Language=eng#

Cost of Higher Education

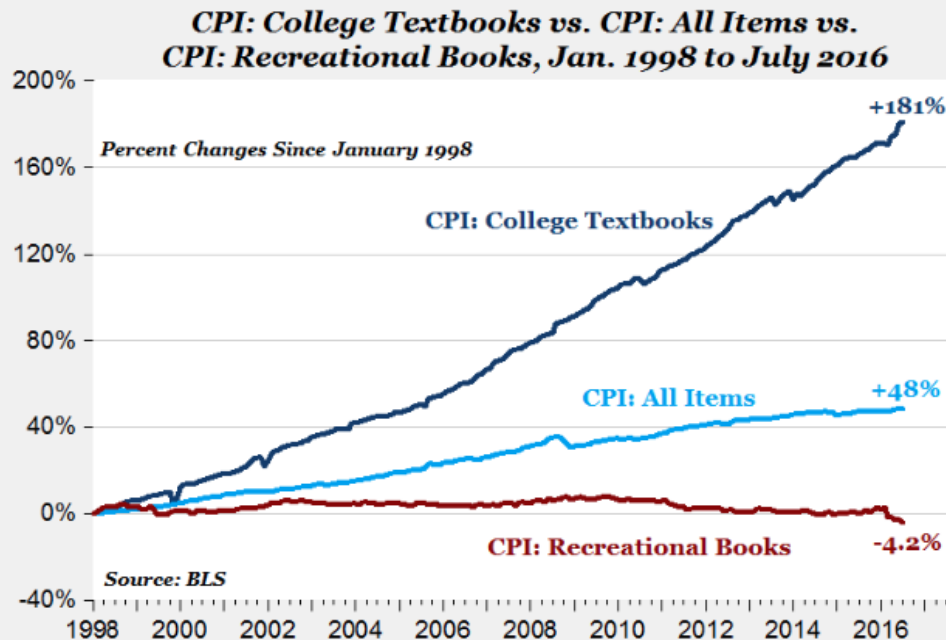
Cost as % of income in 2015



Rising Cost of Textbooks

Chart of the day: The astronomical rise in college textbook prices vs. consumer prices and recreational books

Carpe Diem



Carpe Diem

Costs Prohibit Access to TE

- In the USA, 65% students do not buy textbooks because of high costs (USD 1200 annually)
- In Malaysia, 76% do not buy textbooks because of high costs. (MYR 190 annually)

Access to Textbooks in Schools

- In Cameroon, there was only 1 reading textbook for 12 students and only 1 maths textbook for 14 students in grade 2.
- In Togo in grade 2, there were 3 students for every reading textbook, and 8 students for every maths textbook.



- Remote institutions in India
 - KSS Women's Engineering College, Andhra Pradesh
 - Maya Devi Educational Foundation, Uttarakhand
 - Bhilai Institute of Technology, Chattisgarh



Maya Devi
Educational Foundation



NPTEL

NATIONAL PROGRAMME ON
TECHNOLOGY ENHANCED LEARNING
A JOINT INITIATIVE OF IITs & IISc

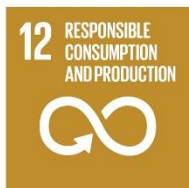
Why OER?

- Reduce costs
- Enhance access
- Improve quality



**SUSTAINABLE
DEVELOPMENT**

GOALS



Brief History of OER

What are OER?

*“OER are **teaching, learning and research materials in any medium – digital or otherwise** – that reside in the **public domain or have been released under an open license that permits no-cost access, use, adaptation and redistribution by others with no or limited restrictions.**”*

(UNESCO, 2017, p. 1).

Where it all began...



STAMP 2000+



MITOPENCOURSEWARE
MASSACHUSETTS INSTITUTE OF TECHNOLOGY





UNESCO HQ Paris

2002 Forum on the Impact of Open CourseWare
for Higher Education in Developing Countries

Cape Town Open Education Declaration 2007

- **Educators and learners:** to actively participate in the emerging open education movement.
- **Authors and publishers:** to release their resources openly.
- **Governments and institutions:** offer taxpayer-funded resources, as open educational resources.

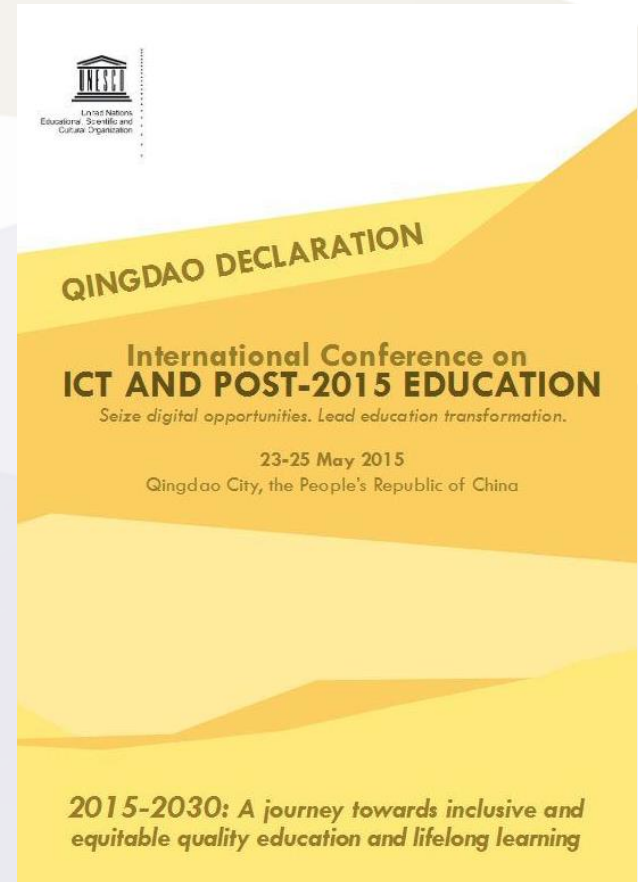
Photo: CC-BY Davide Storti

- The 2012 Paris OER Declaration
drafting group at UNESCO
Headquarters, Paris, France



Qingdao Declaration 2015

... commit to developing sector-wide strategies and capacity building programmes to fully realize the potential of OERs to expand access to lifelong learning opportunities and achieve quality education.





2nd World OER congress

OER for Inclusive and Equitable Quality Education From Commitment to Action

2nd World OER Congress | 18-20 September, 2017 | Ljubljana, Slovenia

ASIA



20

Highlights: Asia



- NME-ICT follows CC BY-SA licence (India)
- Commitment to OpenCourseWare in eLearning policy (Malaysia)
- OER repositories in China, Hong Kong, India, Indonesia, Malaysia, Pakistan, Philippines, Vietnam.

Priorities: Asia



- Need for improved connectivity
- More attention to content for people with disabilities
- Increased awareness and capacity to use/develop OER
- Need for OER in local languages
- National policies to guide OER



COMMONWEALTH *of* LEARNING



OPEN EDUCATIONAL
RESOURCES:
**Global Report
2017**



LEARNING FOR SUSTAINABLE DEVELOPMENT





Global Trends

Policies

- Increasing support, not accompanied by national policies
- Institutional policies have grown
- Regions with extensive OER activities, not always reliant on national policy



Global Trends Repositories

- OER repositories from the global north used more
- Majority of the repositories are at tertiary level
- Repositories are increasingly available in diverse fields and levels



Global Trends Awareness

- Many governments and stakeholders not clear about OER
- Increased focus on open textbooks has led to neglect of OER for lifelong learning
- Governments are supporting MOOCs, which are not necessarily “open”

OER: Then and Now



Focus was on Governments
Policies
Commitment

Additional focus on stakeholders
Mainstreaming OER
Concrete Actions

Five Key Challenges

Key Challenges

- Developing supportive **policy** environments
- Ensuring **inclusive and equitable access** to quality OER
- Building the **capacity** of users to find, re-use, create and share OER
- **Language & cultural issues**
- Developing **sustainability models**

Ljubljana OER Action Plan 2017



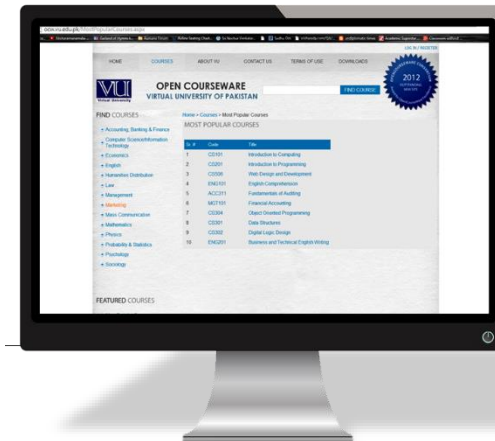
OER Policies in Asia

- No National OER policy: in process in Bangladesh, India and Malaysia
- Institutional policies: BOU, 7 in India, OUSL, WOU
- Project/ Initiative level: NMEICT, India
- Provincial policies: Sri Lanka



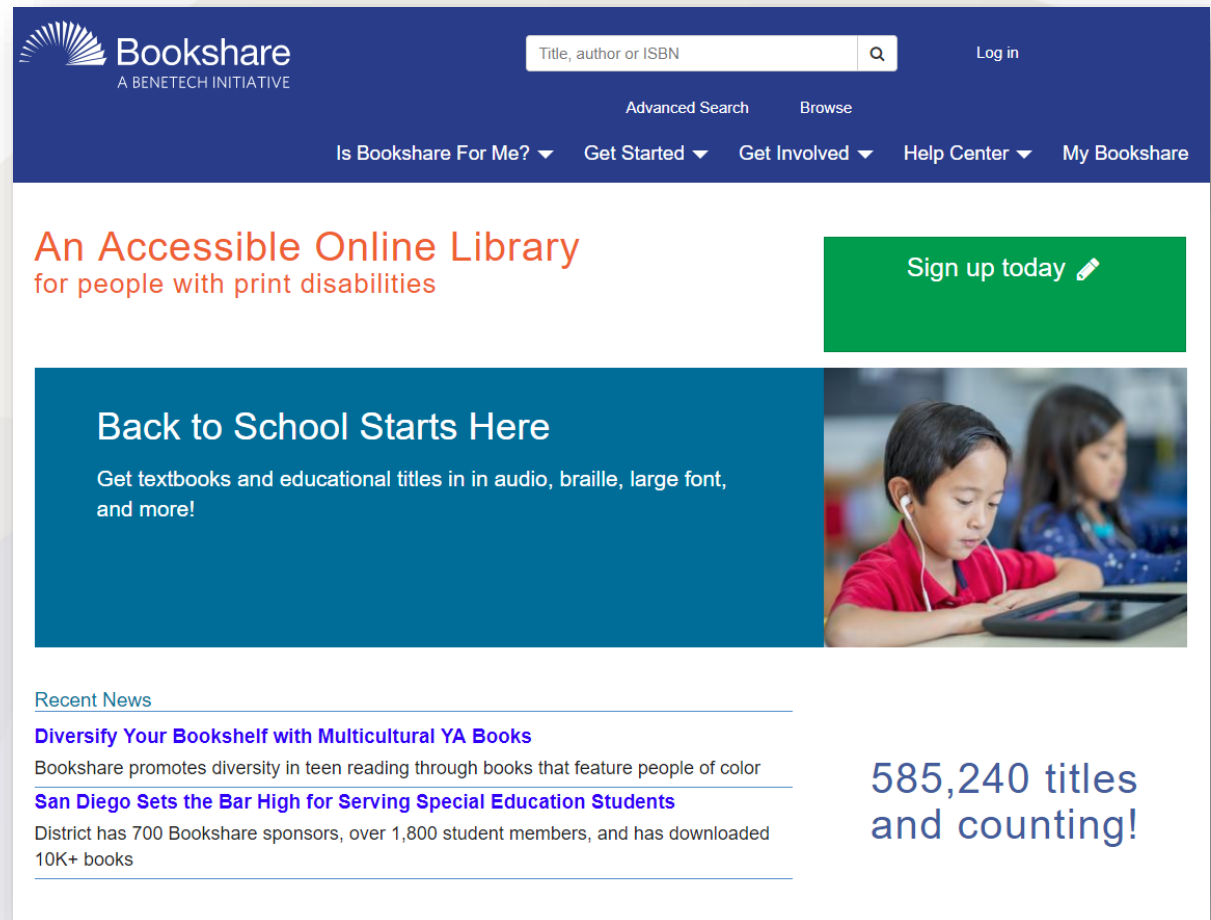
OER Initiatives in Asia

- OER Asia
- CORE, China
- NROER, India
- VUP Open Courseware
- Japan OCW



2. Inclusive and Equitable Access

- ebooks
(including exceptions in copyright for people with disability)
- Open Access
- FOSS



The screenshot shows the Bookshare website homepage. The header is dark blue with the Bookshare logo (a sunburst icon) and the text "Bookshare A BENETECH INITIATIVE". A search bar is on the right with the placeholder "Title, author or ISBN" and a magnifying glass icon. To the right of the search bar is a "Log in" link. Below the header is a navigation bar with links: "Is Bookshare For Me?", "Get Started", "Get Involved", "Help Center", and "My Bookshare". The main content area has a white background. At the top, there's a section titled "An Accessible Online Library for people with print disabilities" in orange and black text. To the right of this text is a green button that says "Sign up today" with a pencil icon. Below this is a blue section titled "Back to School Starts Here" in white text. Underneath this title is the text "Get textbooks and educational titles in audio, braille, large font, and more!". To the right of this text is a photo of two children, a boy and a girl, looking at a tablet. Below the blue section is a "Recent News" section. It has two news items: "Diversify Your Bookshelf with Multicultural YA Books" and "San Diego Sets the Bar High for Serving Special Education Students". Each item has a short description. To the right of the news section is a large text block that says "585,240 titles and counting!".

Bookshare
A BENETECH INITIATIVE


Title, author or ISBN

Log in

Advanced Search Browse

Is Bookshare For Me? Get Started Get Involved Help Center My Bookshare

An Accessible Online Library
for people with print disabilities

Sign up today 

Back to School Starts Here

Get textbooks and educational titles in audio, braille, large font, and more!

Recent News

Diversify Your Bookshelf with Multicultural YA Books
Bookshare promotes diversity in teen reading through books that feature people of color

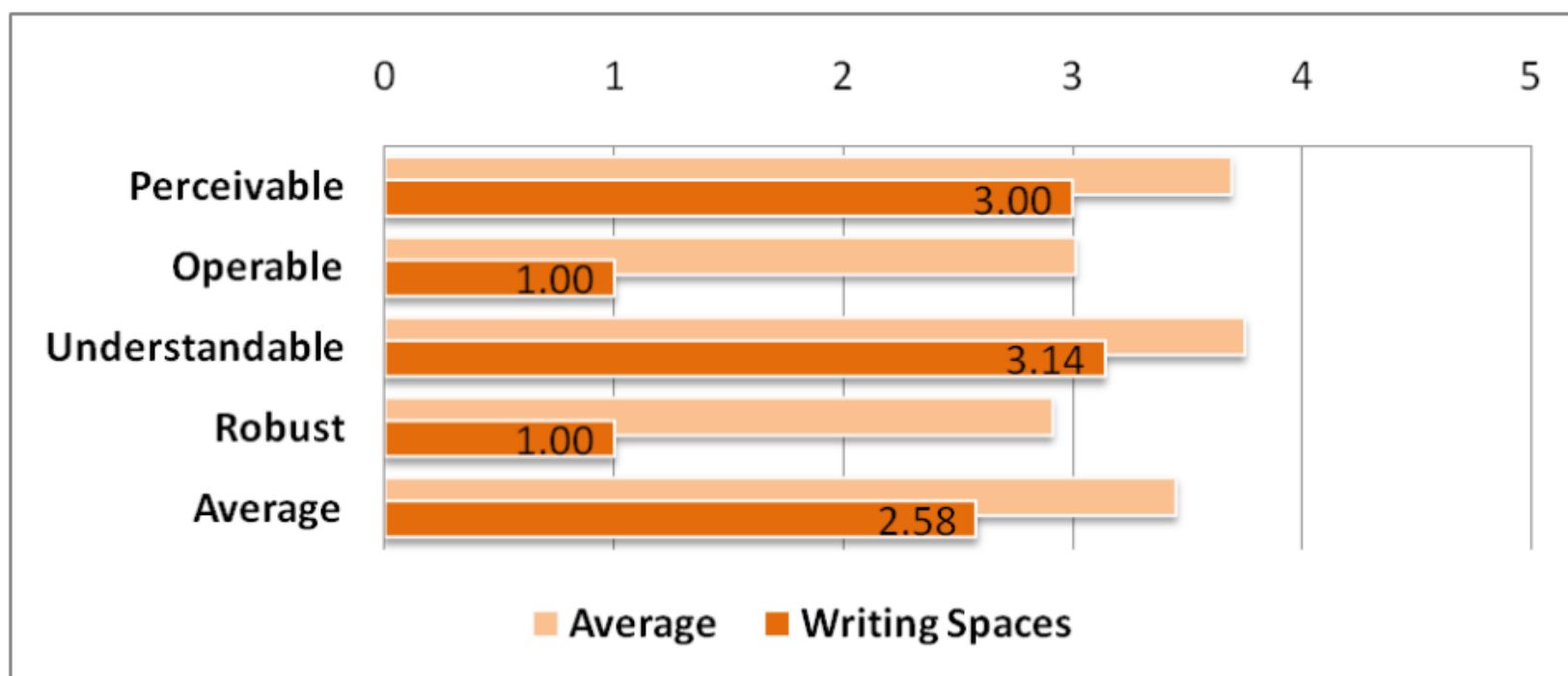
San Diego Sets the Bar High for Serving Special Education Students
District has 700 Bookshare sponsors, over 1,800 student members, and has downloaded 10K+ books

585,240 titles and counting!

How Accessible are OER?

Textbook: Writing Spaces

Accessibility review by: Virtual Ability, Inc.



Source: <http://www.collegeopentextbooks.org/textbook-listings/accessibility-reviews>





Every \$1 invested resulted in \$9 worth
of income and assets.



3. Capacity

- **Teachers**: difficult to locate, adapt, and re-purpose OER material relevant to their work.
- **Learners**: OER should be more open and multi-modal.
- **Technical support**: lack of standard practices in the packaging and re-use of OER.
- **Management**: concerns regarding intellectual property; copyright issues and competition

OER Survey, Asia, 2011 (WOU, IDRC)



Capacity Building

- Short OER Course:
Accessed
by 19,000
people

The screenshot displays the user interface for the 'Understanding Open Educational Resources (OER)' Introduction module. At the top, the Commonwealth of Learning logo and name are visible, along with the course title and 'Introduction' section. Navigation links for 'MENU' and 'EXIT' are on the right. The main content area features a world map background and a blue box with the 'Open Educational Resources' logo. A form titled 'Tell Me Your Name' prompts the user to enter their name for a completion certificate, with a 'Submit' button. Below the form is a silhouette of a diverse group of people. The bottom navigation bar includes icons for 'HELP', 'RESOURCES', 'AUDIO ON', 'TRANSCRIPT', and 'QUICK CHECKS', along with a 'Module Progress 1%' indicator and page navigation controls showing '01 | 04'.

C.O.L. COMMONWEALTH OF LEARNING
Learning for Sustainable Development

Understanding Open Educational Resources (OER)
Introduction

MENU EXIT

Open Educational Resources

Tell Me Your Name
Enter your name in the field below and select the Submit button. This will be used to Print the module completion certificate at the end of the module.

Submit

Module Progress 1%

01 | 04

4. Language & Culture: Translation

CORE



COL ID template translated and adapted by Open University of China



COL materials in Ukrainian



OER Platform in Tamil

ஓதுவது ஒழியேல் - தமிழ் மூதாட்டி ஓளவை



முகப்பு கூட்டமைப்பு பொருளடக்கம் தொடர்புக்கு

திறந்தநிலை கல்வி வளங்கள்

OPEN EDUCATIONAL RESOURCES

Search

தேடுக



This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).

Localisation: Principles

- A community of practice bolsters localisation
- Must be done in appropriate formats
- Understand local contexts

Localization of Open Educational Resources
(OER) in Nepal: Strategies of Himalayan
Knowledge-Workers

Tiffany Zenith Ivins
March 2011

<http://gradworks.umi.com/3450142.pdf>



5. Sustainability Models

Funding Models

- Endowment
- Membership
- Collaboration
- Institutional/governmental

Business Models

- Cross Subsidy
- Ad-supported
- Freemium
- Gift economy

OERu concept



Collaborative Model



Students awarded
credible degree or
credential



Participating
institutions grant
credit for courses



Assessment
from participating
institutions



Student support via
"Academic Volunteers
International"



Learners access
courses based solely
on OER



Institutional/Governmental models



Z-DEGREE

In USA, the Z-degree programmes save about USD2,500 per student



BCcampus  OpenEd

BC Campus in Canada has saved over 9 million CAD in 40 participating institutions



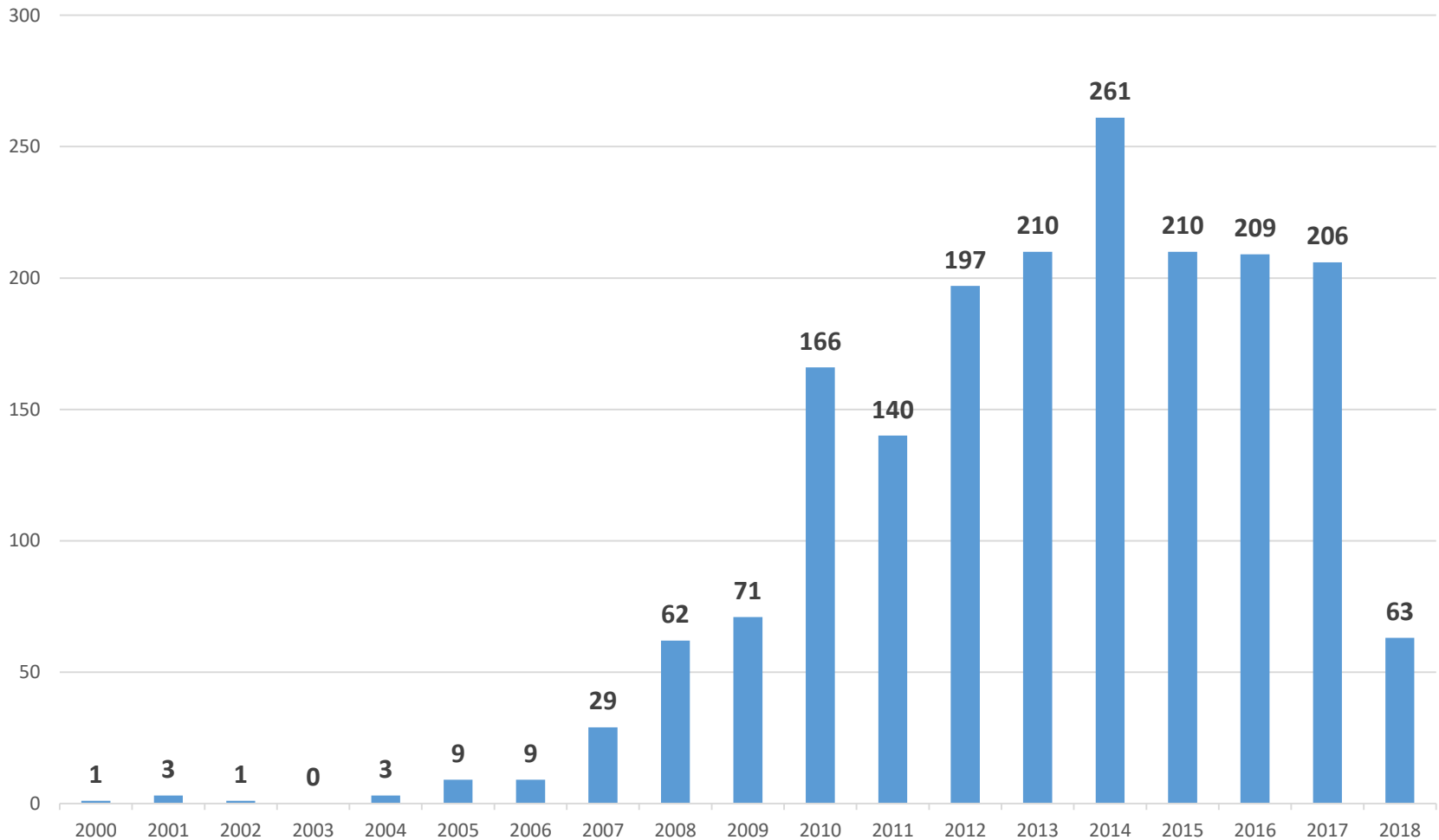
What is still needed...

- More advocacy and capacity development
- Policies
- Targeted approach to developing OER in accessible media formats
- Culturally and linguistically relevant OER
- New business models with a win-win framework

Research Trends

Publications on OER

Based on OER Knowledge Cloud



1. Overview of OER Research

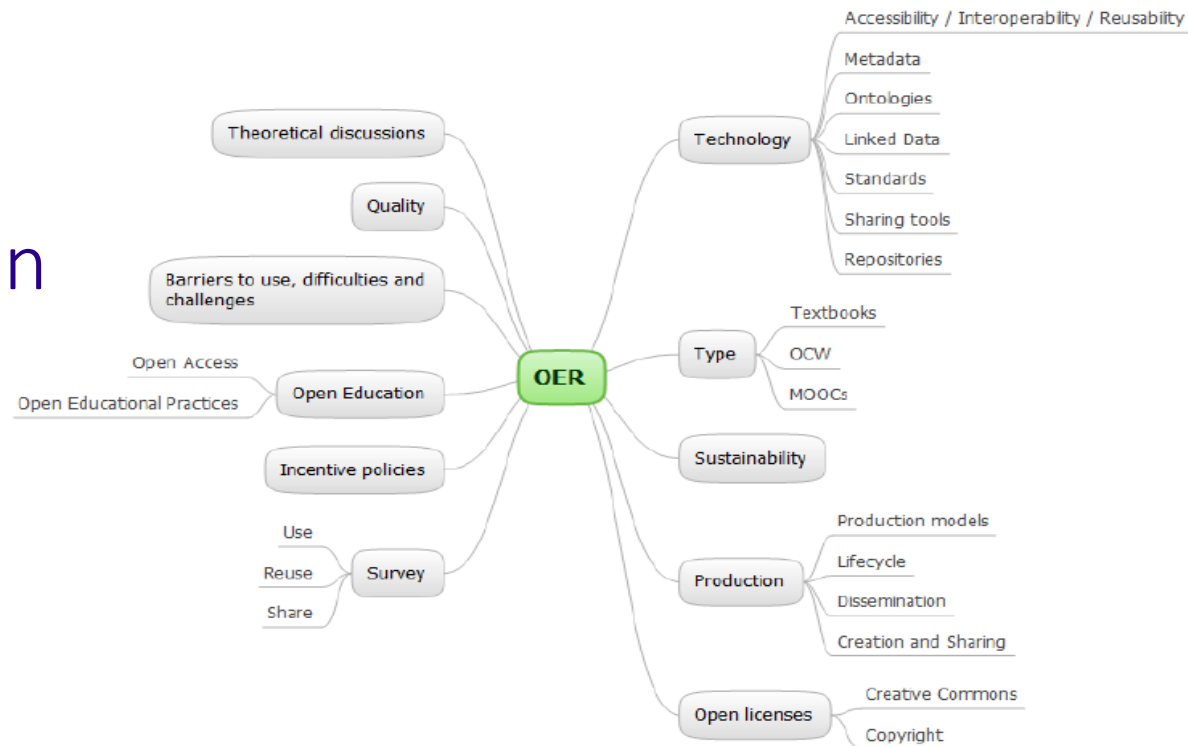
Bibliographic Data	Frequency
Publications	544
Authors	843
Countries of the authors' Institutions	61

Source: Zancanaro, A., Todesco, J. L., & Ramos, F. (2015). A bibliometric mapping of open educational resources. *The International Review of Research in Open and Distributed Learning*, 16(1).



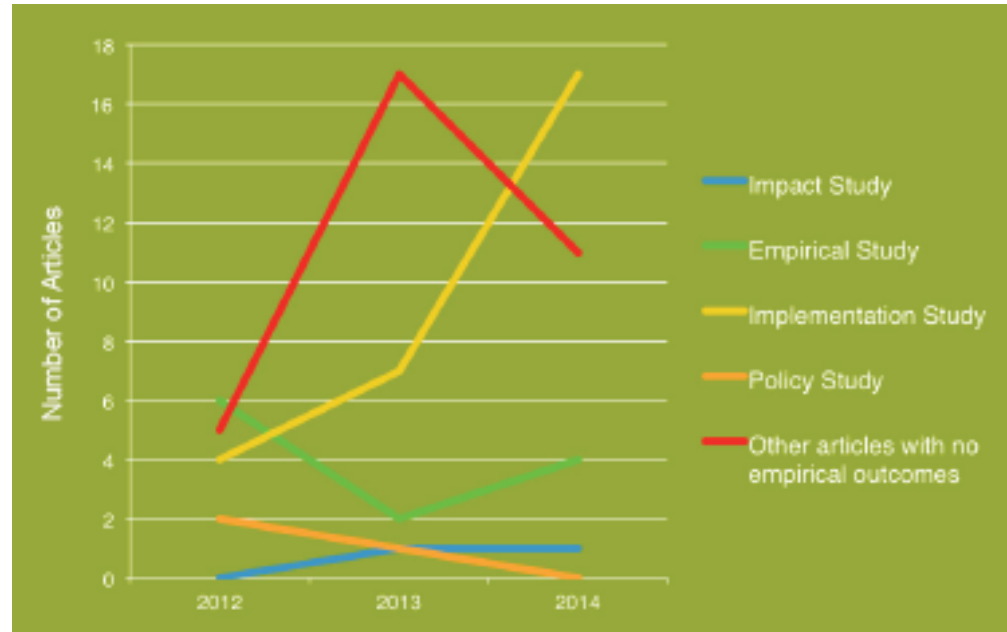
Key Topics

- Technology
- Quality
- Open Education
- Sustainability
- Open licenses
- Barriers



OER Research: orientation

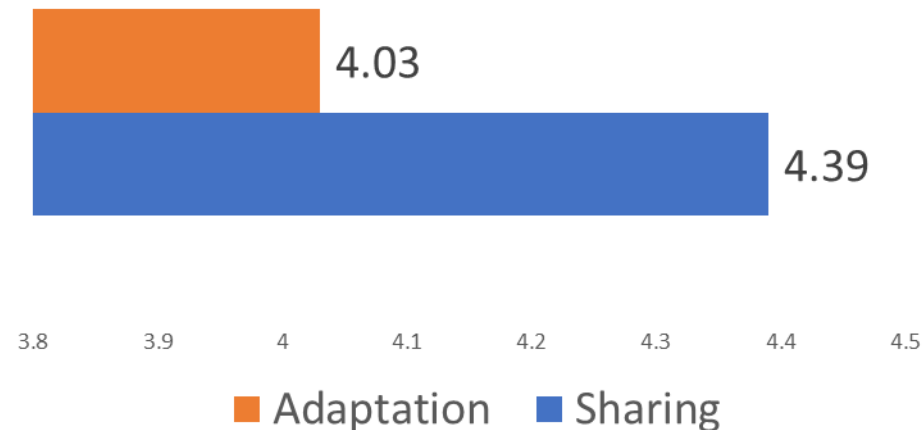
- Less focus on impact
- Descriptive studies
- Implementation reports
- Inadequate policy research



Frequency of OER Study types in IRRODL, 2012-14

2. Teachers' perspective: India

- Teachers had positive attitudes towards OER, and their attitudes did not differ significantly across demographic variables
- Attitude towards sharing was stronger than towards adapting materials developed by others



Source: <http://oasis.col.org/handle/11599/2659>

Teachers' perspective: China

I have no time to develop OER	3.78
I don't know how to develop OER	3.76
I don't know the value of developing OER	2.61
I have no incentive to develop OER	3.2

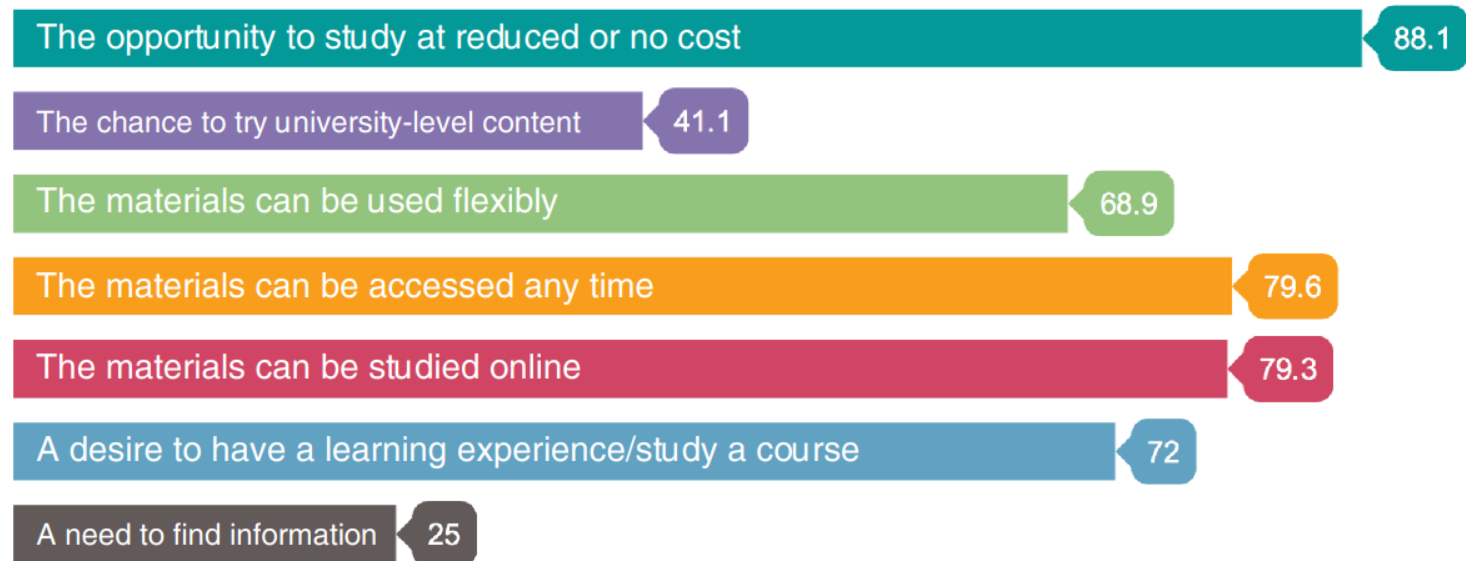
Impact on Teachers: US

- 93.8% of K12 teachers agree OER helped them use a **broader range of teaching and learning methods**
- 89.7% agree that they make use of a **wider range of multimedia**
- 88.6% agree that they **reflect more** on the way that they teach

3.Learners' perspective:

Decision to use OER

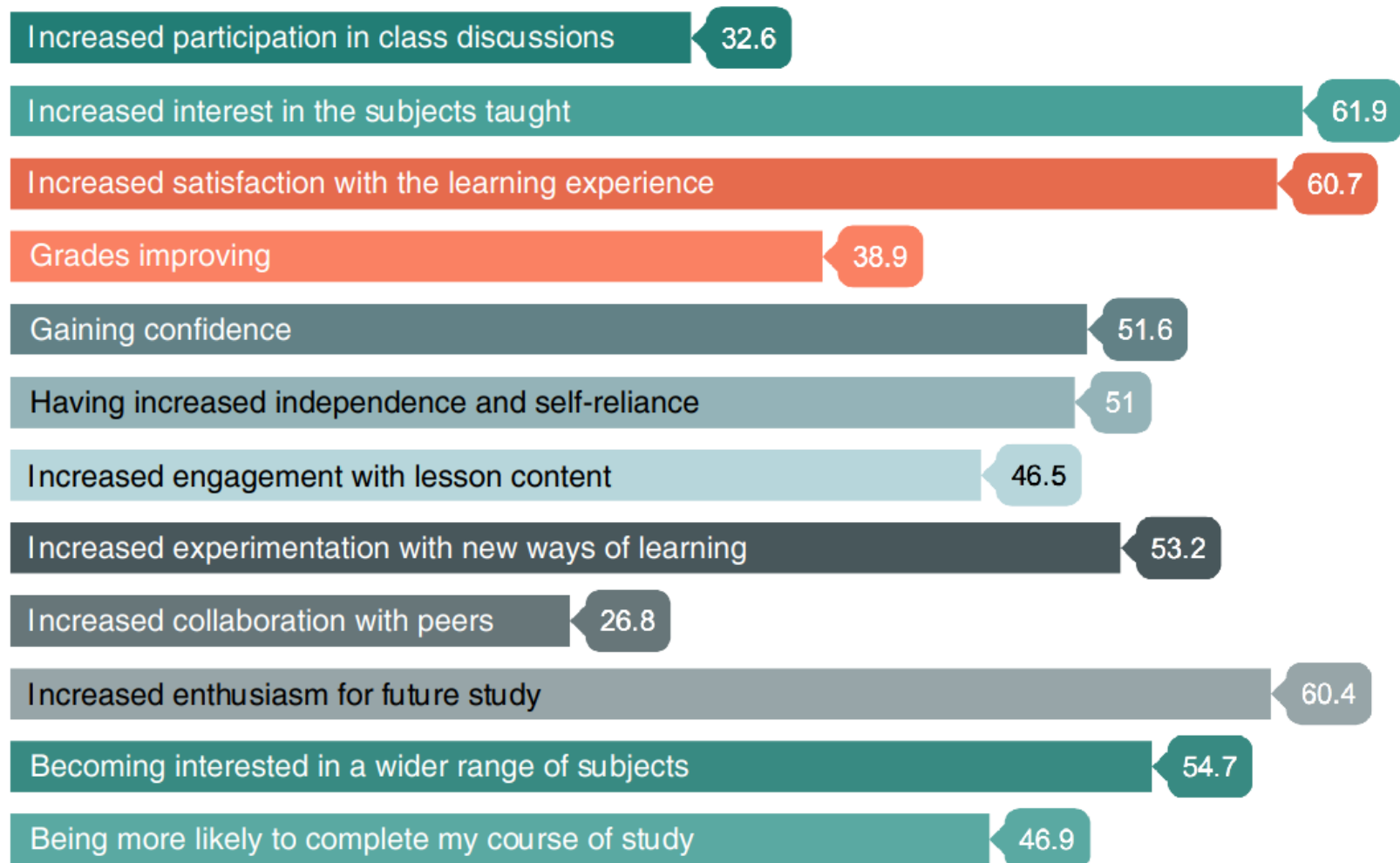
Which of the following factors influenced your decision to use OER? N=969



Cost and ease of access are the most important factors influencing formal learners' decision to use OER

Impact of OER use

In which of these ways has your use of OER made an impact on your formal studies? N=1167



Source: OER Hub, OER data report 2013-2015.



CUTTING *the COST of a COLLEGE DEGREE by UP TO 30%*

Tuition and textbook costs for Tidewater degrees



TCC IN-STATE TUITION **\$9,600**

TEXTBOOKS **\$3,700**

TRADITIONAL DEGREE



TCC IN-STATE TUITION **\$9,600**

**ZTC DEGREE SAVES
30% OF TOTAL COST**

ZERO TEXTBOOK COST DEGREE

\$0

\$4K

\$7K

\$10K

\$14K

TOTAL COST OF DEGREE

Performance in Open Courses

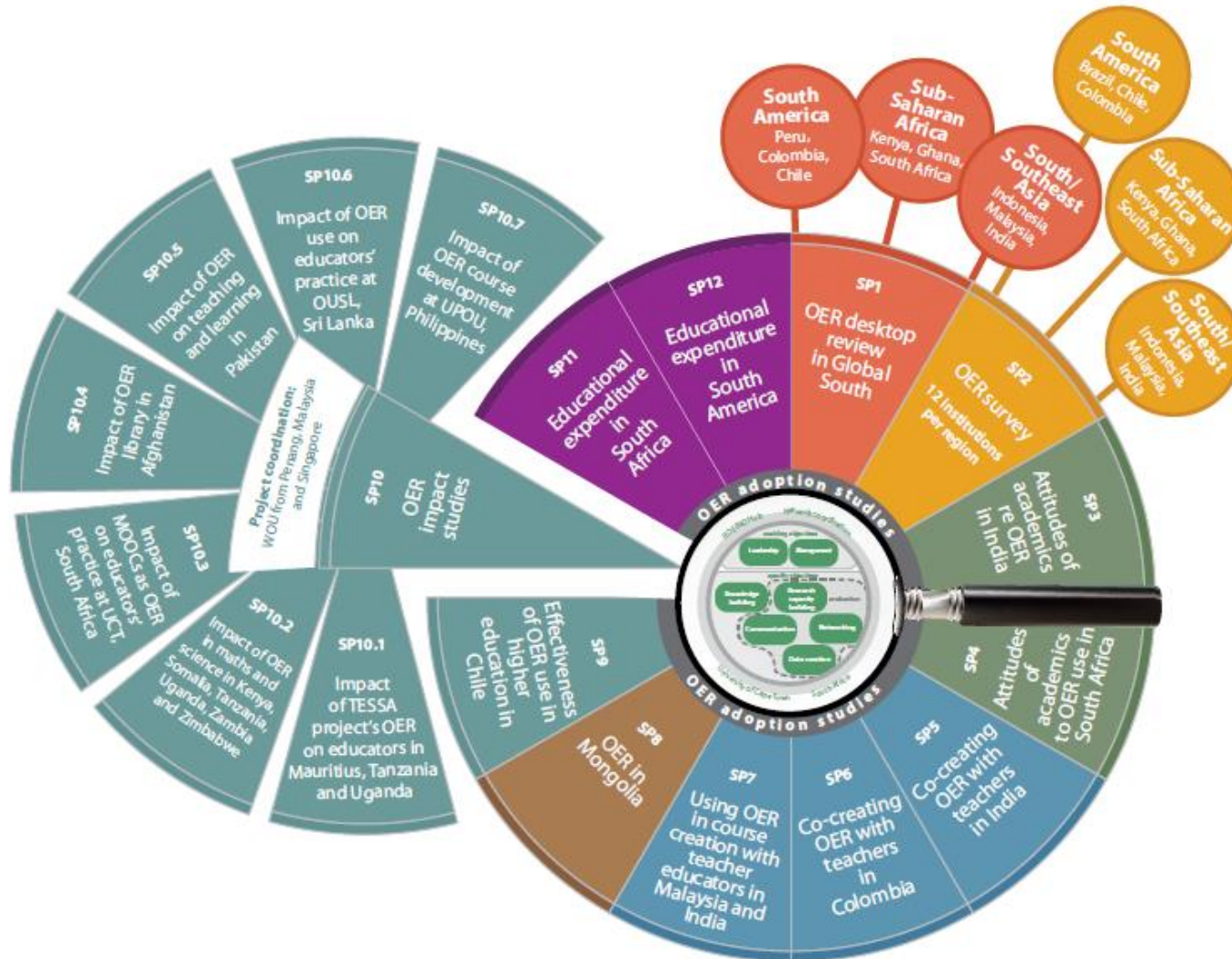
- Students enrolled in face-to-face open courses 7% more likely to succeed than those with commercial textbooks
- Students in hybrid/online open courses were significantly less likely to drop out of a course
- Student success in open courses was nearly 6% higher

Source: Hilton, J., Fischer, L., Wiley, D., and Williams, L. (2016).

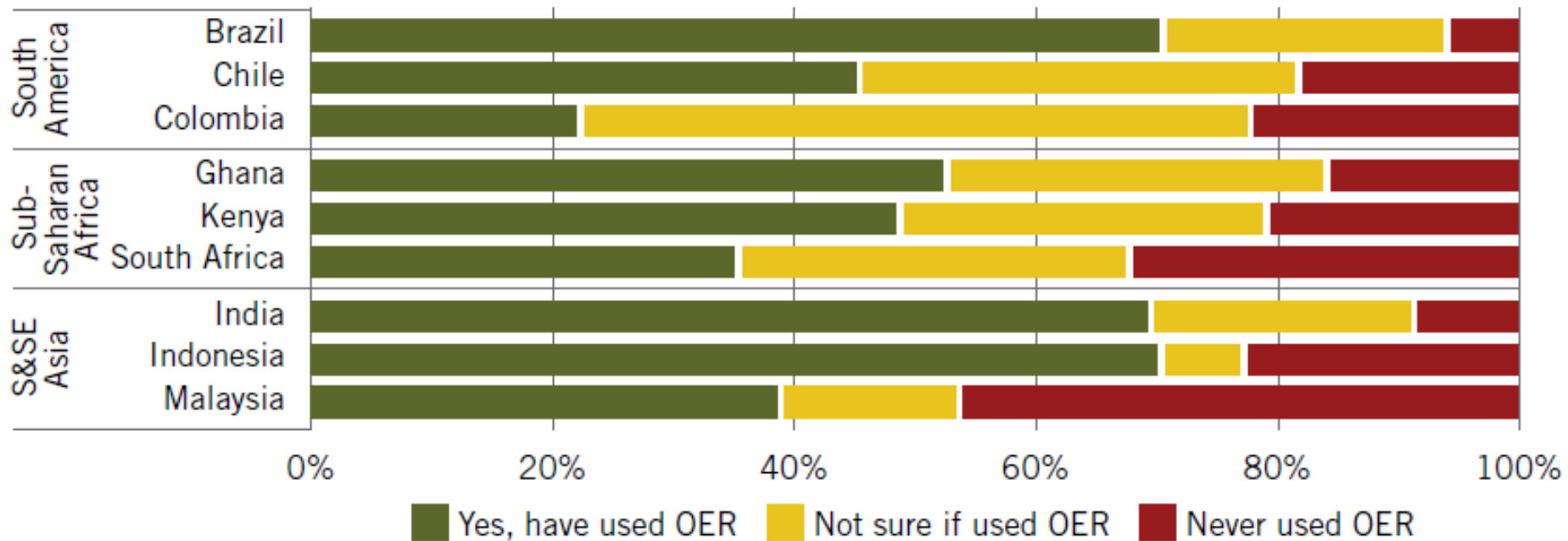
Maintaining Momentum Toward Graduation: OER and the Course Throughput Rate, *International Review of Research in Open and Distributed Learning*, Retrieved from <http://www.irrodl.org/index.php/irrodl/article/view/2686/3967>



4. OER in the Global South



Use by Educators in developing countries



OER Adoption Model

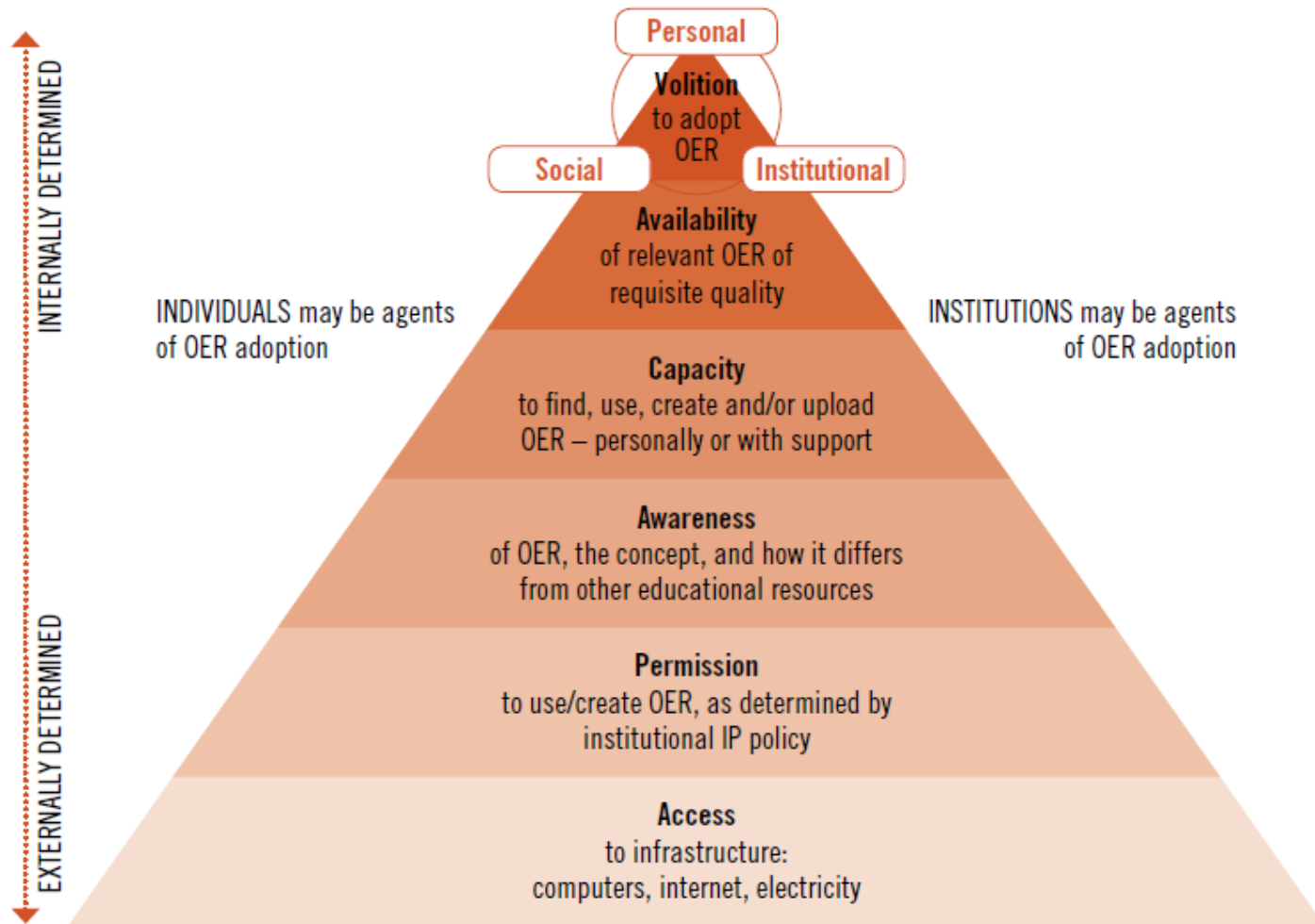


Figure 1: OER adoption pyramid

OER Engagement

- Epistemic stance
- Personal motivation
- Collaboration and co-creation
- Participation in funded OER projects

EMPOWERMENT
OER creation

- Support mechanisms
- Institutional policies
- Pedagogical practices
- Technical skills

PARTICIPATION
OER adaptation

- Availability of OER
- Technological infrastructure
- OER awareness

ACCESS
OER use

Overview of Research Gaps

- Extremely small research base; mostly from Europe and North America
- Focused around attitudes and barriers
- Limited focus on cost-effectiveness and pedagogical impact



Future Directions

GOAL 4



ENSURE INCLUSIVE AND EQUITABLE QUALITY
EDUCATION AND PROMOTE LIFELONG LEARNING
OPPORTUNITIES FOR ALL

SUSTAINABLE DEVELOPMENT GOALS

More at sustainabledevelopment.un.org/sdgsproposal

OER for Lifelong Learning

- OER for personal interest
- For professional development
- For skilling and reskilling



OER for People with Disability

- Using Universal Design Principles for OER creation
- Researching new ways of sharing OER for people with disabilities
- Providing affordable, low-cost options for learning



Using Blockchain for OER

- Integrity of records and identities of learners critical in Quality Assurance of OER
- Making OER more reliable and authentic.
- Credit mobility



From OER to OEP

		OER Usage		
		Low No OER (re-) usage	Medium OER (re-)usage or creation	High OER (re-)usage and creation
Learning Architecture	High Social practices, Collaboration, Sharing (Reflection in action), <ul style="list-style-type: none"> • „open“ objectives • „open“ methods 	A	B	C
	Medium Dialog, Procedures, Rules (Know-how) <ul style="list-style-type: none"> • „closed“ objectives • „open“ methods 	D	E	F
	Low Knowledge transmission (Know that) <ul style="list-style-type: none"> • „closed“ objectives • „closed“ methods 	G	H	I



Towards Effective Learning

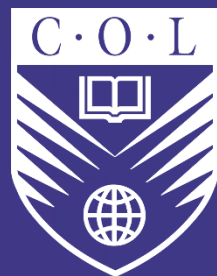
- Learners become producers rather than consumers
- Multi-media resources for a rich learning experience
- Collaboration, sharing and interaction
- Personalized and contextual learning



Re-defining OER

*The phenomenon of OER is an **empowerment process**, facilitated by technology in which **various types of stakeholders** are able to interact, collaborate, create and use **materials and pedagogic practices**, that are freely available, for enhancing access, reducing costs and improving the quality of education and learning at all levels.*

Thank you



www.col.org