Plan Overview

A Data Management Plan created using DMPonline

Title: OER differentiation in Global South

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Project abstract:

The study’s survey compares respondents’ OER use against a variety of demographic, contextual and pedagogical variables to understand which factors seem to have the greatest influence on whether, instructors/students from HEI in the Global South, have used OER. The data were collected through SurveyMonkey server during the 2015-2017 period. The 26-question survey addressed the following themes: personal demographics, infrastructure access, institutional environment, instructor attitudes, and open licensing. This study is based on a quantitative research survey taken in nine countries (Brazil, Chile, Colombia; Ghana, Kenya, South Africa; India, Indonesia, Malaysia). To reduce the threats to validity in the instrument design, a strategy was adopted based on previous studies by Burton and Mazerolle (2011) and Messick (1989) to define the constructs, develop and assess the questions, and pilot the survey.

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OER differentiation in Global South

Project and author details

Please enter your project title.

OER use in the Global South: A baseline survey of higher education students

Project description.

The research aims at providing baseline data regarding the use of Open Educational Resources (OER) by higher education instructors in the Global South (South America, Sub-Saharan Africa, and South and Southeast Asia). The objective is to understand how such activity (or inactivity) is differentiated across continental regions and associated countries. It addresses two main questions: what proportion of students in the Global South have used OER, and which variables may account for different OER usage rates between respondents? This is done by examining which variables – such as gender, age, technological access, and digital proficiency – seem to influence OER use rates, thereby allowing the authors to gauge which are the most important for students in their respective contexts.
This study is based on a quantitative research survey taken by 4784 randomly selected students at 28 higher education institutions in nine countries (Brazil, Chile, Colombia; Ghana, Kenya, South Africa; India, Indonesia, Malaysia). The 26-question survey addressed the following themes: personal demographics, infrastructure access, students attitudes and open licensing. Survey responses were correlated for analysis with respondents' answers to the key question of the survey: whether they had ever used OER or not.
For these respondents in the Global South, OER use is predicated upon students enjoying a certain minimum level of access to information and communication technologies infrastructure – especially hardware (computers, mobile devices, etc.) and internet connectivity (broadband, Wi-Fi, etc.) – which, once achieved, can be described as an enabling factor for OER engagement, but not a motivating factor.
In addition, increased internet speeds, lower internet costs and greater diversity of technical devices do not seem to lead to ever-increasing OER use rates.
Similarly, while OER-related policies would likely be a crucial factor in OER creation, they did not seem to be important regarding OER use. The students, as a potential OER users, from the relatively lesser-developed countries may find greater utility in OER because it serves to overcome some of the pressing educational challenges associated with their nations' contexts' lower economic development.

Author and co-author details

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Data description

Describe the datasets you will submit.

File type: csv
Contents: answers of the 26-question survey applied to the students, according to the following table.
Size: 11,2 MB

Region	Country	Number of institutions	Number of respondents
South America	Brazil	2	287
South America	Chile	3	293
South America	Colombia	1	170
Sub-Saharan Africa	Ghana	4	817
Sub-Saharan Africa	Kenya	4	798
Sub-Saharan Africa	South Africa	4	621
South and Southeast	India	2	437
South and Southeast	Indonesia	4	645
South and Southeast	Malaysia	4	716
Total		28	4784

File description

The file is organized according the following sequence.

(Question with * mark is mandatory)

1.

ELECTRONIC CONSENT: Please select your choice below. Clicking on the "Agree" button below indicates that: you have read the above information you voluntarily agree to participate you are at least 16 years of age you understand that your responses with be used for research purposes and that your anonymity will be preserved If you do not wish to participate in the research study, please decline participation by clicking on the "Decline" button.

Agree / Decline

*2. The name of your educational institution (one answer only)

Dimension 1: Individual characteristics

The name of the Education Institutions in the sample of the survey

Possible values

Catholic Institute of Business and Technology
Claretiano
Disted college
Gauhati University
Great Lakes University
Instituto de Estudios Bancarios Guillermo Subercaseaux
Jomokenyatta University of Agriculture & Technology
KDU college
Kwame Nkurumah University of Science And Tech.
Maseno University
Tangaza University College
The University of Cape Town
The University of Ghana
Unisa
Universidad de Tarapacá
Universidad Nacional de Colombia
Universidad Santo Tomás
Universitas Terbuka
University of Cape Coast
University of Delhi
University of Malaya
University of Mercu Buana
University of Nasional
University of Pancasila
University of Pretoria
University of São Paulo (USP)
Wawasan Open University

*3. Your country (one answer only)

Possible Values:

Brazil
Chile
Colombia
Ghana
India
Indonesia
Kenya
Malaysia

South Africa

*4. Gender

Possible values
Male/Female/Other

5. Age

Possible values
0-100

*6. Your digital proficiency (one answer only)

Possible answers:

Basic Digital Literacy - I can use some common applications effectively
Intermediate Digital Competence – I can use a range of applications effectively
Advanced Digital Expertise - I can use specific applications and tools, over and above levels commonly required

*7. Where do you access the Internet? (Tick all that apply)

Possible answers:
I don’t access internet
Family member or friend’s home
Home
Internet cafe (cyber cafe / Lan house / internet shop)
Public library
School / university / workplace
Wi-fi hotspot (cafe, restaurant, shopping mall)
Other (please specify)

*8. What device/s do you use to connect to the Internet? (Tick all that apply)

Possible answers:
I don’t access internet
Desktop computer
Mobile phone
Laptop computer
Tablet
Other (please specify)

*9. To what extent are you satisfied with the Internet connection where you most frequently access it?

Please answer all rows

Cost (**Possible answers:** Very dissatisfied, Dissatisfied, Unsure, Satisfied, Very satisfied, N/A)
Speed (**Possible answers:** Very dissatisfied, Dissatisfied, Unsure, Satisfied, Very satisfied, N/A)
Stability (**Possible answers:** Very dissatisfied, Dissatisfied, Unsure, Satisfied, Very satisfied, N/A)

*10. Which language do you feel most comfortable with academic reading ? (one answer only)

Possible answers:
Bahasa Melayu
English
Hindi
Portuguese
Spanish
Other (please specify)

*11. Which language do you feel most comfortable with academic writing? (one answer only)

Possible answers:
Bahasa Melayu
English
Hindi
Portuguese
Spanish
Other (please specify)

*12. When watching educational videos that are not in your first language, you prefer * those videos to be: (one answer only)

Possible answers:
Dubbed (audio translation to my first language)
Subtitled in my first language
Subtitled in the original language
In original language, unchanged

*13. English proficiency (one answer only)

competent in English to take a course presented in English only

Possible answers: Strongly disagree, Disagree, Neutral, Agree, Strongly agree

*14. Primary area in which you study. (Tick any that apply)

Possible answers:
Applied Science, Technology,
Engineering
Arts

Computing & Information Science
Economics, Business &
Management, Accounting
Education Studies
Health & Social Care
History & Geography
Languages & Linguistics
Literature
Mathematics
Medicine
Physical Education
Psychology and Philosophy
Religious Studies
Science
Social Science
Special Education
Other (please specify)

Dimension 2: Educational Resources

*15. Below there are examples of Educational Resources. For each resource listed below, tick all that apply to you. Please answer all rows

Possible answers: Created my own, Use others' "as is" (copy), Modified/edited or combined others', Shared my own or modified versions with others (distribute), Never created, used, modified or shared

Word Document or equivalent
Powerpoint or equivalent
Excel spreadsheet or equivalent
PDF
Images
Audio
Videos
e-Books
Lecture notes
Quizzes
Tutorials
Textbooks
Whole courses
Massive Open Online
Courses (MOOCs)
Data sets

16.Please indicate the activities that you undertake if you USE educational resources. (Tick all that apply)

Possible answers:
Copy the content and use it unaltered
Transform the content by adding an interpretation, reflection or practice
Change the content or add locally relevant information, examples and scenarios
Convert the content from one form to another
Summarise the essential ideas
Reuse the content for different purposes than originally intended
Implement changes to update the resource
Translate the content from one language to another
Change the order or sequence of the materials
Integrate the content with other content in order to develop a module or new unit
Combine the content with new media
Other or not applicable (please specify)

*17. Please indicate the activities that you undertake if you CREATE educational resources. (Tick all that apply)

Possible answers:
Check accuracy of content
Check grammar & spelling
Remove contextual information (e.g. dates)
Improve appearance
Add references and acknowledgements
Change file format to one that can be edited
Use licenses to express the rights others have to my educational resources
Keep a copy on my personal computer
Share new content on a public platform (e.g. SlideShare, institutional repository)]
Other or not applicable (please specify)

*18. Have you used any licenses to express the rights others have to use materials you have created/edited/modified/combined? (Tick all that apply)

Possible answers:

No
Yes: copyright
Yes: GNU GPL
Yes: Creative Commons
Yes: other "open content license"
Other (please specify)

*19. How do you usually share with others (distribute) Educational Resources that you have copied, created, edited/modified, or combined? (Tick all that apply)

Possible answers:
Never shared educational resources
Personal email
Personal websites or blogs
Departmental websites
Institutional learning management systems
Institutional repositories
Country or regional repositories (e.g. OER Africa)
Image / video sharing services (e.g. Flickr, SlideShare,
YouTube)
Cloud-based storage (e.g. Google Drive, Dropbox, OneDrive)
Other (please specify)

*20. Please indicate how important are the following factors as potential motivators for you to use/reuse Educational Resources. Please answer all rows.

Possible answers:
Bringing down costs for course development for the institution
Bringing down costs for students
Following normal practice in my discipline
Enhancing my reputation amongst my peers
Helping other educators/students
Knowing that other educators/students may use my materials, improves the quality of my materials
New factors (please specify)

*21. To what extent do the following barriers influence your use/reuse of Educational Resources ? Please answer all rows

Possible answers: Not at all, Slightly, Somewhat, Very, Extremely, Don’t know/ Not applicable
Lack of access to the internet
Lack of hardware
Lack of interest
Lack of knowledge about alternative intellectual property systems (e.g. Creative Commons)
Lack of support
Lack of skills
I worry about the quality
Lack of software
Lack of time
Lack of training
No compensation for use/reuse of the resource
No reward system for devoting time and energy
New factors (please specify)

Dimension 4: OER - Perceived outcomes

DEFINITION:

Open educational resources (OER) are teaching, learning, and research materials that are available in the public domain or have an open license that allows their free use and/or adaptation by others.

OER are provided by several institutions for example, MIT Open Courseware, Open University’s OpenLearn, the National Repository of Open Educational Resources in India, OER Africa, and RIVED in Brazil. Examples of OER include full courses, course materials, modules, textbooks, audios, videos, tests, software, and some massive open online courses (MOOCs).

*22. Have you ever used OER that are available in the public domain or has an open license (e.g. Creative Commons) that allows it to be used and/or adapted by others?

Possible answers:
Yes
No
I don’t know if the resource I have used is in the public domain or has an open license (e.g. Creative Commons) that allows it to be used and/or adapted by others.

The remaining questions should be answered in case of yes in question 22.

Dimension 4: OER - Perceived outcomes (Students)

*23. Perceived usefulness – The extent you believe that OER may enhance learning outcomes. Please answer all rows

Possible answers: Strongly disagree, Disagree, Neither agree or Disagree, Agree, Strongly agree

OER improves my learning outcomes
OER is very useful to me
OER helps me accomplish my learning effectively

OER addresses my needs

*24. Playfulness - The extent to which you may enjoy OER. (Please answer all rows)

Possible answers: Strongly disagree, Disagree, Neither agree or Disagree, Agree, Strongly agree

I feel OER helps me improve my creativity
I feel OER helps me improve my imagination by obtaining information
I feel I can have with OER, a variety of experiences without any interference
I feel OER is fun regardless of usage purpose

*25. Intention to use - The extent to which you may intend to use OER. (Please answer all rows)

Possible answers: Strongly disagree, Disagree, Neither agree or Disagree, Agree, Strongly agree

I prefer OER to traditional learning
I am willing to participate in other OER opportunities
OER should be implemented in several courses
I will recommend OER to other learners

*26. Perceived ease of use - The extent to which you may believe that OER will be easy to use. (Please answer all rows)

Possible answers: Strongly disagree, Disagree, Neither agree or Disagree, Agree, Strongly agree

OER study methods are easy to understand
OER is easy to use

Describe how the data was collected.

Sample selection and procedure

The target respondents for the survey were students at HEIs from the three major regions that are referred to collectively as comprising the Global South: South America, Sub-Saharan Africa, and South and Southeast Asia.

Within each region, selection efforts focused on three countries, identified through a convenience sampling method based on areas where other studies in the Research on Open Educational Resources for Development (ROER4D) project were being undertaken, and where collaborators who could help administer the survey were most easily found.

The following countries, grouped by region, were chosen:
- South America: Brazil, Chile and Colombia;
- Sub-Saharan Africa: Ghana, Kenya and South Africa;
- Southeast Asia: India, Indonesia and Malaysia.

Within these countries, the collaborators – called local coordinators (LCs) – were recruited based on their access to HEIs that were potential research sites. Often, they were members of staff at those institutions, or scholars who were able to petition and gain permission from an institution to conduct surveys there.

In each of the nine countries, the HEIs were identified and targeted for participation in the study. With the help of the LCs, institutions were selected that, collectively, would possess most of the characteristics making up the national higher education landscape, based on variables such as rural/urban, large/small, residential/distance, public/private, and so forth. This was done so that the survey would adequately represent the diverse and complex national education systems under study. In most cases, this was achieved at a satisfactory level.

The initial proposal for the study called for the participation of 36 HEIs across the nine countries, but we were unable to gather data at eight of those HEIs due to data restrictions enforced by the institutions that were approached. (This was also the case at alternative institutions which were selected as second choices.) Ultimately, because of time constraints, the selection and solicitation process could not go on indefinitely, which resulted in a sample of 28 institutions, as follows.

HEIs participating in the study

Region: South America
Country: Brazil
HEI:
Claretiano – Centro Universitário, Batatais
Universidade de São Paulo
Country: Chile
HEI:
Universidad de Chile
Universidad Santo Tomás
Universidad de Tarapacá
Country: Colombia
HEI:
Universidad Nacional de Colombia

Region: Sub-Saharan Africa
Country: Kenya
HEI:
Great Lakes University
Jomo Kenyatta University of Agriculture and Technology
Maseno University
Tangaza University College
Country: Ghana
HEI:
Catholic Institute of Business and Technology
Kwame Nkrumah University of Science and Technology
University of Cape Coast
University of Ghana
Country: South Africa
HEI:
University of Cape Town
University of Fort Hare
University of Pretoria
University of South Africa South

Region: Southeast Asia
Country: India
HEI:
Gauhati University
University of Delhi
Country: Indonesia
HEI:
Universitas Mercu Buana
Universitas Nasional
Universitas Pancasila
Universitas Terbuka
Country: Malaysia
HEI:
Disted College
Kolej Damansara Utama
University of Malaya
Wawasan Open University

Random sampling
To identify the most representative group of respondents possible at each research site, a random sampling method was used to eliminate potential selection biases by giving all individuals an equal chance to participate.

The process required a series of steps to be completed at each institution, which generally proceeded in the following fashion:
1. The LC obtains a list of all courses being taught at the institution during the appropriate semester.
2. The GC and the statistician randomly select 30 courses from those lists at each institution using the Excel VBA function, order them in a hierarchical sequence, then share the results with the LCs.
3. The LCs approach the instructors of the courses, starting with the first course on the list and proceeding in numerical order to: (1) ascertain whether that course has more than 30 students enrolled and, if so, (2) ask the instructor whether they would then be willing to participate in the survey, along with some of their students. Randomly selected courses that did not have 30 students were deselected and the LC went to the next one on the list. This process continued until 10 instructors of courses with 30 or more students agreed to participate in the survey.

What is the value of your data to the research community?

The dataset provides a variety of demographic, contextual and pedagogical variables in order to understand which factors seem to have the greatest influence on whether, students from HEI in the Global South, have used OER for the 2015-2017 period. The 26-question survey addressed the following themes: personal demographics, infrastructure access, institutional environment, instructor attitudes, and open licensing.

The dataset was finished on 2016 and provides some unique characteristics like the following:

- We have the same questionnaire applied over nine countries around the world that have big cultural differences;
- We have information regarding 15 types of educational resources and not generic ones that are very common in the current literature. Since most articles do not provide information regarding the kind of resources, results are not comparable. Education resources are potential OER;
- We provide information about the different levels of openness of education resources for each respondent;
- We have information about the students that are the current creators/user of OER,
- We have a big data sample;

- We provide information to be used in the widely used in the Technology Acceptance Model (TAM);
- Information about barriers and motivators that influence use/re-use of Education Resources;
- A large variety of demographic, contextual and pedagogical variables.

We believe the dataset add value for several studies and government policies plans, for instance:

- For analysing strategies for distance learning policies
- For motivating OER repositories creation
- For comparison among the countries regarding the mentioned variables
- For replying the survey and provide tendencies on OER

In fact, the dataset can be used by researchers as well as by government.

What documentation and metadata will accompany the data? Please consider the use of metadata standards when explaining your data.

I will provide the CSV file with all the data collected and the questionnaire (survey questions).
The metadata standard depends upon the repository. We are prepared to provide metadata according to Dublin Core. The intended repository uses DataCite Metadata Schema.
The XML Metadata description for Dublin Core
<?xml version="1.0" encoding="UTF-8"?>
>
xmlns:dc="http://purl.org/dc/elements/1.1/">
<dc:title>OER students sample</dc:title>
<dc:creator>José Dutra de Oliveira Neto</dc:creator>
<dc:subject>OER research answers</dc:subject>
<dc:description>Answers about 26-questions survey regarding 9 countries (Brazil. Colombia, Chile, Ghana, Kenya, South Africa, Indonesia, Malaysia, and India) and 28 HEIs.</dc:description>
<dc:contributor>Ildeberto Aparecido Rodello</dc:contributor>
<dc:date>2015-2017</dc:date>
<dc:type>Text</dc:type>
<dc:format>CSV</dc:format>
<dc:language>English</dc:language>
<dc:rights>Attribution 4.0 International (CC BY 4.0)</dc:rights>

Ethical and Legal issues

Are there any ethical issues that will complicate the publication of the data? If so, what provisions have been made regarding the sharing of research results?

- In terms of the Memorandum of Grant Conditions for the ROER4D project (Grant no. 107311-001), Professor de Oliveira Neto (along with co-authors) holds the copyright to all outputs arising from the work conducted in ROER4D sub-project 2 (including data), and has the legal right to publish or distribute these data publicly on condition that(from Letter of Support attached - IDRC grant number: #107311-001 and 107311-002 - Start date of project funding: 01 Jul 2014 End date of project funding: 27 Feb 2017):
  - The identity of individuals from whom information was obtained in the course of the sub-project 2 research process is kept strictly confidential. In other words, no un-processed data which has not been de-identified will be transferred to any other parties.
  - Outputs arising from the research process are released under a Creative Commons Attribution (CC BY) license.
  - The IDRC is acknowledged on all outputs arising from the research process with the statement: “This work was carried out with the aid of a grant from the International Development Research Centre, Ottawa, Canada.”

Is there an obligation to re-submit your project to an ethical review to assess whether the data from the project can be shared?

The HEIs that required the project submission to ethical review, was approved. Most of them did not require ethical review.
Although we have an email from several respondents in the SurveyMonkey server, the excel files from the original data do not have personally identifiable information that may identify the respondents.

Are there any issues regarding Intellectual Property Rights (e.g., copyright, database rights etc.) associated with your data? How will the data be licenced?

No issues regarding intellectual rights.
License: Attribution 4.0 International (CC BY 4.0)

Data sharing/openness

How will you provide access to the data? We strongly recommend depositing it in a public repository. If this is your plan, plese name the intented repository. Please suggest several repositories you feel are relevant, and explain your logic behind the choice.

As metioned, the research is about OER in the Global South in nine countries: Brazil. Colombia, Chile, Ghana, Kenya, South Africa, Indonesia, Malaysia, and India. We wil make available:

- the survey questions: set of 26 questions applied to the students. It will allows other applications by other researchers in other countries.

- the dataset with the respective answers (total of 4784 asnwers). It will allows the data analisys and future comparisons.

Among the repositories listed by the http://re3data.org website concerning the keyword “education”, we believe the following repository appropriate.

Repository: DZHW - Research Data Centre for Higher Education Research and Science Studies
URL: https://fdz.dzhw.eu/en/
Reasons for the choice:
1) Provides open access;
2) Uses DOI;
3) Allows both dataset and survey questions storage;
4) Uses DCC Metadata standard scheme.