

# SURVEY INSTRUMENT VALIDITY

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*IDRC Grant/ Subvention du CRDI: 107311-001-Research into Open Educational Resources for Development*



# Survey Instrument Validity

OERdifferentiation.com

ROER4D & GO-GN Research - Research Track  
(Aspen) - 10:30 - Thursday, 23 April 2015

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OER4D project staff - April - 2015



## Survey Instrument Validity

### Validation of a survey instrument to understand the current users and potential user of Open Education Resources (OER) in Global South

- ▶ Although we observe a growth of OER in Global South, we have identified a concern with its use, especially in comparison with the Global North. The difference between Global North and Global South education may arise through a combination of several cultural, demographic, socioeconomic, and political factors.
- ▶ Recognition of OER differences as a big issue, may lead scholars, policy makers, and the public to understand the potential of the OER to improve everyday life for those on the margins of society and to achieve greater social equity and empowerment.
- ▶ **Our purpose is to develop and validate an instrument to understand the current and potential users of Open Education Resources (OER) in Post-secondary Education in the Global South.**

The process of development of the instrument consists of the following six steps:



# Step one: Defining the construct

- ▶ Review of the literature was centered on what influences the current and potential users of OER.
- ▶ The four constructs emerged from the literature:
  - ▶ Individual characteristics,
  - ▶ Education institution characteristics,
  - ▶ OER proficiency (Creation, Use, Modify, Remix, and Share)
  - ▶ and perceived outcomes of OER.

# Step two - Item development and judgment

- ▶ The item development process had each construct with several questions derived from the literature ,previous OER surveys, and question harmonisation process done by ROER4D group.
- ▶ Upon completion of the item development process, we recruited a set of 34 experts to assess the instrument's content and face validity. We scaled all questions within each of the two main constructs using 5-level Likert scale. Majority (75.5%) of members of the experts group have 6 or more years of education experience, 53% have distance education experience, and at least of 31 years old.
- ▶ The selection of qualified experts is an important part of the instrument process to determine the appropriate number of questions to fully explore each construct. This avoids research bias on selecting item development.
- ▶ The expert group also provided comments and feedback regarding each question. We instructed the experts to determine to what extent do the items represented the constructs using a 5-point Likert scale.
- ▶ Only the most collectively agreed items and/or with literature support were included in the next version of the instrument.

# Step three: Designing the survey

- ▶ The instrument contained 26/30 questions on student/instructor version. The final instrument is hosted on SurveyMonkey server and was ready for use in English, Spanish, Bahasa (Indonesia) and Portuguese language. The hard copy option was available for several countries.
- ▶ Incentives to the respondents , LC, and RC.
- ▶ Sample:
  - ▶ 200 students and 10 instructors per institution.
  - ▶ 4 institution per country
  - ▶ Brazil, Chile, Colombia, Ghana, South Africa, Kenya, India, Indonesia, and Malaysia

# Step four: Pilot study

- ▶ The main idea is to identify errors in a survey's form and presentations. It allows us to redesign some problems before it is used.
- ▶ After the pilot test, the 78 respondents provided consistent suggestions to improve the instrument. One major suggestions was adopted: Use Education Resources (ER) instead of OER and then ask for the use of the license. Without a clear understanding of OER by the respondents, no conclusion can be made for OER.
- ▶ The improvements were made, and additional pilot test (second) was done with minor revisions.
- ▶ Time to complete the survey was also collected by the instrument server.



# Step five: Data collection Plan

- ▶ A random sample will be used where every eligible student or instructor should have an equal, non zero chance of being included (Threats to Internal validity).
- ▶ Procedure:
  - ▶ All classes -> random selected 30 classes
  - ▶ All students from first 10 classes
  - ▶ Random selected students -> 30 students
  - ▶ Survey the first 20 students.
- ▶ To support the discussion on the results, a special survey with open-ended questions about the institution were designed to be responded by the [local coordinator](#).
- ▶ SurveyMonkey, Skype (GoToMeeting), and Basecamp were used to manage the project with 39 collaborators around the world.

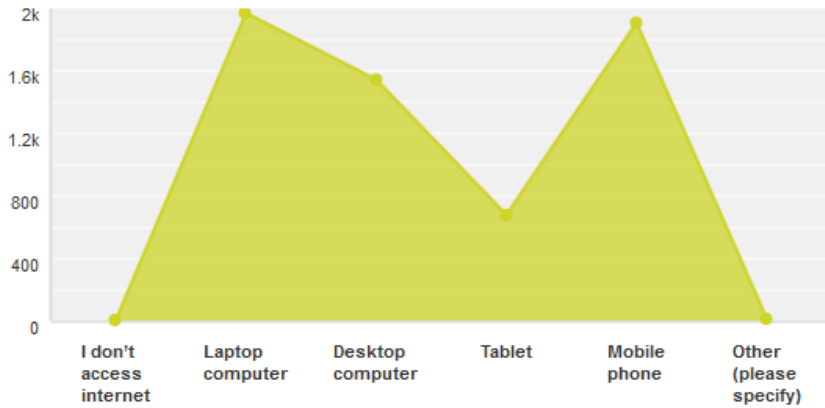
# Step Six: Finalizing a survey

- ▶ We plan to use EFA - Exploratory Factor analysis - and assess survey reliability to validate the instrument after the data collection in order to improve the instrument validity. We expect that this instrument may be used by the OER community.
- ▶ The process of developing and validating an instrument proposed may enhance the quality of information derived from the data collected and help to improve the education in Global South and reduce the difference between Global North and Global South education.
- ▶ All the finding will be available online with open license after the end of the project in November 2015. An online data extraction tool will also be available.

# Initial results ...

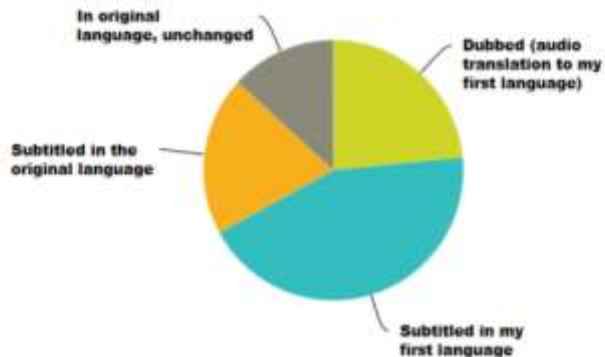
What device/s do you use to connect to the Internet? (Tick all that apply)

Answered: 2,758 Skipped: 107



When watching educational videos that are not in your first language, you prefer those videos to be:

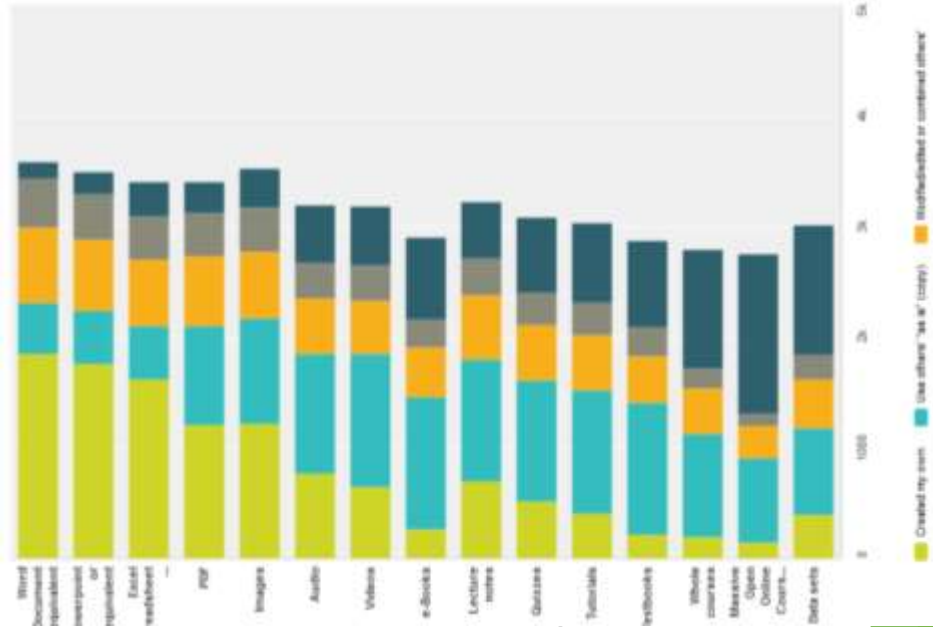
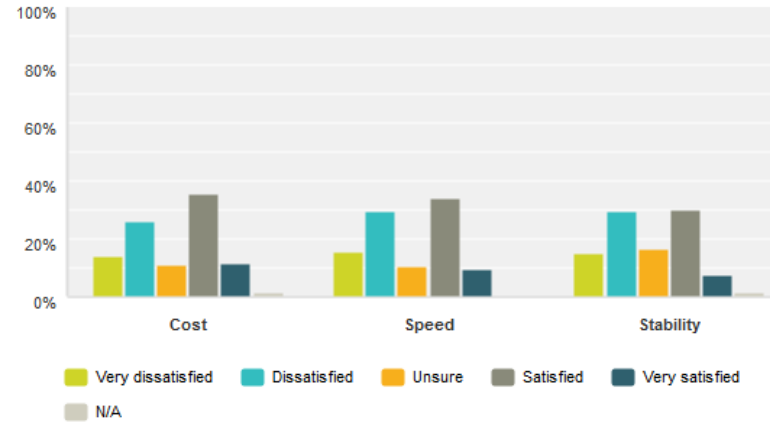
Answered: 7,758 Skipped: 107



To what extent are you satisfied with the Internet connection where you most frequently access it? Please answer all rows

rows

Answered: 2,758 Skipped: 107



# Thank you

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August 2014