EVALUATING NETWORK GROWTH: A CASE STUDY USING SOCIAL NETWORK ANALYSIS

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IDRC Grant/ Subvention du CRDI: 107311-001-Research into Open Educational Resources for Development
Evaluating network growth:
A case study using Social Network Analysis

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EES 2016
29 September 2016
Outline

• The project being evaluated: ROER4D
• Evaluation framework: what & how
• The Tools workflow
• Findings: Twitter network growth & online interactions
• Discussion & conclusion
THE ROER4D PROJECT
Research on Open Educational Resources for Development

- In what ways, and under what circumstances can the adoption of OER address the increasing demand for accessible, relevant, high-quality and affordable education and what is its impact in the Global South?

http://roer4d.org/
ROER4D has 86 researchers across 18 sub-projects in 26 countries across 16 time zones
ROER4D Objectives

1. Build an empirical knowledge base on the use and impact of OER in education
2. Develop the capacity of OER researchers
3. Build a network of OER scholars
4. Communicate research to inform education policy and practice
5. Curate output as open content
EVALUATING ROER4D
ROER4D Key Evaluation Areas

1. Build an empirical knowledge base on the use and impact of OER in education
2. Develop the capacity of OER researchers
3. Build a network of OER scholars
4. Communicate research to inform education policy and practice
5. Curate output as open content

Using the utilization focused evaluation (UFE) framework
What is utilization focused evaluation (UFE)?

UFE is centered around intended use by intended users

- What do the users (key stakeholders) want to know?

- How will answers to the evaluation questions potentially help to improve the project?
UFE in 12 steps:

Steps are *iterative*, not linear

Utilization Focused Evaluation Framework (Adapted from Ramirez & Brodhead, 2013)
1. Build an empirical knowledge base on the use and impact of OER in education
2. Develop the capacity of OER researchers
3. Build a network of OER scholars
4. Communicate research to inform education policy and practice
5. Curate output as open content

KEQ:
To what extent has ROER4D built a network of OER scholars?
Twitter in communications

**OBJECTIVES**
- Build a network of OER scholars
- Communication about ROER4D

**ACTIVITIES**
- Social media activity (general & targeted)

**OUTPUTS**
- Improved visibility of ROER4D online

**OUTCOMES**

**SHORT-TERM**
- Increased engagement with ROER4D online
- Expanded audience for ROER4D’s research outputs

**MEDIUM- TO LONG-TERM**
- Expanded ROER4D network
- Improved reach of ROER4D’s research outputs
- Improved use of ROER4D’s research
- Outputs and information reach ‘right’ audience
Use(s)

- To improve ROER4D’s communication strategy
- To have proof of concept about ROER4D’s networking model

KEQs

- To what extent has ROER4D built a network of OER scholars?

Measure

- Social media networks analytics e.g. Twitter

Tools

- Twitter Analytics
- TAGS
- NodeXL
The Tools workflow

Data collected monthly or when the PIU requires an update

**Twitter Analytics**

- Account activity
  - Number of followers
  - Number of tweets per week and activity around those tweets

**TAGS**

- Interactions - over time
  - Archive of tweets
  - Summary of top tweeters
  - Network diagram of replies, mentions and retweets

**NodeXL**

- Interactions - 7-day window
  - 7-day snapshots: Network diagrams of replies and mentions

**Data collected monthly or when the PIU requires an update**
FINDINGS
Twitter Analytics

![Twitter Analytics Chart]

- Number: 11
- Elements: various metrics such as detail expands, url clicks, user profile clicks, favorites, replies, and retweets.

The chart shows fluctuations in engagement over a period, with peaks and troughs indicating periods of increased activity.
NodeXL

Key
- Orange: Indirect tweeters
- Green: Isolated network
- Blue: Isolated tweeters
- Magenta: Direct and central tweeters
DISCUSSION & CONCLUSION
Key points

- SNA focuses on relationships – good for networking
- Tools workflow for ROER4D networking data
- Tracks network growth and interactions over time

- Evidence of success in the ROER4D project
- Informed project & fueled improvement

- Can be applied to other projects
Thank you!

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Further reading:

About ROER4D:


About evaluation:
