EXPLORING THE CULTURAL-HISTORICAL FACTORS INFLUENCING OER ADOPTION IN MONGOLIA'S HIGHER EDUCATION SECTOR

Zagdragchaa, B.;Trotter, H.;

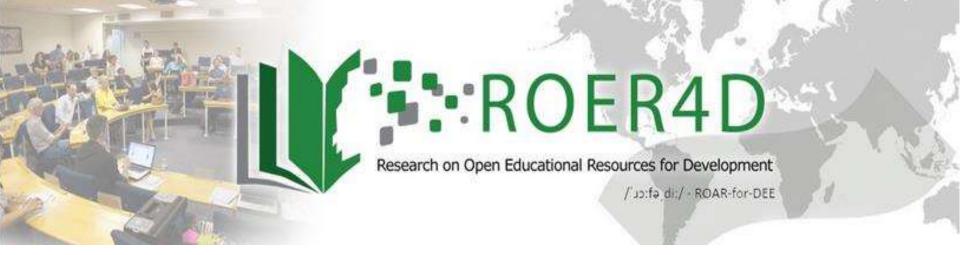
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Exploring the cultural-historical factors influencing OER adoption in Mongolia's higher education sector

Batbold Zagdragchaa & Henry Trotter

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GENERAL OBJECTIVE:

IMPROVE EDUCATIONAL POLICY, PRACTICE and RESEARCH in developing countries by better understanding the use and impact of OER

PROJECT CLUSTERS

OER Desktop Review

OER Survey

Academics' adoption of OER

Teacher educators' adoption of OER

OER adoption in one country

OER impact studies

Baseline educational expenditure





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Research questions

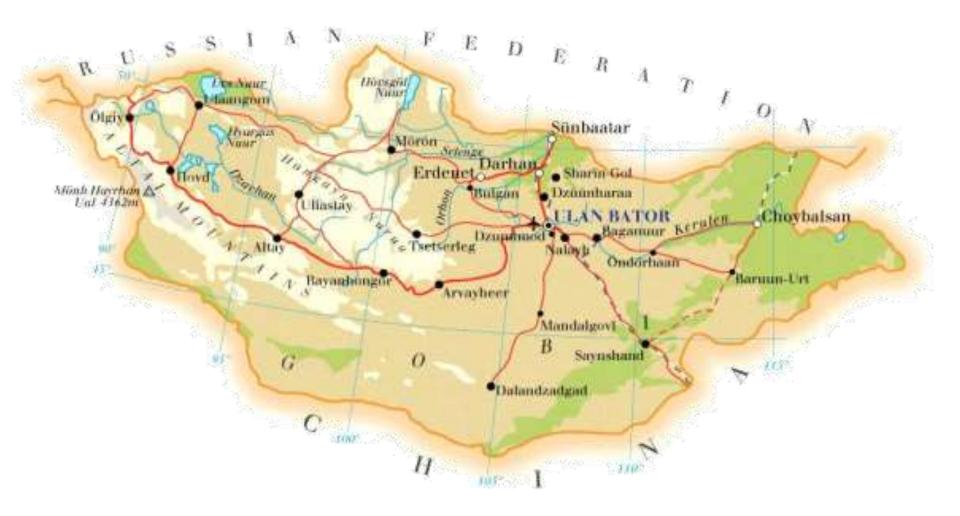
- What key factors, conditions and models of practice that would be considered as an acceptable path forward for OER adoption, adaptation, development and distribution in Mongolian higher education?
- At the macro level what are the cultural-historical influences in Mongolia that might enable or pose barriers to higher education institutions that seek to collaborate, use, reuse or redistribute OER?
- At the practice level, what cultural-historical factors exist to empower or impede teachers and learners to contribute to and benefit from a pool of OER developed or localized for Mongolia?

1. Mongolian context



Mongolian national context

With a small population (3M) divided almost equally between the capital of Ulaanbaatar and the rural centres across the vast countryside, it is one of the least densely populated countries in the world.



Mongolian higher education context

1920s-1990: Under Soviet influence

- Centralised governance
- Free to all students
- Influenced by communist ideology

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1990-present : Post-Communist transition

- Structural adjustment and neo-liberal financing (fees introduced)
- Massification (1985: 8 HEIs w/24K students; 2014: 100 HEIs w/174K)
- Privatisation (2014: 16 state-owned vs 79 private HEIs)
- Quality and relevance (lack of QA mechanisms during HE expansion)
- Gender and rural-urban imbalances (59% female vs 41% male)
- Language (Mongolian preferred; English on rise, Russian in decline)
- Structural reforms (move to 12 year ed structure; 4 year univ degree)
- Governance (talk of decentralisation, but still largely centralised)

Mongolian OER context: 2010-2017

- OER awareness raising and building infrastructure IDRC.ca support since 2010
- CC Mongolia established in 2013 http://www.creativecommons.mn/
- OER pilot projects 2011-2013 http://www.davalgaa.mn/
- OER policy National OER program for 2014-2024 approved by the Parliament. Funds provided from the State budget: https://mn.khanacademy.org/
- Open Education and Knowledge Foundation established in 2014 http://www.one.mn/

2. Research Methodology

Surveys and interviews with key stakeholders, including education department staff, educational administrators and teachers at the

- Ministry of Education and Science of Mongolia
- National University of Mongolia
- Mongolian University of Science and Technology
- Mongolian State University of Education
- Health Sciences University

Qualitative Interviews

14 participants from 4 HEIs, 2 government orgs and 3 NGOs

Interview questions

Awareness

What understandings of "open" practices and OER do you currently hold? Where were you first introduced to OER: workshops, presentations, or colleagues?

Access

To what degree do established technical infrastructure and support affect the potential for OER reuse in institutional settings?

Culture

What issues of organisational culture are associated with collaboration and sharing of OER among educators?

Policy

What business rules and organisational policies have been shown to directly affect OER opportunities?

Practices

What important practices and issues are entailed in the use, revision (translation), remixing, redistribution, and retention (Wiley, 2014) of open curriculum materials (OER) for use in specific localised contexts in higher education institutional settings and programmes?

Quality

What quality assurance processes and issues affect the adoption and reuse of open resources?

Value and utility

How do you see OER benefitting the Mongolian educational system, your institution or students?

Quantitative Survey

42 respondents from 6 HEIs

Survey question themes

Interviewee Demographics

- Gender
- Age
- Discipline
- · Position at HEI
- Years of teaching experience
- Highest education qualification

Internet access

- · Location of internet access
- Devices used for internet access
- Ownership of devices used to access internet
- Type of internet connection (broadband, dial-up, etc.)
- Internet speeds available
- Internet restrictions

Awareness of OER

- Duration of awareness of OER concept
- Resources you would feel free to use for teaching without worrying about copyright or licensing
- Source of first exposure to OER concept
- Institutional OER initiatives
- · Location of OER sources
- Duration of awareness of alternative intellectual property (IP) mechanisms

Use of OER

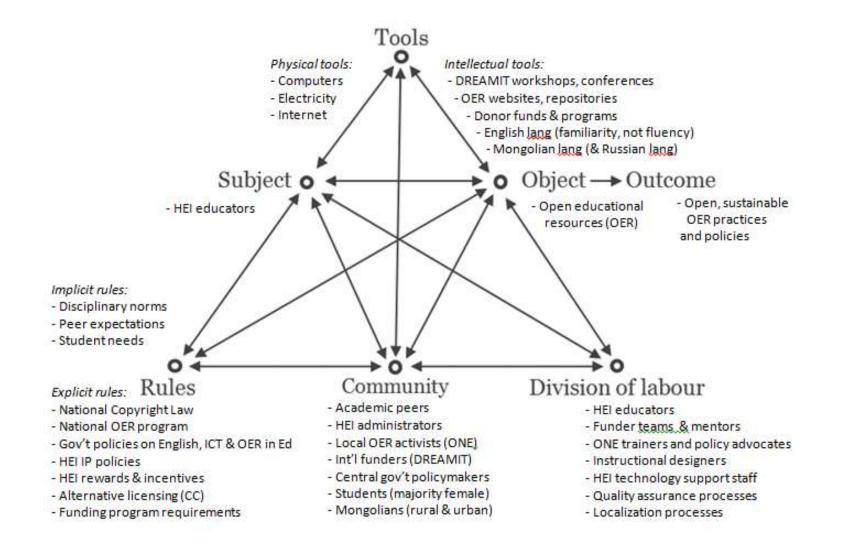
- Use of OER in teaching
- · Reasons for not using OER
- Site of OER access
- Use of OER "as is"
- Use of "revised" OER
- · Frequency of combining/remixing OER
- Assessing source of OER
- · Goals sought in using OER
- Level of OERs' success
- · Reasons for lack of success
- · Reasons for success

Creation and sharing of educational materials

- Creation of OER
- Why not creating OER
- · Means of sharing OER
- · Motivations for creating OER
- · Barriers for creating OER

3. Findings

The Mongolian Higher Education "Activity System" as seen through the lens of Cultural Historical Activity Theory (CHAT)



Awareness

57% of the Mongolian educators and administrators surveyed revealed that they had some level of awareness about the OER concept, while 43% said that they did not have any awareness prior to the study.

Many became acquainted with the concept since 2010 due, in part, to the awareness-raising efforts of various NGOs.

This awareness profile suggests that OER is not yet a mainstream educational innovation in Mongolia.

Access

There is adequate access to the requisite technological infrastructure – computers, electricity and the internet – for engaging with OER for educators at Mongolian HEIs.

The majority of survey respondents (57%) own their own laptops, though many also use the desktop computers provided by their HEIs. Most connect to the internet at work (81%) and/or home (76%)

Respondents revealed a familiarity with the English language allowing them access to English-based OER, though they would prefer materials in Mongolian.

Culture

Educators' work environment was a major factor for how many of them first learned about the concept of OER. 24% said that they first learned of OER from their institutional colleagues while 29% did so through other educators.

The disciplinary norms and expectations shaping educators' practice was also important for survey respondents' OER activity. While 76% of respondents said that they had never created and shared OER, the highest percentage of them (25%) said that they had not done so because "Such sharing is not common in my discipline".

Policy

OER is not recognised or rewarded in Mongolian institutional policies, though the national Copyright Law appears to allow educators to share their teaching materials as OER (in contrast to the law in many other countries).

Educators revealed that they are responsive to the rewards and incentives as established by their employers, but the current lack of official incentives for OER activity inhibits their engagement with them.

Quality

Mongolian educators do not appear to view OER as "special" types of resources, but just one of a number that they would consider in their teaching. The key concern is whether the OER is relevant and of the requisite quality for their pedagogical purposes. The "openness" of OER does not supersede that more fundamental requirement.

75% of survey respondents said that it was either "important" or "very important" that OER "come from a university that I respect (e.g. MIT)." Thus, OER provenance is important as a quality indicator.

Mongolian educators stated that the localisation of English language OER into Mongolian is a great desire for them.

Practices

OER use: 48% of survey respondents said that they had used OER before, while 52% said that they had not. Of these 48% of users, their use of the OER was typically "as is":

| OER formats (Tick all that apply) | "as is" (often or always) | Translate | Summarise | Re-write | Re-sequence | Localise |
|------------------------------------|---------------------------|-----------|-----------|----------|-------------|----------|
| Textbooks | 58 | 25 | 25 | 17 | 8 | 8 |
| Images | 42 | 0 | 17 | 17 | 8 | 42 |
| Research articles | 42 | 8 | 25 | 8 | 8 | 25 |
| Infographics | 33 | 16 | 8 | 17 | 0 | 33 |
| Lesson plans | 33 | 0 | 8 | 8 | 17 | 33 |
| e-Books | 33 | 17 | 8 | 0 | 17 | 25 |
| Elements of a course (module/unit) | 25 | 25 | 25 | 17 | 0 | 17 |
| Videos | 25 | 8 | 25 | 8 | 8 | 25 |
| Lecture notes | 25 | 0 | 17 | 25 | 0 | 25 |
| Slide presentations (PowerPoint) | 25 | 8 | 17 | 17 | 8 | 17 |
| Data sets | 25 | 17 | 8 | 8 | 8 | 17 |
| Whole courses | 17 | 0 | 50 | 17 | 8 | 8 |
| Audio podcasts | 17 | 8 | 8 | 17 | 0 | 25 |
| Tutorials | 17 | 0 | 8 | 17 | 8 | 33 |
| Tests and quizzes | 17 | 0 | 8 | 8 | 17 | 33 |
| Top activity per format category | 11/15 | 1/15 | 3/15 | 1/15 | 0/15 | 8/15 |

Practices

OER creation: 76% of the respondents reporting that they have not created or shared OER and only 24% reporting that they have. Of the 10 respondents who said that they have created OER, this is where they shared them:

| Platform | % of respondents | |
|---|------------------|--|
| Personal website or blog | 60 | |
| Institutional learning management system | 50 | |
| Cloud-based storage (e.g. Google Drive) | 50 | |
| Departmental website | 30 | |
| International repository (e.g. MERLOT) | 20 | |
| Image/video-based services (e.g. Flickr, PowerPoint, YouTube) | 20 | |
| Institutional repository | 0 | |
| Wiki site (e.g. Wikipedia, Wikieducator.org) | 0 | |

Value and Utility

The *value* of OER for Mongolian survey respondents was:

- "gaining access to the best possible resources" (75%)
- "promoting research and education as publicly open activities" (75%)
- "outreach to disadvantaged communities" (67%)

The first response refers to a desire for high quality materials, the second to a moral commitment to open educational activities, and the third to a desire to overcome contemporary inequalities in Mongolia.

Value and Utility

However, the *utility* of OER for respondents who stated that they had used OER appears mixed. When asked how successful their experience was with OER, they responded as follows:

| Response | % of respondents | | |
|-----------------------|------------------|--|--|
| Not at all successful | 8 | | |
| Not very successful | 17 | | |
| Neutral | 42 | | |
| Successful | 25 | | |
| Very successful | 8 | | |

One-third of the respondents who said that they had an unsuccessful experience said that OER did not improve the quality of their teaching. By contrast, half of those who had successful experiences revealed that OER *did* improve the quality of their teaching.

4. Conclusion and Recommendations

- 1. OER awareness remains modest amongst Mongolian higher educators and administrators. Further funding for OER activity, awareness raising, and the growth of communities of practice may address this challenge.
- 2. Access is not a primary issue for OER engagement.
- 3. There has not yet emerged a *culture* around OER engagement. OER-related interventions aimed at HEI managers who can help build such a culture should be explored.
- 4. Educational *policy* is mostly agnostic regarding OER, meaning that it leaves the choices around it with individual educators. A more directed pro-OER policy environment would spur greater engagement by educators.

4. Conclusion and Recommendations

- 5. Mongolian educators are less worried about the *quality* of OER (compared to Western educators), but more concerned about a particular sub-component of quality, which is *relevance*. The more localised that OER can be, the better. Further development of local language and content OER should be a priority.
- 6. OER use is more common than creation, though total engagement remains relatively low. Greater exposure to open educational practices through workshops, seminars and incentive mechanisms might improve this.
- 7. Mongolian educators appear to have reservations about the value and utility of OER, perhaps mimicking experiences with the broader array of educational materials in general. If educators are going to bother to seek out OER, they must enhance educators' experiences with teaching.

Further information

Sub-Project 8 webpage

http://roer4d.org/sp-8-oer-adoption-and-use-in-mongolia

Corresponding author

Batbold Zagdragchaa: batbold@npi.mn



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Thank you!

