Developing and finalizing research framework for a cross-country impact study of UNESCO Educational Resources and Correspondence Trainings

Chee-Heong Lee, Chooi-Yi Wei, Siew-Yee Lau, Dr Mahmud Abdul Wahab, Chee-Keong Chong, Winnie Pek-Hoon Er

24\textsuperscript{th} November, 2016

UNESCO Regional Seminar for RDTCs 2016

Bangkok, Thailand
Background & Justification

- Much efforts by RDTCs in distributing thousands of UNESCO Educational Resources and conducting trainings for teachers & teacher trainees throughout the Asia and Pacific region.

- However, lack of cross-border researches on the impact of these resources and corresponding trainings.

- Study intends to:
  - Bridge the research gap by investigating the impact across different geographical areas.
  - Shed light on usefulness & effectives, strength & weaknesses of the resources and corresponding trainings
  - Identify possible improvement actions to be taken
Research Outline

• Analytical frameworks for evaluation of ICT:
  ▪ The TAM (Technology Acceptance Model)
• Based on the literature, the variables include: supports, challenges and impact for using/promoting UNESCO Educational resources.
• These are to be investigated to measure the impact of the resources and corresponding trainings.
Conceptual Framework

- Challenges
- Supports
- Trainings

Impacts on teaching

UNESCO Educational Resources
Research Questions

1. What are the impacts of the resources and trainings on the teaching and learning of RDTC trainers, pre-service and in-service teachers who received and used the UNESCO educational resources?

2. What are the challenges experienced by the RDTC trainers, pre-service and in-service teachers who received & used the resources?

3. What are the types of support needed for schools in using the resources and for RDTCs in providing training?
Research Methodology

• This is a mixed-method study, employing both quantitative and qualitative approaches.

Research Stages

<table>
<thead>
<tr>
<th>Stage 1:</th>
<th>Pilot test to test and refine the research instruments. Sample size about 50.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 2:</td>
<td>Briefing to the RDTCs involved in the study (at least 10 RDTCs from Asia Pacific region): timeline, instruments used, data collection methods, compilation and analysis of data. Data will be collected and analyzed by the research team.</td>
</tr>
<tr>
<td>Stage 3:</td>
<td>In-depth focus group interviews with RDTC trainers, pre-service and in-service teachers in 2-3 selected countries, to triangulate quantitative results obtained from questionnaire (about 15 participants)</td>
</tr>
<tr>
<td>Research Questions</td>
<td>Data Collection techniques</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------------</td>
<td>----------------------------</td>
</tr>
<tr>
<td>(i) What are the impacts of resources and trainings on the teaching and learning of RDTC trainers, pre-service and in-service teachers?</td>
<td>Survey Focus group Interviews</td>
</tr>
<tr>
<td>ii) What are the challenges experienced by RDTCs trainers, pre-service &amp; in-service teachers who received and used the resources?</td>
<td>Survey Focus group Interviews</td>
</tr>
<tr>
<td>(iii) What are the types of support needed for schools in using UNESCO Resources &amp; for RDTCs in providing training?</td>
<td>Survey Focus group Interviews</td>
</tr>
</tbody>
</table>
Significance of Research

• Significant role in identifying and evaluating the impact of the UNESCO resources and the corresponding trainings

• Provide feedbacks to complete the continuous quality improvement cycle for the educational resources project.

• Findings will help to realign the efforts with the actual needs

• To optimize the use of limited funding and maximize the outcomes in the future.
Stage 2 Quantitative Approach

The RDTCs’ assistance needed for:

• To help translate the instruments into the mother tongues of their respective countries.

• Online version and softcopy of questionnaires to be sent to the RDTCs involved by end of December 2016.

• Quantitative data collection: January to February 2017.

• RDTCs to help keying in the data into the template prepared, to email the data and/or to post the duly-filled up questionnaires to the research team in order for the data to be processed.
<table>
<thead>
<tr>
<th>Date</th>
<th>Task Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>22/11/2016</td>
<td>Confirm participating RDTCs.</td>
</tr>
<tr>
<td>26/11/2016</td>
<td></td>
</tr>
<tr>
<td>27/11/2016</td>
<td>RDTCS: Translate the questionnaire from English to mother tongue of respective RDTC countries.</td>
</tr>
<tr>
<td>18/12/2016</td>
<td></td>
</tr>
<tr>
<td>19/12/2016</td>
<td>Preparing questionnaire (soft-copy form) and print out questionnaire (hard-copy form)</td>
</tr>
<tr>
<td>31/12/2016</td>
<td></td>
</tr>
<tr>
<td>01/01/2017</td>
<td>Collection of questionnaire data.</td>
</tr>
<tr>
<td>22/02/2017</td>
<td></td>
</tr>
<tr>
<td>23/02/2017</td>
<td>RDTCs: Enter data into template provided and email back to research team</td>
</tr>
<tr>
<td>28/02/2017</td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>Activity</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>01/03/2017</td>
<td>Analysis of data.</td>
</tr>
<tr>
<td>20/03/2017</td>
<td></td>
</tr>
<tr>
<td>21/03/2017</td>
<td>RDTCs to arrange for focus group interview, i.e. arrange for venue, transportation, respondents and translator on the dates agreed between research team and RDTC.</td>
</tr>
<tr>
<td>10/04/2017</td>
<td></td>
</tr>
<tr>
<td>21/03/2017</td>
<td>For the research team: Field trip to selected 2-3 RDTCs to conduct focus group interview. Transcription and translation of interview recordings.</td>
</tr>
<tr>
<td>30/04/2017</td>
<td></td>
</tr>
<tr>
<td>01/05/2017</td>
<td>Writing of report.</td>
</tr>
<tr>
<td>30/07/2017</td>
<td></td>
</tr>
<tr>
<td>31/07/2017</td>
<td>Submission of final report.</td>
</tr>
</tbody>
</table>
Developing research framework for a cross-country study on Awareness and Use of Open Educational Resources (OER)

Chee-Heong Lee, Chee-Keong Chong, Dr Mahmud Abdul Wahab, Winnie Pek-Hoon Er, Chooi-Yi Wei, Siew-Yee Lau

24th November, 2016
UNESCO Regional Seminar for RDTCs 2016
Bangkok, Thailand
Background of research

• The OER movement started in 2002 with UNESCO’s Forum on Open Courseware. It has since then gained much momentum. However, the actual use of OERs in educational practices is far from mainstream in many Asian countries.


Findings: Users have second thoughts about using OERs when faced with issues of clearing copyright, locating resources, and assessing credibility & quality.
Background of Research

• UTAR CLT’s study (which was presented in the Regional Seminar in 2015):
  138 secondary teachers surveyed.
  The main barriers for teachers to adopting OERs include: Lack of time (49%), difficulty in locating OERs (36%), unknown quality & credibility (28%), copyright issues (27%), lack of support (15%).

• Extended study was done by UTAR CLT in 2016, by way of Focus Group interview to triangulate data from the earlier study.
Background of Research

1. **Favourite teaching aids:** Flash card, hands-on equipment, video stimulation, presentation slides, worksheets from internet

2. **Favourite references used for teaching:** Some prefer textbooks, some prefer internet.

3. **Whether the resources used are categorised as OER**
   - Respondents mentioned the resources used (ERIC Educational Resources, Science Direct, Reed Elsevier) but were unable to explain whether these are categorized as OER or not.
   - They are not aware of the licensing and copyright issues
Background of Research

4. Benefits of OER: The respondents found OER useful and beneficial for their teaching. They would adapt the resources to match with the syllabus and their students’ learning level.

5. Limitation of OER:

Main reasons for not using: Limitation of infrastructure in schools (e.g., not all classrooms are equipped with LCD projector).

Another deterring factor: Relevance of OER with the school syllabus. “We have to spend lot of time, trying to collect them and then adapt them or do whatever necessary”. (Most respondents agree OER has its benefits; they would like to adopt OER).
Background of Research

• To implement the Paris OER Declaration, UNESCO Bangkok organised an Experts Meeting to engage experts in strengthening and finalising UNESCO Bangkok’s plan:

1) to conduct a regional survey on teachers’ awareness and use of OERs, and

2) to develop a guidebook for teachers in accessing/exploring, evaluating, using/re-purposing and sharing OERs.
Extended study of OER by UNESCO-UTAR CLT

Awareness & Use of OER:

• Types of subjects, urban/rural school, township population, computer/lab/internet access
• Know what is OER
• Experience on using OER – Types, pedagogical approach, benefits, barriers/challenges, type of support needed
• Views on use of OER and ease of use
• Anticipated use of OER