PERCEPTION AND DILEMMAS OF TEACHER EDUCATORS ON UTILIZATION OF OPEN EDUCATION RESOURCES

By

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ABSTRACT

Teacher educators are confronting myriads of challenges in identifying and utilizing the Open Education Resources (OER). This study is intended to analyze the perception and dilemmas faced by teacher educators in integrating OER for teaching. The conceptual framework of the study is focused on teachers' access and utilization of the online resources. Sample is 108 teacher educators drawn from Kerala and Tamil Nadu. OER Utilization Inventory and Informal Interview were the tools used. The collected data propelled for a mixed approach of quantitative and qualitative analyses. Findings of the study show that there is inadequate perception among teacher educators on availability and usability of relevant OER for teaching the contents. Teacher Educators are varied on their perception regarding OER as relevant and active support to teach content. 18% of teacher educators perceived the OER as need of the hour while 13.88% perceived OER as not supportive. 68% perceived with neutrality. 82% of teacher educators are skeptic on authenticity of available online resources including OER materials. Most of the teacher educators guarantee the credibility of online resources only after verifying with the textbook resources. They have 'tendency to compare' the relevance and quality of online materials with Books. The study reflects need of awareness programmes for teacher educators on OER and its utilization. Centralized monitoring on authenticity of OER is suggested to adjudicate the credence and quality of the materials.

Keywords: Open Education Resources, Online Materials, Perception, Dilemma, Availability and Usability.

INTRODUCTION

Open Educational Resources (OERs) are teaching and learning materials that learner may freely use and reuse, without charge. UNESCO (2012) defined OERs as teaching, learning, and research materials in any medium, digital or otherwise that reside in the public domain or have been released under an open license that permits no-cost access, use, adaptation, and redistribution by others with no or limited restrictions. Hafner (2010) noted that OERs often have a Creative Common license that state specifically how the material may be used, reused, adapted, and shared.

OERs provide self-paced learning and offer access to a huge amount of study materials. Selecting appropriate OER material is a task that needs keen attention (Naidu & Mishra, 2014). The non-availability of proper resources for teacher education courses is the major factor that caused for the creation of several OER collections and repositories in the sector. Moreover, OERs make the search for resources easier and democratic to both teacher and learner. But very few accounts area available on of how OERs are being used and what OER are accurately available (Kawachi, 2016; Atkins et al., 2007). It is a common understanding that the teacher educators utilize the OER materials according to the contexts, and not exactly by comprehending the authenticity of them. Wiley (2009) opines that the use of OER is often considered as 'adjustment resource' to the text book contents. According to Wiley (2009) the potential for 'use and reuse practices of OER are little understood, poorly supported, and yet to occur in a widespread fashion'. To identify by the teachers as the fully

supported resources for referring, teaching and training, the OER should occur challengeable credibility. To be with the innovative changes in the field, teacher educators have to be more aware of the OERs and also to be effectively utilized them for teaching and training.

It is evident from the review of available literature in the field that the use of OER by teacher educators is still an area not considerably explored. OER movement has succeeded in the creation of a large number of open resources, but not many studies that have probed the effective use of OER (Menon et al., 2016). Thakrar et al. (2009) in their study found out that the circumstantial use of OER resources is common among teachers. The use of these materials is more among teachers where the OER development process itself included the participation of teacher education institutions as a consortium (Menon et al., 2016; Menon & Ali, 2012). The findings of Coughlan et al. (2013) have provided some insight into different types of reusing and remixing OER, but only within the limited context of two courses which are delivered as OER. Okada (2010) in their study mainly focused on the collaborative creation of open educational content by teacher educators and developed a set of ways to reuse OER. Petrides et al. (2010) reported a study in which one of the aspects investigated was the scarce tendency among teachers to search for deviated OER for same area. The researchers identified that teachers focus on the use and reuse of same material instead of searching for new or innovative materials.

1. The Study

The present study aimed to explore teacher educators' perception on utilization of OERs. This study also explores the dilemmas that the teacher educators experience in utilizing the OERs. The survey was conducted among 108 teacher educators from Kerala and Tamil Nadu, two South Indian States.

2. Research Questions and Objectives

Research questions of the present study are;

- What are teacher educators' perceptions on availability and usability of relevant OER for teaching the contents?

- To what extent are the teacher educators able to search and find relevant OER materials?

- What are teacher educators' stances on replacing OER to other references for teaching and training purposes?

The study has the following specific objectives:

- To study the perceptions of teacher educators on availability and usability of OERs for teaching and training

- To see the levels of perception of teacher educators on supportability of OER for teaching and training

- To explore teacher educators perception regarding credibility or authenticity of OERs

3. Framework of Study

A framework is developed to stream the study. Figure 1 represents the framework that adopted to pursue the study and process of treating the variable. It is relevant to state that the study is conducted in the academic year 2016 - 17.

4. Methodology

The present study is designed with inquiry survey approach. Data were collected from teacher educators by direct appointment for the purpose. Data collection included quantitative and qualitative approach.

4.1 Sample and Tools Used

Qualitative and quantitative tools were used to collect data. Tools include interview and inventory (OER Utilization Inventory) developed by the researcher.

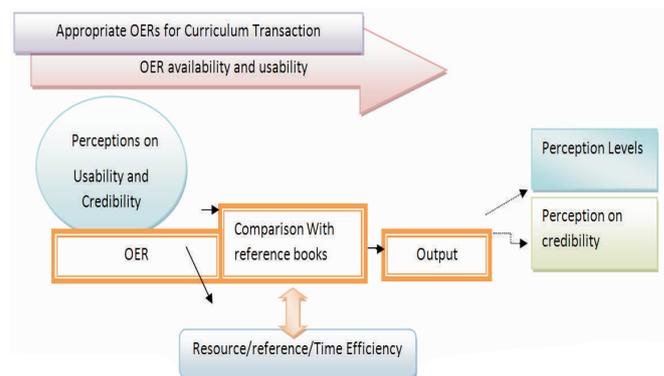Sample for the study was organized randomly from two

Figure 1. Conceptual Framework of the Study Source: COL Study Report, 2016 (OER Material with CC-BY)

South Indian States; Kerala and Tamil Nadu. The sample first set included 108 teacher educators. The second sample set was 6 teacher educators, each from all the three types of colleges from each state. Details of sample are provided in Table 1.

4.2 Analyses of Data

The study mainly explored the perception of teacher educators on availability and usability of OER for teaching and training processes. The tool is used to measure the variable focused on availability, relevance, and suitability of the OER materials. Both quantitative and qualitative data were analysed to reach on the findings.

5. Data Analyses and Findings

The interview with teacher educators gathered explanations on their experiences. The narratives of the experiences of teacher educators are given as excerpt 1.

Excerpt 1:

OERs are need of the hour and a teacher educator of the period can never abstain from them. They are wonderful resources to depend for teaching and training. There are number of OERs on same content. Choosing the correct one is a difficult task.

All the six teacher educators are chaotic on the accurateness and availability of OERs. Four members said that there is difficulty for adequate availability of OERs for the content that to be taught.

OERs are easy to refer than the books. But the credibility is always questioned. "I consider the OER materials only after verifying with the textbook materials in order to find out whether they are credible or not" is the most notable

reply from three of the interviewees. The other three were not open to tell this, but they too did not deny the view.

Teacher Educators consider Wikipedia as the most popular and useful repository of OERs. Most of the materials are being utilized by them without bothering about the license issues. Teacher educators rarely use OERs as the only resource support. Accuracy in locating OER materials is not so easy. "I reach on different types of OER for a single topic. It is difficult to consider one among them for a specific content". "Availability of OER materials are not difficult task. Locating on exact or most suitable material is the real problem": this was the common opinion of all TEs.

5.1 Perceptions among Teacher Educators on Availability and Usability of Relevant OER Materials

The data from the interview with teacher educators explain that teacher educators are not sure on the availability and usability of the OERs. The OER that downloaded may not be specific to explain content. The content that explains in the OER may be different from the content that the syllabus explains. OERs are available on any topic, but usability is skeptic. 5 out of 6 teachers opined that the OERs do not give accurate information. One teacher educator opined that the accuracy depends upon the unit of the OER. Some units may be clearly explained, some others not (By unit she meant a content portion). The license aspects are not clear to teachers', all the six teacher educators unanimously opined. Most of the teacher educators are skeptic about the types of license. The OERs once available may not be located at the future search. The information from one OER material seldom find in another one with supporting evidences; even there have contradictory information in different OER materials on same area. The core of the discussions with teacher educators are evident to state that there is inadequate perception among teacher educators on the availability and usability of OER materials.

5.2 Perception among Teacher Educators on Supportability of OERs for Teaching and Training

The rating scale was the tool to collect data on this

State	Types of College	N of Sample	
		For Inventory	For Interview
Kerala	Aided	19	1
	Government	8	1
	Self-finance	21	1
Tamil Nadu	Aided	18	1
	Government	9	1
	Self-finance	33	1
	Total	108	6

Table 1. Details of Sample Selection

aspect. Responses from 108 teacher educators were considered for analysis. Teacher educators were requested to respond five core statements that determine their perception on the usability of the OERs for teaching and training. The analysis is done by taking point of agreement, point of disagreement, and point of neutrality. Results of the item-wise percentage are given in Table 2.

Table 2 is supportive to state two things: (a) the result is congruent with the result from the interview and (b) the percentage analyses evidently support the finding that the teacher educators have inadequate perception on usability and reusability for teaching.

The findings of the item-wise percentage is that 18.5% of the teacher educators perceived the OER materials are supportive for teaching and training. It is interesting to see that 20.37% of teacher educators perceived the OERs are necessary for present day teacher education classrooms. A group of teachers who perceived the OER materials as necessary for present day classroom may not be considered supportive for teaching. 18.6% of teacher educators believe that abstain from OERs does not affect the teaching.

5.2.1 Reflection

The item-wise percentage further analyzed to find the percentage of teachers who consider OERs are essential or not essential for teaching. 21.19% of teacher educators consider OERs are essential for carrying out teaching and training in the modern period. 14.12% of teacher educators perceived OERs are not essential for the teacher educators for their classrooms. The most notable result is that 64.67% of teacher educators have

neutral opinion on the usability of the OER materials. They consider OER materials are neither necessary nor unnecessary. This result can be read from Figure 2. This group has to be motivated to the usability of OERs and also must be developed with positive attitude. They have to be directed properly towards the use of OERs. The reasons for denying the supportability of OERs by a big group of teacher educators have to be accounted by the educationists.

In order to find the teacher educators' perception on OER usability, the scores on variable administered for descriptive statistical analyses. The descriptive statistical constants of the scores of responses are given in Table 3.
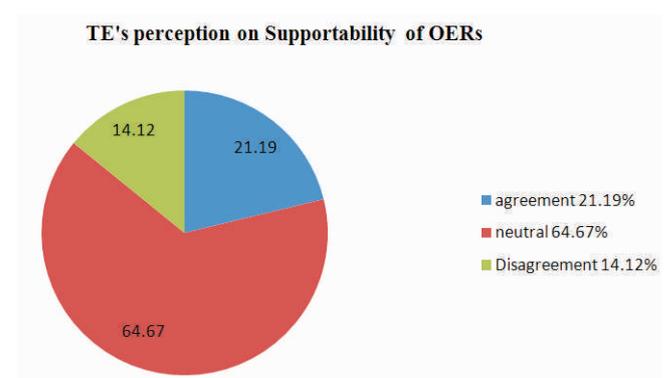

Figure 2. Teacher Educators' Perception on Usability of OERs

Items	Value
Mean	16.03
Median	16.00
Mode	16.00
SD	2.29
Variance	5.27
Range	10.00

Table 3. Descriptive Statistical Values of the Perception on OER

Item	N	Percentage of Agreement	Percentage of No Opinion	Percentage of Disagreement
OER is supportive for teaching	108	18.50	67.9	13.8
OERs are necessary for present day classroom	108	20.37	63.88	15.75
Teacher Educator can't abstain from using OER	108	18.40	63.00	18.6
OERs are most supportive resources	108	24.00	65.74	10.26
OERs are not necessary for modern teacher education classrooms	108	12.50	62.80	24.70

Table 2. Item-wise Percentage of TEs Perception on Supportability of OERs

Values of the Mean, Median, and Mode of the scores of teacher educators' perception on OERs are same. These values are evident to explain that most of the teacher educators are scored on the middle value. The highest score in the distribution is 21 and lowest is 11. There is the variance of 5.27 and SD of 2.29. The range of the score distribution is 10. This is a notable value of range. There are teacher educators with low scores and with high scores on the Perception on Usability of OERs. But most of the teachers have a value in middle of the two extends. These statistical values are supportive to explain that a big group of teacher educators have almost same types of opinions on the usability of OERs. The scores of the big group represent the perception that 'no high support' or 'no absolute rejection'. In other words, this means the big group of respondents is with neutral opinion.

As per Table 3, the distribution of the scores among teacher educators on the perception on OERs is varied. The measures of central tendencies are same values. But top score in the frequency is a high value with a variance of more than 5. The lower value also has same variance from the mean. But most of the values in the distribution are concentrated very near to the mean. It means the teacher educators chose to respond with the 'no opinion' option in the rating scale. As per the item-wise percentage analysis, it is evident that teachers are skeptic to choose the OER materials as the prime resource of teaching. They are not sure on the usability of the OERs. Based on the percentage of agreement and disagreement and also upon the descriptive statistical values, it can be stated that the teacher educators have inadequate perception on the usability of OER materials. This result has congruence with the result from interview.

5.3 Teacher Educators Perception regarding Credibility of OERs

It is found out that less part of teacher educators (21.19%) are using the OERs by considering them as supportive for teaching. Big part of them is skeptic and having neutral opinions on the use of OERs. At the same time, the number of teacher educators who do not prefer OERs for teaching is very low, that is only 14.12%.

One of the major objectives of this study is to find out teacher educators' perception on the credibility of the OER materials. Teacher educators are supposed to make use the OER materials only with relevant and true belief on them. Thus, it is important to find out the teacher educators' perception regarding the credibility or authenticity of the OER materials.

The scores of teacher educators' perception on credibility are administered for percentage analysis and the result is provided in Table 4.

Table 4 reveals that only 15.74% of teacher educators agrees that the OERs authentic. Formerly, it is seen that 21.19% of teacher educators consider OERs are supportive for teaching and learning. But, it is interesting to find that only 15% of them consider the OERs are authentic. The contradictory fact is that 5.45% teacher educators make use the OER materials without having much confidence on them. The big group of teacher educators (71.3%) perceived the OERs may be authentic. This group uses the OER materials after verifying the credibility with other resources.

5.3.1 Reflection

In order to make use of any resources as supporting material, teachers must have strong confidence on them. The resources will not achieve popular support without the sureness of teachers. The present result explains that most of the teacher educators have no confidence on the credibility of OER materials. This result must be considered by creative commons and material hostess.

5.3.2 The Tendency of Verifying Credibility of OER Materials

It is found out that 71.3% of teacher educators are skeptic

	Item	N	No. of Agreement	Percen tage
Teacher Educators who perceive….	OERs are authentic and use them directly for teaching		17	15.74
	OERs are not authentic	108	14	12.96
	OERs may be authentic but use only after verifying the content with other resources		77	71.30

Table 4. Teacher Educators' Perception on Credibility of OERs

on the authenticity of the OER materials and they verify materials with other resources. Because of the research interest, it is intended to find out their tendency of comparison. Respondents were given three options to mark on this conceptual item. The response options are "book", "other OERs", and "Experts". The result is given in Table 5.

Table 5 invariably proves that most of the teacher educators (88.31%) are in a tendency to compare the authenticity of OER materials with the textbooks. They hesitate to believe OERs are credible resources. A very lower group of teacher educators (2.6%) make sure the authenticity of OER materials by comparing with other OERs. 9.09% of teacher educators discuss with experts to assure the authenticity of OERs. The result is evident to state that most of the teacher educators do not directly consider the OERs are authentic and they have the tendency of comparing them with books to assure authenticity. This distrust may be due to the lack of knowledge on the effort behind constructing the OERs. However, to develop teachers' confidence, reputable experts have to contribute to the field. The credential of Creative Commons is to be explained in the OER materials to develop the teacher educators' confidence on them.

5.4 Dilemmas of Teacher Educators

Data regarding the dilemmas of teacher educators on utilization of OER materials are collected through the interview. The interview conducted was informal. Questions were framed based upon the research questions. The following issues were identified:

- *Selection dilemma:* The teacher educators often fail to identify proper OER materials for a particular content. Locating on the same material at different time is almost difficult. Using and reusing of materials create confusion.

Item with	N	No. of Favorable Responses	%
Books		68	88.31
Other OERs	77	2	2.60
Experts		7	9.09

Table 5. TEs' Tendency to compare OERs with other Resources

- *Dilemmas of authenticity:* This is same as revealed by the analyses of responses in the inventory. Teacher educators cannot take a firm decision on the authenticity. Different OERs on same topic may give contradictory information.

- *Feasibility dilemmas:* Teacher educator may suggest one OER materials and student teachers may reach on other. The student teachers may not retrieve the same OER material that is suggested by teacher. The different materials give different information and these create problems in the teaching learning process.

- *Dilemmas on Licences:* Different types of licences are tagged with the materials. The CC licence category is always a dilemma to teacher educators. They have doubt on the openness of licence.

Conclusion and Generalization

The study aimed to reveal teacher educators' perception on usability of OER materials for teaching. It also aimed to know teachers' concept on the authenticity of OER materials. The result shows that most of the teacher educators have no favorable perception on OERs. They are skeptic on the usability of OER. Most of the teachers are using the OER materials only after verifying its credibility with other resources, particularly with books. Teacher education sector cannot abstain from the wide use of OERs and other online materials. Digital launching of content materials are essential. The teacher educators are the responsible people to develop positive attitude among prospective teachers towards the wide and effective use of technological content and support. To make it effective, teacher educators must be persuaded for the use of OERs and other online resources. The creative commons and online resource providers must take deliberate attempt to develop credibility and authenticity of the online materials. NCTE, NCERT, UGC, and other apex bodies of education can perform high accountability to assure the authenticity and credibility of OER and online resource materials. A centralized system may be functioned from NCTE or RIEs to extend the details of authentic OER and online materials.

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