

Sharing, Adaptation and Organization of Open Educational Resources: Exploring the Teachers' Attitude of Sukhothai Thamathirat Open University, Thailand



Jeetendra Pande, Alka Singh, Kamolrat Intaratat, G Mythili

Abstract: *The Open Educational Resource(OER) is based on culture of sharing and learning, encouraging the teachers to adopt existing OER, adapt and share with others to keep up the cycle of collaboration and continuous improvement. Understanding teachers' attitude towards the use of OER and comparing data across institutions may help to recognize the issues that impact OER take-up. The major objectives of the paper is to study the teacher's attitude towards OER at Sukhothai Thamathirat Open University(STOU), Thailand. The teachers' attitude towards OER scale with a five-point scale from strongly disagree to strongly agree was used in this study. Based on the scale, adaptation & use of OER and sharing of OER can be identified. The questionnaire was distributed to the faculty of STOU. There were 32 respondents of STOU considered for analysis. Data captured through online form. The data have been analyzed quantitatively by implying statistical measures. The frequency measures were used to present the demographic as well as other data along with chi-square test. The analysis was done in SPSS. Teachers of Thailand are encouraged to share OER for their professional enhancement and personal satisfaction. It is interesting to find that majority of them are motivated to share and contribute to OER for dissemination of ideas in a knowledge society.*

Keywords: *Open Educational Resources (OER), Attitude, Adaptation, Sharing resources.*

I. INTRODUCTION

Open Educational Resources(OERs) has become a core component of open education in higher educational settings[9]. The first definition of OER was proposed by

UNESCO in the year 2002 in a forum on the Impact of Open Courseware for Higher Education in developing Countries. OER, as defined by[19] are digital or any other form of resources for teaching, learning and research available in public domain with an open license which authorize the users or creators to freely use, adapt, redistribute with no or limited restrictions. The open licensing has been defined by pertinent international conventions within the system of intellectual property rights which respect the authorship of the creator. It is of particular interest in developing countries if OER can be utilized to improve the quality of higher education and give more people opportunity to receive a higher education while keeping the total cost for education down[16],[3]. It has been claimed that OER foster the spread of knowledge and that, among teachers, they can support learning from others' teaching[6], [17], [18]. In addition, awareness of OER among teaching staff is an important in order to make higher education accessible with growing number of teachers. Apart from awareness, the attitude of teachers is also important for utilization of available resources[4]. Pegler[15] suggests that reuse of OER can be dependent on technical, motivational and quality factors. Several studies reported positive attitude of teachers towards OER. It was found in one of the studies by Kanwar, Kodhandaraman, & Umar[5] that utilising OER purportedly reduces the time associated with developing courses and programmes, facilitates sharing of knowledge, preserves and disseminates indigenous knowledge, and improves educational quality at all levels. Similarly, Butcher[2] revealed that OER provide access to global online content that can be localised without legal restriction, introduce greater choice in terms of available learning resources and create inclusive learning communities for teachers as well as students. Efforts have been made by Pande[13] and Pande, Intaratat, Mythili, & Singh[14] investigated the teachers' attitude towards OER in and reported that adoption and continued movement on the OER route will keep having positive and beneficial effect on higher education in the time to come. Mythili[10] stated that finding appropriate OER and integrating in the course was challenging task for the teachers and learners felt OER materials used in the course facilitated their learning. To recommend OER uptake in Indian higher education institutions for promoting it in a sustainable manner, Mishra & Singh[8] endorsed a comprehensive strategy at the institutional level.

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In terms of distance education institutions, digital technologies, coupled with OER could enable to serve the educational needs of diverse communities, provided the learners have easy access to open technologies[12]. Moreover, the OER movement has gained much momentum recently as a relatively new global phenomenon which is capable of bridging the knowledge divide[1], [11]. Keeping in mind the above aspects of OER, the researchers decided to explore the attitude of open universities teachers' attitude towards OER with respect to sharing, adaptation & use and organizational facets. The methodology and findings are presented further.

II. METHODOLOGY

The quantitative approach has been used to investigate the attitude of faculty of Sukhothai Thamathirat Open University (STOU), Thailand towards OER. The sample of teachers were randomly selected from the above-mentioned open universities Sukhothai Thamathirat Open University (STOU), Thailand. A questionnaire including five-point scale was used for data collection through google form. It included statements were related to faculty attitude towards sharing of OER, ways of adaptation & use of OER and organizational as well as practical aspects of OER. Overall, 32 responses of STOU faculty members were considered for data analysis. The data was analyzed quantitatively through SPSS implying statistical measures such as Mean, Standard Deviation and Chai-square test.

A. Questionnaire for the present study

After reviewing related literature, the researchers adapted an attitude scale for OER (ATOER) developed and standardized by Mishra et.al[8]. The questionnaire included demographic details such as gender, age, designation, teaching experience. In addition, 5-point ATOER scale catering to teachers' sharing, adaptation & use, and organizational as well as practical aspects of OER was used. The statements related to organization and practical aspects of OER were prepared by the researchers on the basis of related studies.

B. Demographic Profile of the Respondents

There were total 32 faculty members who responded to the questionnaire. Moreover, the majority (53.10%) of university teachers were within the age group of 35-50. There was about one-third of the sample within the age group of 51 to 65 years. The young teachers (15.60%) were counted to be lowest in sample. It indicates that more than half of the teachers were in the middle of their career (Figure 1). The Figure 2 indicates that majority of teachers with 72 % were female, while 28 % were male.

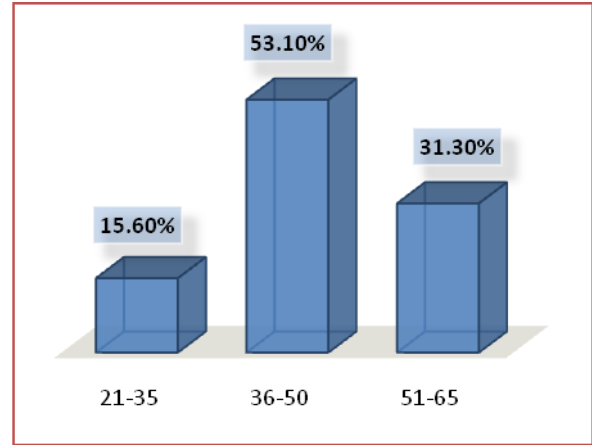


Figure 1: Age-wise distribution of Sample

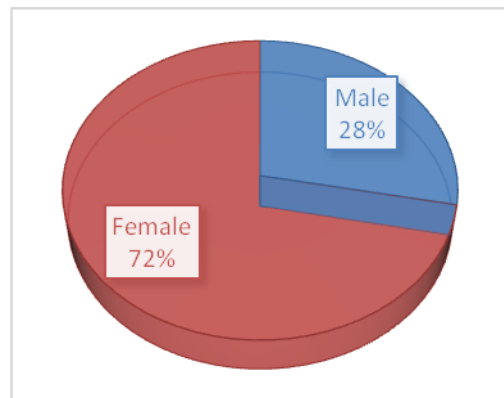


Figure 2: Gender-wise distribution of Sample

Besides, Figure 3 shows that majority of teachers (31.30%) were assistant professor in their respective open universities. It is noted that equal number of assistant professor and associate professors i.e. 21.90 % each participated in the study.

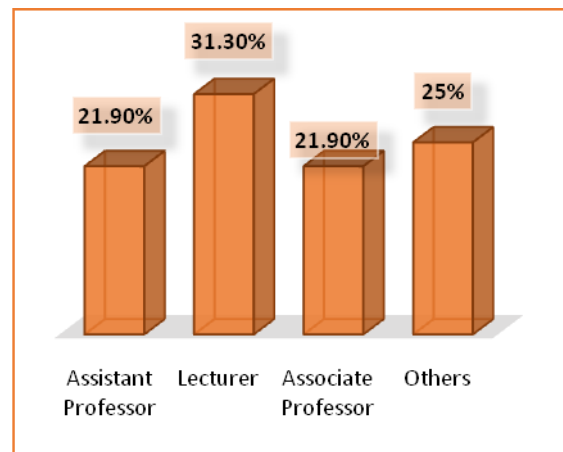


Figure 3: Designation-wise distribution of Sample

Figure 4 shows that more than two-third of the faculty members of STOU were having 11 to 30 years of teaching experience. On the other hand, 15.6 % had 1 to 10 years and more than 30 years of experience respectively.

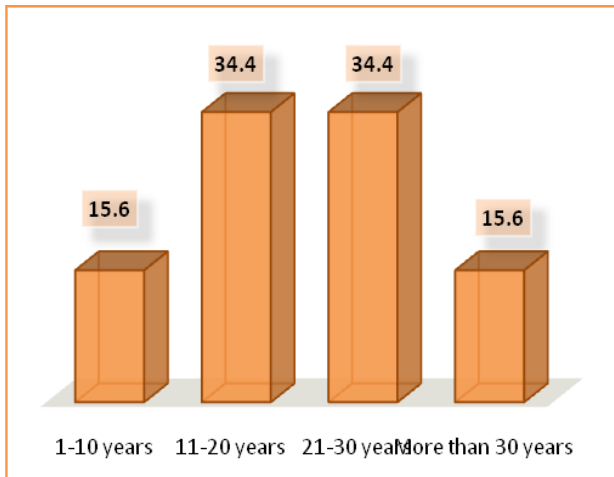


Figure 4: Distribution of Sample as per teaching-experience

III. FINDINGS

A. Attitude of STOU faculty towards OER

Data on respondents' attitudes towards OER were collected using the questionnaire and analysed as per the 5-point scale categories. Analyses of the overall means and standard deviation were done on all the statements as per the scale (1 = Strongly disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5 = Strongly agree).

Table 1 presents the overall average responses of STOU faculty along with sub-scales of sharing of OER, adaptation & use of OER and organizational aspects of OER. It is revealed that faculty indicated strong positive attitude towards sharing of OER (Mean = 4.40; SD = 0.39) as compared to sub-scales on adaptation and organisational aspects of OER. However, they showed positive attitude towards adaptation and use of OER (Mean = 3.98; SD = 0.46). Teachers supported OER in terms of institutional and organisational aspects (Mean = 3.96; SD = 0.45). Overall, the faculty of a Thailand open university found to be positive towards OER (Mean = 4.08; SD = 0.41) supporting the knowledge dissemination and open unrestricted learning.

Table 1: Average of STOU Faculty Attitude towards OER

Overall Attitude towards OER	N	Mean	Std. Deviation
Sharing of OER	32	4.40	0.393
Adaptation and Use of OER	32	3.98	0.464
Organisational aspects of OER	32	3.96	0.456
TOTAL MEAN	32	4.0815	0.411

B. Attitude of STOU faculty towards Sharing of OER

Table 2 indicated the responses of participants towards the 7 items sub-scale on sharing of OER. It is already found that overall, STOU teachers are positive about sharing of OER. The attitude means ranged from 4.59 to 4.28 indicates that the respondents were largely positive about sharing OER. They agreed that sharing of OER enhances their professional networking and sphere of influence (Mean= 4.59; SD = 0.49). Apart from that, they strongly consider that sharing of their own educational resources is their responsibility (Mean = 4.53; SD = 0.56) and matter of pleasure if someone adopts/adapts their created educational resources (Mean = 4.44; SD =0.56). In addition, teachers reflected that sharing

and contributing to knowledge society is an obligatory social responsibility (Mean = 4.34; SD = 0.54) that can encourage others as well (Mean = 4.31; SD = 0.59). OER helps to disseminate ideas (Mean = 4.31; SD = 0.59) to become a significant part of a larger community (Mean = 4.28; SD = 0.68). The responses from STOU faculty on sharing of OER show their positive attitude towards disseminating their resources for achieving personal satisfaction or professional accomplishment. To conclude, it is found that they are motivated to share and contribute OER.

Table 2: Average of STOU Faculty Attitude towards 'Sharing of OER'

Statements on Sharing of OER	Mean	Std. Deviation
OER enhances professional networking and sphere of influence	4.59	.499
As a teacher, it is my responsibility to share all educational resources that I have created	4.53	.567
It gives me pleasure if someone adopts/adapts my educational resources	4.44	.564
I feel it is obligatory for an expert to contribute to OER repository as his/her social responsibility.	4.34	.545
I believe that sharing educational materials as OER will encourage others to do so as well	4.31	.592
OER helps to disseminate my ideas	4.31	.592
Sharing OER enhances my confidence as I see myself as a part of a larger community	4.28	.683

C. Attitude of STOU faculty towards Adaptation and Use of OER

The analysis of teachers' attitude towards adaptation and use of OER shown in Table 3 also presents the positive attitude. The means scores ranged from 4.53 to 3.25 show strongly agree to neutral responses regarding adaptation and use of OER. Notably, all the statements related to sharing of OER indicated visible positive attitude. On the other hand, the teachers indicated neutral attitude towards some of the associated statements on adaptation and use of OER.

The STOU faculty has strongly agreed that OER materials are useful and adequate for different learning situations (Mean = 4.53; SD = 0.62). Furthermore, as OER is available for any given content (Mean = 4.25; SD = 0.62), it is more effective than text books (Mean = 4.25; SD = 0.62). Apart from content, faculty found OER suitable for given requirement (Mean = 4.19; SD = 0.69) and freely available resources (Mean = 4.09; SD = 0.85). They revealed that their competencies, awareness and knowledge about OER help them to contribute and adopt it (Mean = 3.88; SD = 0.70). Besides, they have shown positive to neutral attitude towards the promises of availability of OER in future (Mean = 3.47; SD = 0.98). The teachers reported neutral attitude about the accuracy and error - free contents under OER (Mean = 3.25; SD = 0.84). Overall, faculty has shown positive attitude towards use of OER and adapt it in any given learning situation, content and other requirements. The adaptation is convenient due to availability of no cost resources and effective learning approach. Besides, they do not expect OER to be accurate and error free which shows that they are either unsatisfied or ignorant about the quality of OER.

Table 3: Average of STOU Faculty Attitude towards 'Adaptation and Use of OER'

Adaptation and Use of OER	Mean	Std. Deviation
OER materials can be appropriately used in different learning situations	4.53	.621
OER material is available for any given content.	4.25	.622
Students will learn more effectively through OER as compared to a textbook.	4.25	.622
OER materials can be adapted for a given requirement	4.19	.693
I prefer to use OER as they are available for free	4.09	.856
My own competencies and knowledge of OER helps me to participate in contributing or adopting OER.	3.88	.707
I am sure in the near future there will be enough OER appropriate for any given content.	3.47	.983
Contents of OER materials are expected to be accurate and error free.	3.25	.842

With perspective of institutional or organisational aspects of

OER, the mean range reported between 4.34 to 3.00. As Table 4 reveals, STOU faculty responded between positive to neutral attitude towards organisational aspects of OER. The ability of customisation of OER make it learner friendly and caters the need of differently abled children (Mean = 4.34; SD = 0.54). The faculty agreed that OER helps to reach out more students (Mean = 4.25; SD = 0.76) by implementing it with different learning styles (Mean = 4.31; SD = 0.64). It is useful for adequate time management while learning (Mean = 4.34; SD = 0.65). In contrast, they felt that level of learning while using OER does not commensurate with the efforts taken for their preparation (Mean = 4.28; SD = 0.68). For them, OER provides opportunity for multi-channel of learning (Mean = 4.00; SD = 0.80) that helps to retain the content for the longest time (Mean = 4.03; SD = 0.78). On the other hand, they felt difficulty in integrating multiple OER in a learning package (Mean = 4.06; SD = 0.56). Interestingly, some of the teachers supported OER integration in higher education (Mean = 3.66; SD = 0.90). Moreover, they are neutral towards the impact of using OER on their performance in classroom transactions (Mean = 3.09; SD = 0.96). Similarly, they reported neutral attitude on difficulty in transacting the OER content within higher education (Mean = 3.00; SD = 0.91).

Although, teachers supported the use of OER at institutional level but they reported slight confusion about integrating OER in real classroom situation. Supposedly, it may be due to quality hindrance and lack of awareness. However, teachers reflected that OER creation takes more time and efforts.

Table 4: Average of STOU Faculty Attitude towards Organisational Aspects of OER'

Organisational Aspects of OER	Mean	Std. Deviation
OER materials help to cater to the learning needs of differentially abled children	4.34	.545
OER material can be customized to the needs of the learners.	4.34	.545
OER encourages proper management of learning time.	4.34	.653
OER material caters to different learning styles of students.	4.31	.644
The level of learning while using OER does not commensurate with the efforts taken for their preparation	4.28	.683

OER helps me to reach out to more students	4.25	.762
It is difficult to locate OER materials for developing a learning package	4.06	.564
Learning through OER material helps learners to retain the content for a longer time.	4.03	.782
OER material provides opportunities for multi channels for learning.	4.00	.803
It is difficult to integrate multiple channels/sources of OER materials in a learning package	3.84	.954
It is desirable to teach any course in higher education through OER.	3.66	.902
OER resources can help teachers to perform better in classroom transactions.	3.09	.963
It is difficult to transact the content of higher education using OER.	3.00	.916

IV. CONCLUSION

This study indicates that most respondents from an open university of Thailand have positive attitude about the prospects of sharing and using OER. It encourages the potential use of OER in Thailand. To sum up, teachers of Thailand are encouraged to share OER for their professional enhancement and personal satisfaction. It is interesting to find that majority of them are intrinsically motivated to share and contribute to OER for dissemination of ideas in a knowledge society. Apart from sharing, the teachers feel positive about adapting and using OER in different learning situations and finding suitable content as per the requirements. Notably, they are not sure about the accuracy and quality of content. Thus, quality matters of OER need to be worked out and resolved at institutional level. The creation, sharing and use of OER at an organisational level is an important part. Although, the teachers reflected positive attitude about integrating OER in an organisation but they are not sure about its integration for better classroom transactions and overall higher education system. The positive attitude towards OER need to be utilised to activate the uptake of OER in ODL institutions of Thailand. The OER may be promoted in a sustainable manner with applying, a comprehensive strategy at the institutional level. This research can be simulated in various ODL institutions to understand the personal and professional factors of teachers for OER integration in those contexts. If the institutions are able to well comprehend their teachers' attitudes, they can

formulate better strategies to resolve hinderances, inspire teachers and sustain quality of OER. This data-oriented approach helps to derive institutional support, policy formulation and training approaches. Finally, OER awareness and positive attitude among community of teachers help them to collaborate for sustainable knowledge society that put forward the global movement of OER uptake.

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Sharing, Adaptation and Organization of Open Educational Resources: Exploring the Teachers' Attitude of Sukhothai Thamathirat Open University, Thailand

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