Volume : 1 | Issue : 5 | Nov 2012 • ISSN No 2277 - 8160

Research Paper | Education

Teacher-Trainees' Awareness regarding Open Educational Resources

Shamim Ahmad

Assistant Professor, Department of Education, Maulana Azad National Urdu University, Hyderabad-32

ABSTRACT

Open educational resources as repository of educational transactions cover a wide range of courses, materials, modules, tools and other applications. While recognizing the potential value of OERs, the institutions need to ascertain the info-structure for effective learning conditions. This write-up emphasizes on the awareness of transformation in learning and the conditions of learning rooted through emerging technologies, and focuses on the teacher-trainees' awareness regarding open educational resources. Results of the paper however indicate that respondents having considerably high awareness regarding OERs with hardly any difference found between a) male and female; b) science and social science, but differed between c) urban and rural respondents. The study suggests the creation and use of OERs need to be encouraged for active participation and increased sharing of ideas. Consequently, while enhancing repositories and supporting access to knowledge, learning and education, there is a growing need to promote and integrate emerging technologies.

KEYWORDS :Teacher-Trainees; Awareness; ICT; Open Educational Resources.

Background

As trustee of the instructional transactions, OERs constantly endeavour to enhance repositories and support access to learning, knowledge and education. The quality and relevance of teaching and learning is enabled by ICT through the integration of ICT in teacher professional development and the provision of range of educational resources for teachers (Isaacs, S, 2011, pp.179). Emerging instructional technologies provide broader perspective to learners, teachers, educators, teacher-trainees and other scholars. Teacher-trainees have to equip with the knowledge, behaviour, attitudes and skills required to perform effectively, efficiently and expeditiously in the classrooms, schools and the community at large. Transformations in the teacher-trainees' roles are indispensable as they have to address situations which are changing rapidly. In most countries, the resources required for learning are also evolving likewise especially in the era of everyday changes in institutional procedures. Due to brisk advancements in science and technology, knowledge is expanding rapidly and to keep track of those advancements, the teachers and teacher-trainees need to learn more efficiently and expeditiously.

Open Educational Resources

OERs are the expression of an Internet empowered world wide community effort to create global intellectual and educational commons (COL, 2009, p.25). However, OERs do not automatically lead to quality, efficiency and cost-effectiveness; much depends on the procedures put in place (COL, pp.3). The underlying assumption of the open educational resources approach is that knowledge in tech-driven knowledge era has to be made open, accessible and flexible killing the barriers of distance and time.

The term "open educational resources" was first adopted at UNESCO's 2002 forum on the Impact of Open Courseware for Higher Education in Developing Countries (Johnstone, Sally M., 2005). Open educational resources include course materials, learning contents and more importantly tools that support creation, dissemination and application of knowledge for learning communities. As Gupta et al, (2011) report as "Leading institutions are now using it to provide individualized learning at a distance and upload their courseware as open resource, with the result that it has become world's most valuable knowledge repository. Every life-long learner has opportunity to become discoverer/ researcher/ navigator/ collaborator by surfing through the information highway, interpret it and share knowledge with many and varied users" (Gupta, et al, 2011, p.5). In the context, teacher-trainees should be prepared to respond to the enormous challenges of tech-driven knowledge era.

Undoubtedly, ICT use is expanding the range of learning options to use and re-use for the teachers, educators, teacher-trainees, learners, researchers and the community at large. Given the accessibility of emerging technologies, OERs are designed to encourage active participation and increased sharing of ideas. Ostensibly, the network of OERs can not only make learning experience a flexible one but also more efficient and cost-effective. Open Educational Resources (OER) can play an important role in the transformation to an education system in which innovation, customisation, high quality, cost-cutting, and efficiency go hand-in-hand (Evertse, J., 2011, pp.1). The very purpose of open educational resources is to be available online and free of cost for people to use and re-use. In the context, teachers and teacher-trainees need to be made aware, trained and enabled to create, use and share OERs. Thus, a study to examine teacher-trainees' awareness regarding open educational resources has been conducted.

Objectives of the Study

The objectives of the paper are:

- to examine the awareness of teacher-trainees regarding open educational resources,
- to analyze the significant difference, if any, in the awareness of male and female teacher-trainees regarding open educational resources,
- to find out the significant difference, if any, in the awareness of urban and rural teacher-trainees regarding open educational resources, and
- to study the significant difference, if any, in the awareness of science and social science teacher-trainees regarding open educational resources.

Hypotheses

The hypotheses formulated for the study are outlined below:

- teacher-trainees have considerably high awareness regarding open educational resources,
- there is no significant difference in the awareness of male and female teacher-trainees regarding open educational resources,
- there is no significant difference in the awareness of urban and rural teacher-trainees regarding open educational resources, and
- there is no significant difference in the awareness of science and social science teacher-trainees regarding open educational resources.

Methodology Used

The methodology employed was descriptive research wherein teacher-trainees' awareness regarding OERs with respect to their gender, locale and stream were investigated. The study is not an exhaustive one, and is restricted to the limited number of distance learners. The methodological details like sample, tool, data collection procedure, analyzing data and statistical techniques are outlined below:

Sample

Keeping the objectives in view, a total of 110 teacher-trainees enrolled in full time two - year secondary teacher education programme at Maulana Azad National Urdu University, Hyderabad were selected using simple random sampling technique. Sample consists of both male 63 (57.27%) and female 47 (42.73%) respondents.

Tool
A self-made questionnaire developed by the investigator was used to examine the awareness of teacher-trainees regarding open educational resources. The tool consisting of 20 items with reference to the open educational resources was developed to illicit the required information from the subjects under investigation.

Procedure
As part of necessary instructions while administering the questionnaires, the respondents were assured that their responses would be kept confidential and will be used only for research purposes. Hence, the respondents were asked to give free and frank answers without hesitation. Though, no time-limit was imposed, but they were instructed to complete the questionnaire as early as possible. The data gathered from the subjects was analyzed and interpreted using suitable statistical techniques.

Data Analyses and Interpretation
In order to analyze and interpret data, the statistical techniques used for the present study were Percentage, Mean, Standard Deviation and t-test. The data gathered was presented in the tabular form and analysis was done as per the objectives of the study. The teacher-trainees' awareness regarding open educational resources has been discussed with the relevant tables in the following section of the study.

Table – 1: Level of Respondents' Awareness Regarding OERs

Sl. No.	Awareness	N	Percentage	Mean
1	Low	14	12.73%	51.07
2	Moderate	56	50.91%	62.64
3	High	40	36.36%	73.83
Total		110	100	

It can be inferred from the table -1 that 12.73% of respondents possess low level of awareness while 50.91% moderate level and remaining 36.36% have high level of awareness regarding open educational resources. The result reveals that a significant number (36.36%) of the respondents posses high level awareness regarding open educational resources. Besides, a majority 56 out of 110 (50.91%) have moderate level of awareness which indicates that they not only support but also appreciate the considerable effects of open educational resources in the knowledge driven era.

The significance of differences observed between means in relation to gender, locale and stream with the help of statistical technique i.e. t-test is analyzed hereunder.

Table - 2: Significance of Mean Difference – Gender-wise, Locale-wise and Stream-wise

Variables		N	df	Mean	SD	t-value	Inference
Gender	Male	63	108	64.27	7.42	1.41	Not Significant @ 0.05 Level
	Female	47		66.53	8.89		
Locale	Urban	41	108	67.66	6.82	1.99	Significant @ 0.05 Level
Rural		69		63.80	8.52		
Stream	Science	51	108	65.82	9.17	0.69	Not Significant @ 0.05 Level
	Social Science	59		64.73	7.13		

Table - 2 shows that the t-value calculated for the significance of the scores of male and female respondents is less than the required tabulated value for significance i.e. 1.98 at 0.05 level. It indicates that male and female respondents have similar awareness level regarding open educational resources. The null hypothesis (H0) is hereby accepted. Hence, it is concluded that there is no significant difference in the awareness of male and female respondents regarding open educational resources.

It is also evident from the Table - 2 that the t-value obtained for the significance of the scores of urban and rural respondents is 1.99 which is greater than the required tabulated value for significance i.e. 1.98 at 0.05 level. It shows that both the urban and rural respondents differ in awareness level regarding open educational resources. Hence, the null hypothesis (H0) is, hereby, rejected. Therefore, it is concluded that there exists significant difference in the awareness of urban and rural respondents and that the urban teacher-trainees have better awareness than their rural counterparts regarding OERs.

As evident from Table - 2 that the t-value obtained for the significance of the scores of science respondents is 0.69 which does not exceed from the required table value for significance i.e. 1.98 at 0.05 level. Hence, the null hypothesis (H0) is accepted. Therefore, it is concluded that there is no significant difference in the awareness of science and social science respondents experience regarding open educational resources.

Conclusion
For decades in the field of educational research, investigators have been concentrating to broaden the gateways of learning, knowledge and education. OERs are an integrated activity of online creating and sharing of educational materials for the people to use and re-use. At the turn of 21st century knowledge era, teacher-trainees would feel more satisfied and enriched preferably in a well established info-structure. Now, when the wheel has already been invented, time has come to make use of it and improve the structural units linked with the knowledge creation, knowledge dissemination and knowledge application. In addition, teacher-trainees need to advance their knowledge base, attitudes and skills for relevant structural improvement in their respective discipline. OERs help to solve the problems of learning materials along with the encouragement for active participation and sharing of ideas in consistent with the present day learning environment.

Educational Implications
It is crucial that teacher-trainees should learn the techniques to maximize the educational effects; however, equally significant is reducing the cost by creating, disseminating and applying open educational resources. OERs being instrumental in shaping the business of educational transactions emphasize all to know the modus operandi and apply the alternative provisions in varied learning situations. Learning by multiple resources preferably open materials provide wider scope to the learning community to advance on the path of learning, knowledge and education. The current advancement in hardware, software and courseware makes the learning process more effective, efficient and expeditious. The present situation evokes to perform innovatively using alternative strategies and best practices. COL (2009): ICTs for Higher Education, Commonwealth of Learning, UNESCO, World Conference on Higher Education. http://unesdoc.unesco.org/images/0018/001832/183207e.pdf. (Accessed and Retrieved on 22.03.2012).

REFERENCES

Isaacs, S. (2011): Transforming Education: The Power of ICT Policies. Paris, United Nations Educational, Scientific and Cultural Organization. http://www.unesco.org/new/en/education/resources/online-materials/single-view/news/transforming_education_the_power_of_ict_policies-1/. (Accessed and Retrieved on 18.04.2012). | COL (2011): Guidelines for Open Educational Resources (OER) in Higher Education., Commonwealth of Learning, UNESCO. http://www.col.org/PublicationDocuments/Guidelines_OER_HE.pdf (Accessed and Retrieved on (08.02.2012). | Evertse, J. (2011): Access to High Quality Education for All. Open Educational Resources. Netherlands, SURF Foundation. http://www.surf.nl/en/publicaties/Documents/Articles%20on%20OER_article%20I_29112011%20(web).pdf. (Accessed and Retrieved on 12.04.2012). | Gupta, et al. (2011): Use of Technology in Education: A Paradigm Shift from Little Media to M-media. AIU, University News, Vol. 49, No. 36, Sept. 05-11. | COL (2009): ICTs for Higher Education, Commonwealth of Learning, UNESCO, World Conference on Higher Education. http://unesdoc.unesco.org/images/0018/001832/183207e.pdf. (Accessed and Retrieved on 22.03.2012). | Johnstone, Sally M. (2005): Open Educational Resources Serve the World, Educause Quarterly, 28 (3), www.en.m.wikipedia.org/wiki/Open_educational_resources#cite_note-Johnstone-2. (Accessed and Retrieved on 07.12.2011).