Integrating open educational resources in situated learning design for professional education

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Integrating Open Educational Resources in Situated Learning Design for Professional Education*

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Abstract

Open Educational Resources (OER) movement steadily picking up in the last decade has opened up innovative possibilities for course development and learner support in Open and Distance Learning. While OER integration provides easy access to latest digital content of known quality drawn from variety of global sources it also allows each user or institution to have locally designed study programme and learner support relevant to the context and learner needs. This allows programme to combine global knowledge with local situations and needs.

The paper argues for a constructivists approach to curriculum development wherein the course package will have two components; one a study guide, locally developed with varied learner engagements through a variety of activities situated in the real work context and the second a resource pack of OER identified and compiled according to the curricular needs. The study process would involve the learner drawing relevant theoretical knowledge from the OER resource pack to effectively working through the activities provided in the study guide. This model is illustrated by the author through two cases of course development. The first is that of the MA Teacher Education-International Programme by the Open University of Sri Lanka (2006) and the second is the ongoing course development in one of the courses of Master of Education Programme of the Wawasan Open University, Malaysia.

Emerging OER Movement

Open Educational resources (OER) are digital materials that can be used, re-used and distributed for academic purposes without being limited by copy right restrictions. This has been made possible by suitable ***open content licenses*** which otherwise would not be have been under copyright laws. ***Open content*** refers to publishing of content online with the same philosophy underlying the ***Open Source*** practices. Open content includes any kind of creative work, or content, published under an open content license that explicitly allows copying and modifying of its information by anyone, not exclusively by a single organization, firm or individual.

* **Paper presented at the 24th ICDE World Conference on Open and Distance Learning: *Expanding Horizon- New Approaches to ODL*, 2-5 October, Bali.**

OER include different kinds of learning content including books, course materials, content modules, learning objects, collections, and journals. Tools include software that supports the creation, delivery, use and improvement of open learning content, searching and organization of content, content and learning management systems, content development tools, and on-line learning communities. Implementation resources include intellectual property licenses that govern open publishing of materials, design-principles, and localization of content. They also include materials on best practices such as stories, publication, techniques, methods, processes, incentives, and distribution.

Case studies of OER integration in ODL

Two cases are presented here in short and only highlighting the relevant details required for a discussion of how OER materials are being integrated to the learning design and how such a model achieves a healthy blend of quality resources available in the web and locally developed and relevant activities and experiences from the learners own context. CASE-1 presented is a course titled „Role of Teacher Educators as a Researcher. which is one of the six courses in the MA Teacher Education Programme developed by the Open University of Sri Lanka in collaboration with the Commonwealth of Learning, Vancouver. CASE-2 is the ongoing work of integrating OER learning objects in a course titled „ICT in Education‟ under Master of Education Programme being developed by the Wawasan Open University. The course will be offered in the July semester of 2012. The author was part of the team which developed and delivered the MATE programme. Similarly the author is now participating in initiating OER integration by developing a model course in the Wawasan Open University. The curriculum structure of the two courses is different although both attempt to use OER for resource support. But there is a basic variation in which the OER is built in to the learning system. Both the courses discussed here are part of post-graduate programmes for preparing teacher educators and follow a common curriculum development approach different from the traditional content based approach. This is discussed in the following section

Curriculum Development in Teacher Education

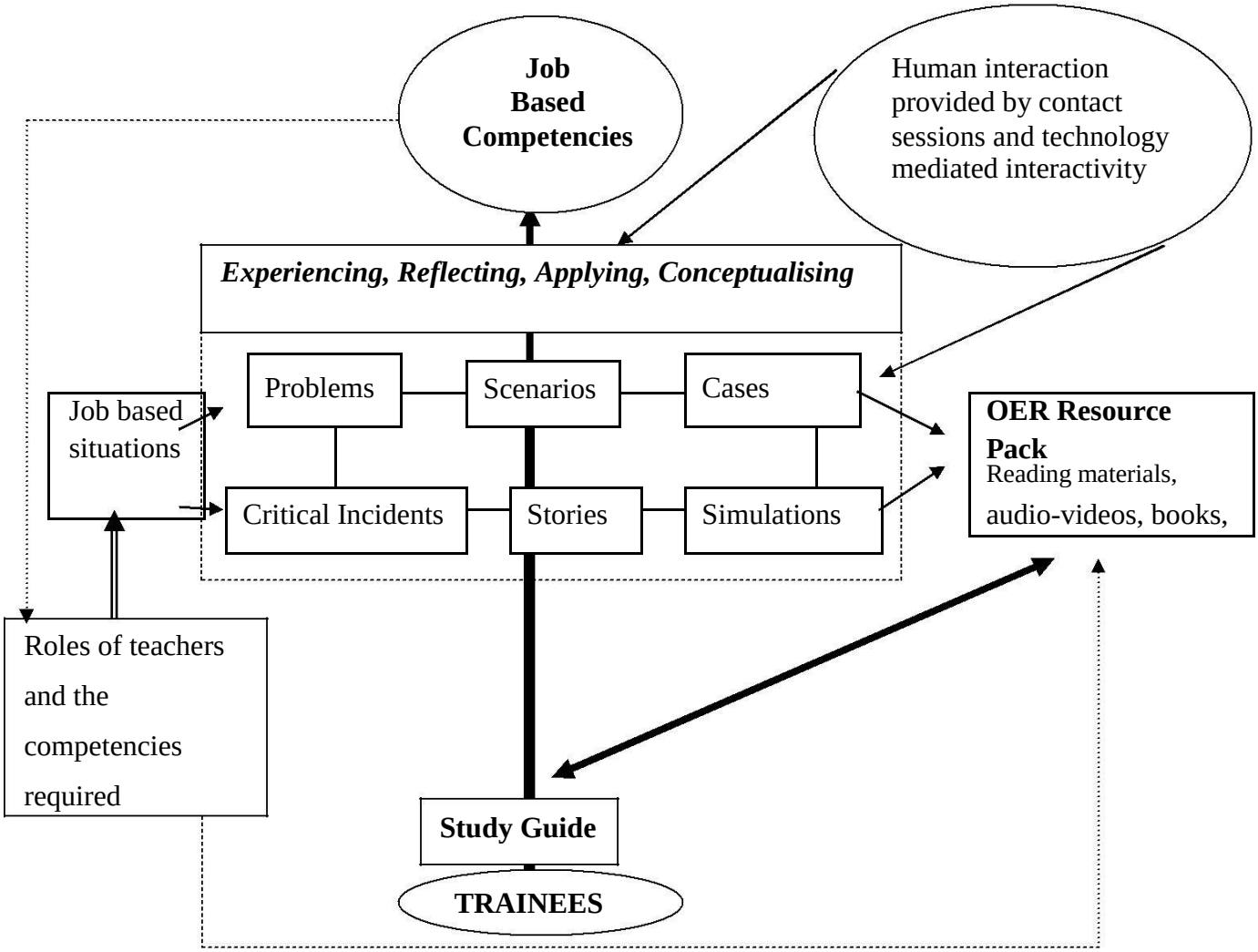
Most teacher education curricula tend to take a theory-oriented approach with the assumption that an understanding of the foundational and pedagogical theory and their applications in a few school or class situations will equip the teachers to deal with the complexities of the real situation. They may initially formulate the curriculum objectives based on the roles of teachers and the competencies required but when it comes to curriculum outlines and transaction tend to take a theoretical approach. Unfortunately the same approach is largely followed in teacher education courses by distance mode too. Hence, even the so called “good” courses of teacher education by ODL in
India remained highly theoretical derived from a discipline based curriculum development process.

Constructivists approach to curriculum design:

Is it possible to adopt a field and situation based curricular organization and transaction instead of a theory-based approach? Can the training interventions take into account and utilise such episodes and experiences for discussions and reflections? Can case studies and simulations be developed based on these experiences? According to the constructivists‟ approach to learning, individuals build their own theory of the nature of the world, from their own perceptions and experiences. It is grounded in the idea that "people learn by actively constructing new knowledge, rather than having information poured into their heads". Many argue (Bates, 1999; Jonassen, 2000) that learning within the constructivist environment promotes meaningful learner engagement and critical, creative and complex thinking by learners. Hence, it is important that opportunities for such meaningful learner-engagement are provided in any effective instructional context.

Based on the processes involved in the collaborative reflective practice it is possible to conceptualise a professional development curriculum for a ODL based programme or course. The reading materials, media based materials, resource materials, interactive sessions including face-to-face contact classes and technology based interaction, assignments and projects could play appropriate roles in facilitating the trainee going through the processes involving **experiencing, reflecting, applying and conceptualizing**. The core reading and other media materials would consist of cases, stories, critical incidents, scenarios, simulations and problems derived from the classroom, school and community situations based on the roles the teacher has to play and the competencies he/she has to develop to function in these situations. The cases, problems etc. will be designed and developed in such a way that the trainee while going through them will at appropriate points have to take a decision, perform an activity, experience in real situations and/or an audio-video episode, recall prior experiences, read a relevant theoretical writing or factual information and/or reflect on the issue either individually or collaboratively in face-to-face or technology mediated human interaction. Such a transactional process is expected to develop in the trainees those competencies required for performing the pre-specified roles effectively (Fig.1).

Fig. 1: Constructivist approach to curriculum design



Source: Menon M.B.(2008)

MATE-I Programme of OUSL

MATE-I programme designed to develop professional competencies for working teacher educators consists of six compulsory courses and a portfolio project. Printed materials and multimedia resources including a Study Guide with detailed study schedules and a Resource Pack, comprise the major forms of student support while contact sessions with the local tutors provide opportunities for closer interaction.

„The Teacher Educator as a Researcher" is one of the courses in the MATE-I programme designed to develop skills in research and evaluation.

Competency in conducting and understanding educational research is integral in solving existing problems as well as focusing attention on issues arising in the field of teacher education. The skills you gain from this course will therefore be useful to you in making valid suggestions to stakeholders in education.

The content of this course comprises identifying researchable questions, selecting appropriate approaches, collecting, analysing, and interpreting data, and reporting your findings. It also includes strategies for evaluating existing research in order to determine its usefulness in your current practice as a teacher educator.

Fig-2: OER Integration in CASE-2: Teacher Educator as a Researcher (MATE-I Programme of OUSL)

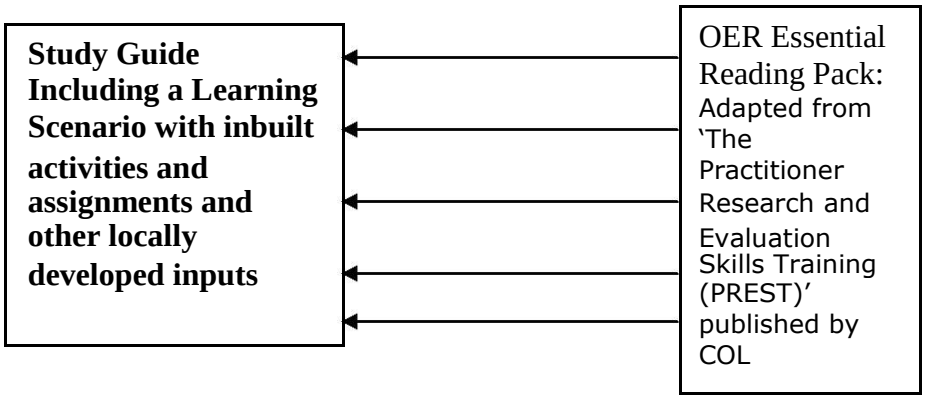
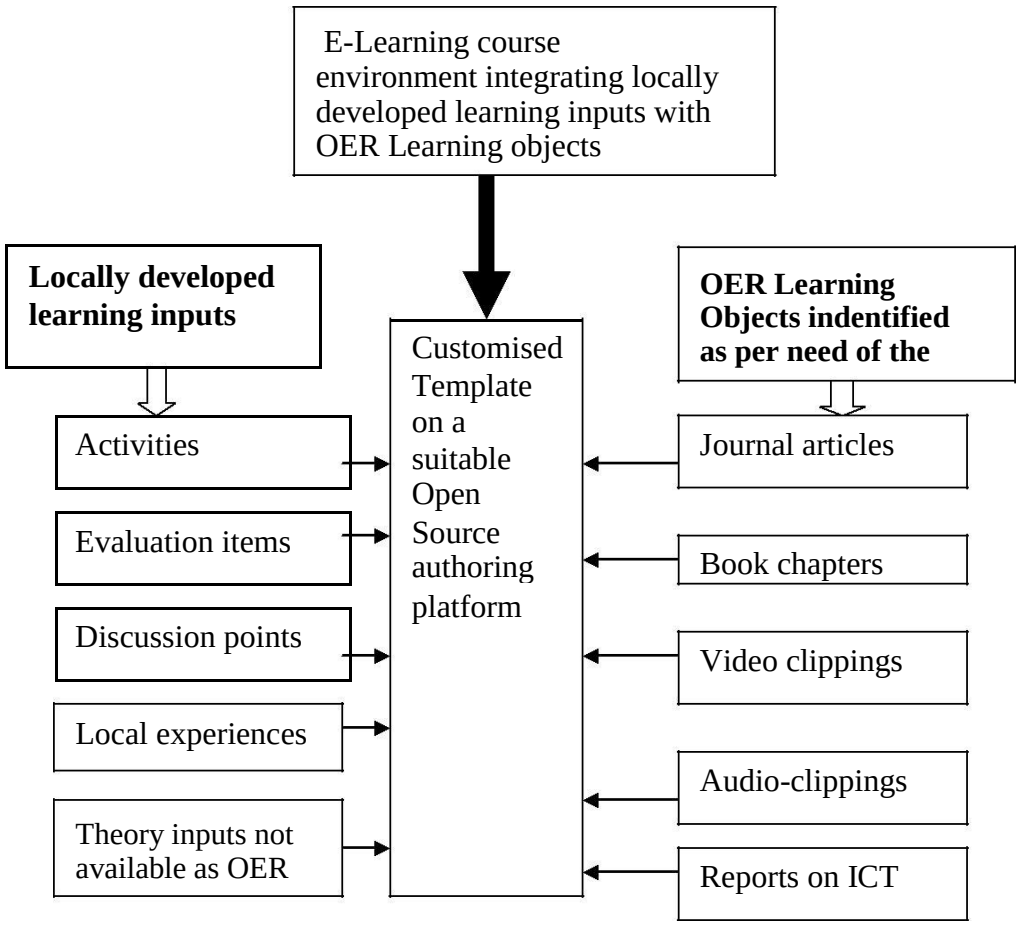


Figure-2 indicates the structure of the course package including the Scenario and the OER Pack.

M.Ed. Programme of Wawasan Open University

CASE-2 is the ongoing work of integrating OER learning objects within the course development in the post-graduate programme of at the Wawasan Open University. In this case OER inputs are being identified from different global sources and integrated to the study guide locally developed. The paper examines the work being carried out in developing one of the core courses of the Master of Education Programme titled „ICT in Education‟ . M.Ed. programme is for preparing teacher educators with all required competencies for conducting training of teachers and other personnel in education and training sectors. Figure-3 provides the structure of course package indicating the manner in which OER learning objects are embedded to the study guide.

Fig-3: OER Integration in CASE-2: ICT in Education (M.Ed. Programme of WOU)



Discussion:

The two cases presented in this paper are examples of use of OER in the course package of an ODL programme. However, there are differences in which the OER is integrated to the study process. In the Course under MATE-I programme the Study Guide and the OER Resource Pack are two separate components of the package. The Study Guide is essentially a Scenario with inbuilt activities and decision making points related to conduct of research in education. The theoretical details related to research methodology is presented in the OER resource pack. Case-2, being a e-Learning course, multimedia OER components are being embedded to the study guide in a template using a digital platform based on the open source eXe software. The OER materials include reading materials and other OER inputs sucg as audio and video clippings.

A comparison of learning design and OER integration details of the two cases is given in Table-1.

Table: 1.

Features related to Learning Design/OER	**CASE-1 (Course of MATE-I Programme of OUSL)**	**CASE-2 (Course of the M.Ed. ogramme of Wawasan Open university**
Target Group	In-service Teacher Educators	Pre/In-service Teacher Educators
Learning Objectives	Competencies for effective functioning in various role of a teacher educator	Theoretical knowledge and Competencies for effective functioning in various role of a teacher educator
Approach to curriculum development and transaction	Constructivists Approach	Constructivists Approach
Content organisation	Study Guide linked to a Resource pack	Study Guide linked to a Resource pack
Learning design	Scenario-Based Learning	Skill oriented activities supported by theoretical understanding
OER use	PREST material of COL	Multi-media OER learning objects identifies according to curricular needs
Modality of OER integration	OER overall supporting the Scenario provided	Specifically identified OER learning objects embedded and linked with the concerned activities in the study guide
Assessment	Portfolio based assessment	TMAs and final external assessment
Technology	Print supported by on-line support and face to face contact	e-Learning on a Moodle (2.00 version) platform supported by F2F contactor/and video-conferencing using wiziQ
Course development modality	Course team developing print based materials	Course team working on an open source authoring platform called eXe
Course Development Tracking Process	Monitoring of individual and group work physically	Use of course development tracking system
Nature of Copyright	Study Guide copyrighted and the resource pack is OER	Study Guide copyrighted and the resource pack is OER

It is evident from the table that the two courses are for comparable target groups attempting to achieve professional competencies related to education. The curriculum development approach is also similar. Both attempts to integrate OER in a locally developed studu guide. CASE one adopted a blanket approach of using an OER course (with adaptation) in Research Methods to theoretically support the scenario based learning. CASE-2 adopts an approach of specifically identifying OER learning objects to link with everu content section and points.

Conclusion

The two cases presented in the paper are examples of OER integration. Although OER movement has taken off and several distance education institutions have uploaded materials on the web, there are no clear models of integrating OER learning objects (materials) in the course materials. Resources are being redeveloped not only due to copyright issues but also because lack of modalities in linking an outside material with those developed locally in a relevant and workable manner. There needs to be more experiences of the type given in the paper to establish the effectiveness and feasibility of the models of OER integration.

References:

Bates, A. (1999), `Restructuring the University for Technological Change', in *What Kind of University? International Perspectives on Knowledge, Participation and Governance*, eds J. Brennan, J. Fedrowitch Huber and T. Shah, SRHE & OUP, London.

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