



OPEN EDUCATIONAL RESOURCES IN INCLUSIVE EDUCATION: IMPLICATIONS FOR TRAINERS

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- Introduction
- Methods and Methodologies
- Theoretical Framework
- Empirical Study Design
- Findings of the Empirical Study
- Conclusions and Prospects for Development

- Modern inclusive education in the European Union is considered within **three strategic priorities** (Moedas, 2015):
 - Open Innovation,
 - Open Science, and
 - Openness to the World.
- These three strategic priorities reveal the **paradigm change** in education in general and in inclusive education in particular
 - from e-learning
 - to open learning.
- Open learning is centred on **open educational resources** (OER).

Introduction (2)

- **Advantages and disadvantages** of open educational resources (OER) are widely discussed.
- **Educator training** on open educational resources (OER) is ensured.
- However, **little attention** has been paid to the **trainer training** on open educational resources (OER).
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- The **guiding research question** is as follows:
 - What is trainer training on open educational resources (OER)?
- **The aim of the research** is
 - to analyze use of open educational resources (OER) in inclusive education
 - underpinning elaboration of a hypothesis on trainer training how to create and use open educational resources (OER).
- The **methodology** of the present scientific research:
 - open educational resources (OER) → empirical study within a multicultural environment → conclusions.

Methodological Background (1)

- The methodological background of the present research is based on the **System-Constructivist Theory**.
- Application of the System-Constructivist Theory to learning introduced by Reich (Reich, 2005) emphasizes that human being's point of **view depends on the subjective aspect** (Maslo, 2007):
 - **experience** plays the central role **in the knowledge construction process** (Maslo, 2007).
- Therein, the **subjective** aspect of human being's point of view is **applicable** to the present research.

- **Trainer training** is identified as an **opportunity** to enhance trainer's teaching competence.
- Trainer training includes **open learning**.
- Open learning is centred on **open educational resources** (OER).
- By **open educational resources** (OER), UNESCO understands "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".

- **Advantages** are identified as any trait, feature or aspect that **gives** an individual, entity or any other thing a more favorable opportunity for success.
- In contrast, **disadvantages** are identified as any trait, feature or aspect that **does not give** an individual, entity or any other thing a more favorable opportunity for success.



- **Guiding question:**
 - What are teacher trainers' views on OER?
- The empirical study was carried out in February 2016.
- The **sample** of the empirical study involved seven teacher trainers from different countries.
- **Explorative research** has been used in the empirical study.
- **Interpretive** research paradigm
- The **semi-structured interview** with the following question:
 - What are advantages and disadvantages of OER in inclusive education?

Study Results: Lithuania (1)

- **Advantages:**
 - OER - the opportunity for educators to get concentrated information, relevant materials, methodic support etc.
 - Opportunity to share the knowledge and expertise on local, national and international level;
 - Opportunity to develop professional competences, self-education;
 - Opportunity to disseminate information;
 - Opportunity to collaborate with partners.
- **Disadvantages / Suggestions:**
 - To provide tools for users' communication on various topics;
 - To provide possibility to vote for best materials;
 - To create users'friendly environment and technical tools.

- **Advantages:**
 - OER ensures a variety of teaching and learning materials
 - Teacher can re-use OER for other groups of learners
 - Learners can access OER any time and any location where the Internet is available
- **Disadvantages:**
 - No a possibility of **immediate discussion** on the OER interpretation with other participants (peers and teacher) of educational process
 - Mostly learners' self-interpretation of OER that can differ from the others' interpretation that, in turn, sometimes delays the implementation of a task.
 - Learners' time management

Study Results: Germany (1)

- **Advantages:**
 - Reusable materials,
 - Access anytime from anywhere,
 - Possibility to combine studies with other activities

- **Disadvantages:**
 - No direct access to the tutor
 - No direct access to other students in order to share their experience
 - Time Management

- **Advantages:**
 - Providing **learning materials** for professional programmes such as Bachelor's and Master's degree programmes in library and information sciences.
 - Production of a **portal for the educational community** to share information, course content, and make accessible quality distance education learning products and services.
 - **Using existing resources**, develop reusable learning objects as "cognitive Bricks between the institutions"
 - Developing **collections of science experiments and industrial processes**, and the resources of art galleries and historical archives.

- **Advantages:**
 - Developing the **international intellectual resource** that is constituted by scientists and professors who are currently under-used in their present national infrastructure.
 - Developing courses in the field of **continuing education**.
 - Collaborating with other countries in the development of **case studies** in international business (including inclusive education), for example in the transition from traditional to modern business structures.
 - Provide a **test/evaluation environment** for open courseware programmes.
 - Publish links to pages created by faculty worldwide who are using the Web to deliver course **materials in different languages**.

- **Disadvantages:**
- Not surprisingly, the **access limitations** most commonly reported are lack of adequate bandwidth, a shortage of computers, and the need for training in ICT. Inadequate local telecommunication infrastructure, sometimes including regulatory policy that has the effect of keeping costs high and access limited, is also a recurring issue.
- In some institutions **computer access** is limited to faculty and graduate students, and often it is inadequate even for this relatively small group of users.
- **Language** can also be a constraint. Sometimes the language of instruction is not the language of the Web.

- **Disadvantages:**
- **Multilingualism:** It functions as a limiting factor [since] institutions feel that it is inappropriate and improper to be present on the web only in Tamil or Telugu, so they spend a lot of energy and resources trying to have the materials in their the mother tongue.
- For some, there is a reported "non-readiness" to use resources like Open Educational Resources (OER).

Study Results: Romania (1)

- **Advantages:**
 - Learners and teachers can access e-tools in any location and conditions,
 - teachers can use and re-use all materials time to time,
 - is possible to use for team-teaching and team-learners,
- **Disadvantages:**
 - is not a direct & affective communication,
 - planning a time for leaning is difficult,
 - is not an affective feed-back in real time.

- **Advantages of OER:**

a) we can learn from everybody all over the world

b) we can find even every needed information just from computer with web site

c) as a teacher I can offer to our students much more materials, books, video etc. - it can help in learning and teaching

Study Results: Poland (2)

- **Disadvantages of OER:**

a) quality - in open resources, especially international - we sometimes know nothing about quality, authors' experience; without guide/leader it's very difficult to work with OER

b) wi - fi and other technical difficulties

c) too much data causes discouragement and decline in motivation

d) problem of copyright - authors sometimes do not want "to open" his work, book, etc. People working not at university or school in fact do not want to show even presentations or articles because of copyright...

Study Results: Russia (1)

- **Advantages:**

- Easy access to varied on-line data;
- Latest developments in medical sciences and research results available on-line help in training better specialists for the sphere of public health;
- Accessibility of research results on-line can promote professional collaboration among students thus contributing to better qualification.

- **Disadvantages:**

- Questionable reliability of sources and materials at times;
- The issue of copyright;
- Poor guidance through some resources.

- Summarizing content analysis (Mayring, 2004) of the data reveals that the respondents' views on open educational resources (OER) are homogeneous.
- **Advantages:**
 - Re-use of OER
 - Use of OER at any time
 - Use of OER at any location where the Internet is available

- **Disadvantages:**
 - Technical difficulties to reach OER such as limitations of
 - OER access
 - Internet access
 - Computer access
 - Limited OER interpretation
 - OER availability in a native language
 - Quality of OER

- The theoretical findings on the inter-relationship between open learning and trainer training allow determining that trainer training facilitates open learning via use of open educational resources (OER).
- The empirical findings of the present research allow drawing the conclusions on teacher trainers' homogeneous view **on use of open educational resources (OER) in inclusive education.**
- The **hypothesis** is formulated: Trainer training is successful if
 - Open educational resources (OER) are accessible,
 - Open educational resources (OER) are available in a native language,
 - Open educational resources (OER) are qualitative,
 - Open educational resources (OER) are interpreted.

- Limitations of the present research:
 - The inter-connections between open education resources (OER), advantages and disadvantages, view, teacher trainer and inclusive education have been set.
 - Another limitation is the empirical study conducted by involving teacher trainers only.

- Further research tends to focus on **empirical studies** to compare **teacher trainers and teachers' views** on open educational resources (OER) in inclusive education.
- The search for **relevant methods for evaluation** of open educational resources (OER) in inclusive education is proposed.
- And a **comparative research of more countries** could be carried out, too.



Thank you for your attention!

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