Element 2.2 **Narrative: Lessons learned from a) producing and b) evaluating the unit**

This text provides only the most significant information that teachers and trainers would wish to have on their first steps using OER. It has two chapters: What are our crucial experiences producing this Learning-Unit ( chapter 1) and what are the crucial experiences working with it in class (chapter 2).

Our Learning-Unit in the form of OER is called *Medicament Administration.* This teaching-learning session is part of the subject “Nursing 1” of the Nurse assistant specialization.

Chapter 1 of element 2.2: **Lessons learned producing the OER**

* The OER-type chosen is a webquest. Such a type of activity belongs to the family of *Inquiry Based Learning*. Web quest activities are often developed on special platforms designed for this purpose. We decided to use the platform *OpenWebQuest*. The main pedagogical features of a web-based research appear in the OER sources per country on the Learn Box.
* The Greek Web Site for *OpenWebQuest* presents great educational and research interest as open source software. It was developed by Antonio Temprano, and the eLearning research team from the University of Peloponnese. It was evaluated and the findings have shown that the tool meets many requirements, but it can accept improvements and extensions. This edition is available under the Commons license 4.0. The sections of a WebQuest on this particular platform are the Welcome-Page, Introduction, Task, Process, Evaluation, Conclusion, Teacher Page, About Author(s) and Reviews. To use a webquest, you need to register first, with an eMail address and a password. The use of *OpenWebQuest* is free.
* Basic digital literacy is necessary to understand how a web quest platform is structured. It is easy to navigate in *OpenWebQuest.* If you are not acquainted with web quest platforms in the past you’ll have to spend some time in order to get to know the platform. This will provide you with an ease of use in the classroom and of course will give you hints on how to help your students work with this OER.At the end you’ll probably be inspired to create a web quest yourself, if you haven’t done it already in the past. In a web quest all material (videos, texts e.tc.) is provided through links so everything you prepare has to be uploaded somewhere on the Web. *Openwebquest* can host your creations. As written above its use is free.
* Regarding the construction of the OER, care has been taken to propose two equivalent versions (in Greek and in English). A particular difficulty we had to overcome was that web sites cannot be reproduced in another language. We have looked for “equivalent” sites (that is sites which provide equivalent messages and sets of information). This type of difficulty appears any time that someone wants to create a version of the web quest in another language: it is not a matter of translation solely; one has to search for equivalent sites in the sense defined above.
* A video was produced with interviews of actors of a social pharmacy and also of a pharmacist who speaks about medicine recycling. This video was designed and produced in Greece by the ASPETE team of the project. The video has been subtitled in English for the English version of the OER and has been uploaded to a separate link in youtube.
* The content Knowledge cannot be considered as granted for a subject as SD. The teacher may be competent regarding the vocational aspects of the subject but not regarding education for sustainable development. For these reasons the information and the content proposed in the OER are informative for the teacher as well.
* Basic digital literacy is necessary for the students as well. They must be able to open links and navigate to their contents. They must also be able to copy content (pictures, texts, diagrams) insert them to a new file and eventually make some modifications. No specific previous skills concerning web quest is necessary. You can explain the work to be done in the classroom. The students/trainees just open the link of the web quest and they can even go through the Sections of the Web quest themselves. But the idea is not an individual search. The work is collaborative in the classroom so you can support groups on what to visit and how to have access to it. Besides, in a small group of students or trainees there are surely some who can assure the digital skills that the group needs in order to start or continue its work.
* The use of web quest with the distinctive process phases of the subject provides additional educational value combined with cooperative-teaching, aiming to moderate any differences between the students or the apprentices. Through this educational procedure it is expected to achieve feedback, support and evaluation of students.
* DO help your students/trainees to have access to the sources if a difficulty appears
* DO encourage the students to study and exchange ideas on the material
* DON’T comment on the material itself; don’t express your own ideas during group work of the students/trainees as if you were a member of the group. You are a facilitator. Put further questions when necessary in order to guide their inquiry.

Chapter 2 of element 2.2: **Lessons Learned while implementing, testing and evaluating the OER**

Here is a short presentation of the Sessions as they appear on *OpenWebQuest*

Session 1: Awareness on the subject, introduction/ Working in groups with Webquest on common sources: video and the article “Sustainable Use of Pharmaceuticals”/ discussion in plenary session

Session 2: Review of what has emerged during the previous phase/ working in groups with stimuli - sources per group/ discussion in plenary session.

Session 3: Composition-creation of a poster/ Evaluation/ Retrospection.

In element 2.1 you can already find some guidance about the optimum implementation of the 3 sessions. Some more suggestions are given here:

* A number (3 to 5) of sources to be visited in the 2nd session has been proposed already in chapter 1. It is up to the teacher to decide which sources and how many per group. The first implementation of the OER in Greece has shown that a great part of essential information has been provided already by the sources proposed in the first session. So students can go through new sources quite fast. On the other hand too many sources can lead to repetition of information.
* The number of students per group can be 3 or 4 or depending on the conditions and the age of the students/trainees it can be up to 5.
* In the 3rd session the teacher can alternatively propose the creation of a poster in digital form on a desktop PC while projecting it in a giant screen. This is not the preferable option though since the number of students to work collaboratively around a PC screen is limited. The first OER implementation has shown a very active 3rd session with all students around the cardboard discussing and helping to create little by little the poster. Besides, making a poster in digital form demands advanced digital skills which are neither part of the prerequisites nor part of the objectives of this Learning Unit.

**Evaluation**

The OER (Greek version) has been implemented in a class of an Institute of Vocational Training in mid-February 2018. There were some apparent positive effects on learners. The display of video and the web-browsing played a helpful role during the educational procedure in order to associate prior with new knowledge and they have promoted critical thinking regarding personal experiences. Furthermore, through this procedure some trainees contested their prior stereotypic perceptions.

In general the evaluation of the OER comprises answers by the trainees to the questions of the evaluation phase of the OER as well as an interview with the trainer who implemented the OER Some of the important themes of an OER evaluation, as stated in Jung et al. (2016), have been taken into account for these evaluations.

* You can find these evaluations through a link in the Conclusion Section of the English version of the web quest

Moreover, the web quest has been an object of practical exercise of students of ASPETE Patras. These students are future teachers (some of them are already in-service teachers) of various specializations, chiefly VET teachers. They have been invited in this practical exercise to go through the webquest and evaluate it from the point of view of a teacher who intends to use this OER in the class. We have kept the results of those students who had Health Care specializations. These results examined in parallel with the evaluations of the trainees and the trainer permitted us to produce some comments to the “Jung, Sasaki, Latchem” fitness-for-purpose evaluation grid[[1]](#footnote-1). This grid is organised in four dimensions: Purposes, Ease of Use by teachers and students, Content and Pedagogy.

You can read some of these comments which are characteristic regarding the three last of the aforementioned dimensions in the short text that follows. First is expressed the criterion and then –in italics- the comment:

**Ease of Use**

* The OER accords with open content licenses (e.g., Creative Commons) that have been properly

referenced and applied to the resources.

Comments …*OER could be remixed and shared to support interdisciplinary and intercultural teachings. The license used in the present OER production is the 4.0 International (CC BY NC SA 4.0).  Ιt is free to : 1) Share - copy and redistribute the material in any medium or format 2)  Adapt - remix, transform, and build upon the material (Creative commons, 2018).*

* The screen design and navigation systems are clear and consistent.

Comments ……… *According to trainees’ answers simplicity, accuracy and clarity of web material are declared very high. According to ASPETE students’ answers the navigation systems is clear. Screen design is also considered as appropriate. Some users suggested more accompanying images.*

* The presentation methods accord with the learner’s knowledge and abilities.

Comments ………… *According to the trainer: “...the content of the teaching is largely matched to the learner’s knowledge and abilities”*. *Trainees’ answers go-in general- to the same direction.*

**Content**

* The goals and content are easily understood.

Comments ……… *Trainees’ evaluation (crossword puzzle) shows that the content has been understood to a large extend.* *According to the trainer* *the teaching content is being developed from simple to complex. Finally, trainees declare Content appropriateness for expected goals.*

* The content is accurate and up to date.

Comments ……*SD issue is a subject that concerns modern societies and educational systems. The content relates to current problems. The video production is very recent (it is produced within the project)*. *There are positive answers of the trainees regarding completeness and sufficiency of content. (Diagrams 1 and 3)*

* The content is appropriate to the students’ knowledge, experience, language, ethnicity, race,

culture, religion age, gender or other circumstances.

Comments …………*The content of the teaching is largely matched to all the facts mentioned above. Regarding the criteria of nationality, race, culture and religion, as the trainer described, a negative reaction of a foreign student has been noticed. However, this reaction was blunted thanks to the help of the group and of the trainer.*

**Pedagogy**

* The OER provides opportunities for task analysis and solving hands-on, real-world problems.

Comments *Additional evidence is necessary to answer this.*

* The OER’s text, images, audio and video elements and hyperlinks provide diversity in learning.

Comments …… *It was quite stimulating for the trainees and it gave valuable feedback. It deals with a subject of general interest. Additionally the students who have evaluated the web-quest declared that it provides diversity in learning and awareness on the SD problem*.

* The instructional design focuses on the key aspects of the learning and lacks distracting features.

Comments ……………*It is clear regarding content and goals and it lacks distracting features but maybe to the extreme (some students who evaluated the web-quest would prefer it more attractive, for instance more images)*

* The OER enables the transfer of the new knowledge and skills to different tasks, problems or contexts.

Comments …………*It clearly provides important knowledge. We don’t have enough evidence regarding knowledge transfer.*

* The OER enables the students to consolidate their learning or construct personal meaning through reflection, discussion, demonstration of new knowledge or skills, etc.

Comments ………… *It supports cooperative and interactive learning, through sharing ideas, exchanging views and arguments, interacting with peers, and presenting their work to the classroom. Additionally according to the trainer: “through this procedure some apprentices contested their prior stereotypic perceptions”*

1. Jung, Sasaki, Latchem (2016), A framework for assessing fitness for purpose in open educational resources. International Journal of Technology in Higher Edication.Springer. [↑](#footnote-ref-1)