

FOSTER Course Template

Structure of eLearning courses for
FOSTER Project

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INTRODUCTION

This document is intended to provide to eLearning course creators some information, concepts and guidelines in order to develop an online course with the FOSTER Learning Module.

BASIC CONCEPTS

Considering the basic concepts to someone that is not aware of eLearning topics:

- E-Learning = 100% online
- B-learning (blended learning) = face-to-face + online
- Synchronous – all the people at the same time – chat, videoconference
- Asynchronous – not at the same time – forum, email
- An eLearning course may be proposed like this:
20 hours (3 online synchronous sessions + 7 asynchronous and 10 hours face-to-face)

ANDRAGOGY

Andragogical theory is based on four assumptions that define its unique position, as against pedagogy or traditional learning methods:

- The learner needs freedom to develop his/her own learning.
- The existing experiences of the learner are fundamental for understanding and new learning to take place effectively.
- The person needs to be ready to learn, as opposed to being motivated by fear or coercion.
- The orientation to learning is paramount: in other words, it is not subject-orientated but learner centred.

COURSE TYPES

- **Self-learning courses** – The trainee can attend individually, at any time, a course and is “alone” in the learning process. A general forum or a help contact must be provided.
- **Moderated courses** – The trainee is integrated on a group that attend the course at the same time. The trainer guide the trainees and has an active role.

RAPID LEARNING

- Concept of developing eLearning courses on a **practical perspective** (based on evident and practical needs of the trainees) with existing content or by adapting.
- Don't need a professional team but also don't have the same quality.

“Don't try to explain how a clock is made if the trainee just need to know what time is it!”

LEARNING OBJECTIVES

The learning process starts with the definition of the learning objectives (the needs that someone or an organization identified) to define the course structure and contents. To start defining a learning objective use these steps:

1. Start by: After completing the module, the trainee will be able to ...
2. Add an action verb
3. Add the actual product, process, or outcome
4. And optionally conditions

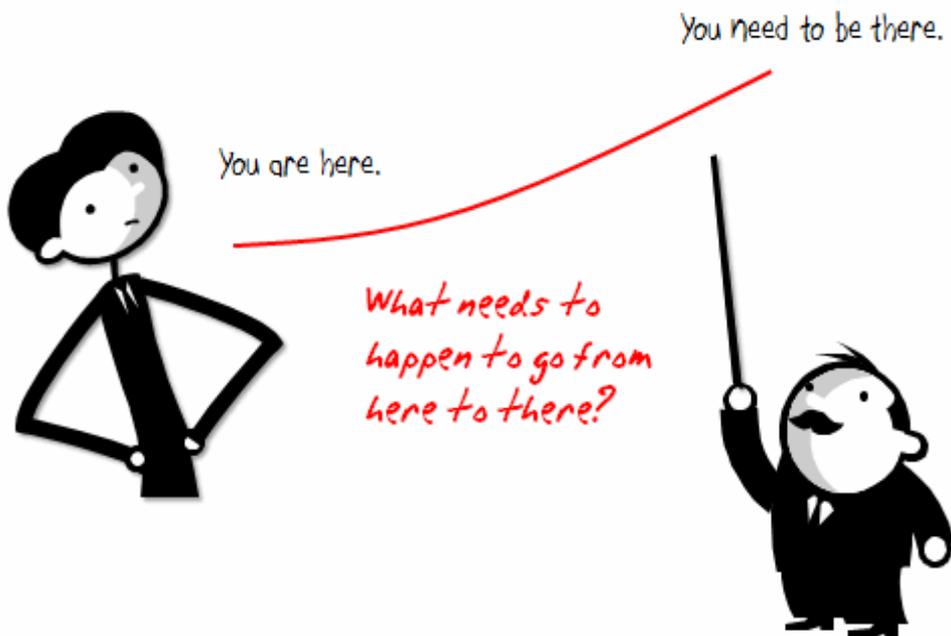


Figure 1 - Learning Objectives

Example:

The trainee will be able to...

deposit one* peer-reviewed publication ...

based on OpenAIRE guidelines in his institutional repository.

* Make measurable objectives!

On the FOSTER project, we provide a list of identified learning objectives that can be used on the courses:

https://www.fosteropenscience.eu/project/images/documents/D2.3_ContentandLearningObjectives.pdf

Considering the proposed learning objectives related to the topics, you can later define learning activities that support a specific learning objective. One activity may be used to consider several specific objectives.



Figure 2 - From topics to Learning Objectives and Learning Activities

GRANULARITY

When users decide to create a course, they must consider the granularity of the elements they will create or manage and also the consequences of the use. The following schema shows how an asset, like a text, image, video can be more or less reusable, depending on his granularity. So, less connections your learning object has, more reusable it is on different contexts.

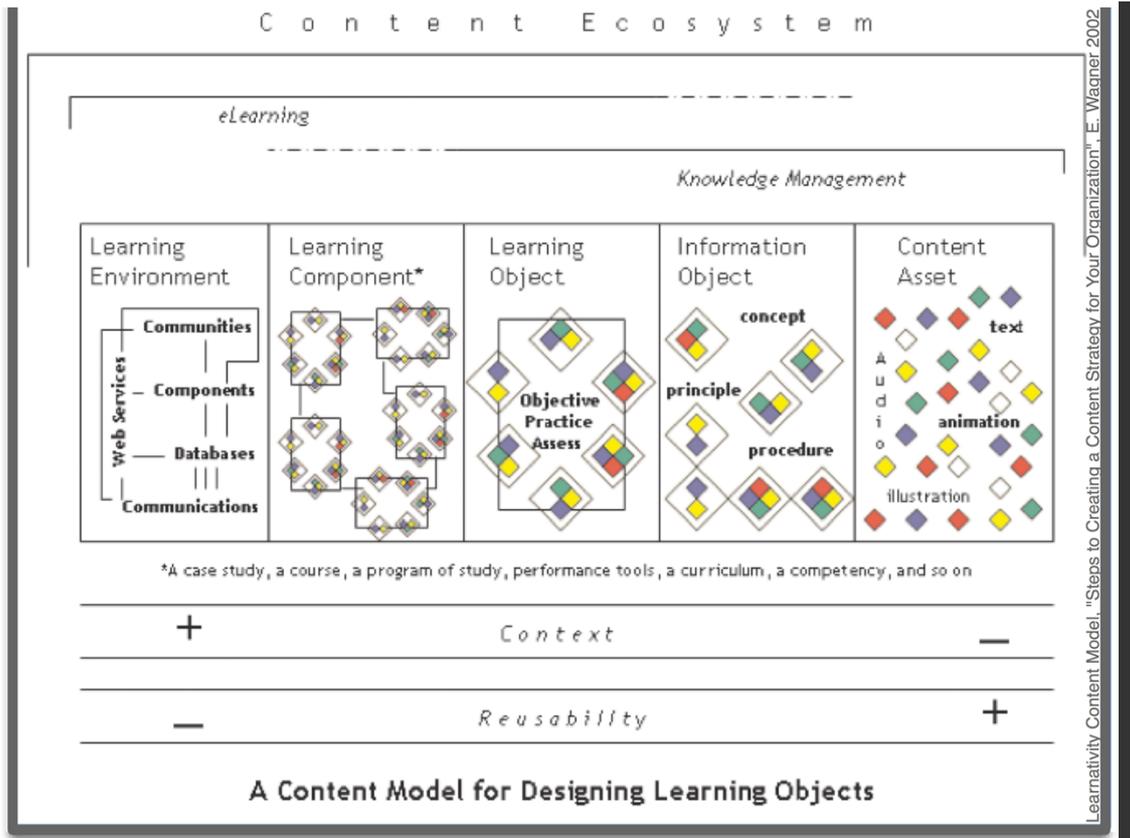


Figure 3 - Content Granularity

CONTENTS VS COMMUNICATION

Courses can have different levels of participation of the trainer but a basic rule must be considered to create a course:

More Communication = Less Contents

Less Communication = More Contents

More you communicate with the trainees, less content you need because the information is transmitted on the communication process. If you prepare a course to be a self-learning course, so you will need lot of contents to share the information.

AVAILABLE TOOLS & DOCUMENTS

For the course creation on the FOSTER project, course creators have the following tools available:

Tool	Description	URL
FOSTER	Content repository with	https://www.fosteropenscience.eu/

Content Portal	presentations, reports, videos, etc...	
FOSTER Learning Module	A functionality to create a eLearning course (for course creators). You must have an account and have permissions to create a course.	https://www.fosteropenscience.eu/
Other open educational repositories	There are lots of different Open Educational Repositories with contents that can be reusable in FOSTER Courses.	http://www.jorum.ac.uk/ http://www.merlot.org/ http://ocw.mit.edu/index.htm http://cnx.org/ https://www.oercommons.org/ http://www.open.edu/openlearn/ http://62.204.194.27/necobelac/indexing.jsp
Authoring tools	Tools that can be used to create short activities, modules or even courses.	http://exelearning.net/?lang=en http://www.courselab.com/ Directory of authoring tools: http://c4lpt.co.uk/directory-of-learning-performance-tools/instructional-tools/

Documents of the project to support the creation of the courses:

[D2.3 Content and Learning Objectives for target groups in Task 2.1-2.4 delivered to WP3-4](#)

[D4.2 Toolkit for Training](#)

CONTENTS

On the FOSTER context, we propose the use of the contents of the Portal, so consider the following:

- Select appropriate contents
- Adapt and upload a new version if needed
- Use contents for the web (preferable HTML format)
- Build your own with authoring tools
- A presentation without context / narrative can be insufficient.
- Consider also the size of contents and the use of it on different devices (smartphones; tablets).
- Use the FOSTER Content Portal as a learning object repository with open licences!

LEARNING APPROACH

Considering the FOSTER Project context, we suggest:

- Modules based on (**practical**) tasks of 30 minutes
- Combine practical exercises with **short** readings
- Use **short** quizzes to self-evaluation in each lesson
- Combine different media (videos; infographics; texts;...)
- Use different types of activities
- Make a bridge between the course and the real world of the trainee

We should develop and schedule activities with the contents of the FOSTER Portal

Example:

- Activity
 - Reading is an activity
- Contents
 - The text is a content

When describing activities, include deadlines (based on the course schedule)

MANAGE A COURSE

When managing an existing course, the trainer should consider the following:

Timing

A course must have a schedule defined in hours and days. Consider a value of 30 to 60 minutes maximum of work per day, depending on the engagement you define. Also, a self-learning course has less time per day than a moderated course.

Moderation Levels

The moderation levels depends on the design of the course, but the trainer can be just a supervisor or moderator, or be active and interact with all trainees every day.

Track

Define a way to check the evolution of the group or individuals learners by tracking the evolution. It's possible to do it on the FOSTER Learning Module.

EVALUATION

One of the most important part of all learning activities is the evaluation of the learning process for each trainee. Course creators should consider these different types of evaluation:

Diagnostic Evaluation

- Is done at the beginning of the course to define the learning path

Continuous Evaluation

- The evaluation done during the course

Final Evaluation

- At the end of the learning process
- Will provide a certification (formal or informal)

The course and the trainer should also be evaluated in order to promote the continuous improvement of the courses.

PARTS OF THE COURSE

The FOSTER Portal is organized in several components that can be used to organize and develop the e-Learning courses.

Forum

The forum is the element that must be used to an asynchronous communication between the trainer and the trainees and between the trainees. Other ways to communicate, mainly synchronously, can be used in association with external tools (Skype, Hangouts,...). (more at <https://www.fosteropenscience.eu/node/495>).

Lessons

A lesson is the unit that divides the course. A course can have several lessons, and each lesson can have several resources. (more at <https://www.fosteropenscience.eu/node/473>).

Contents

The contents are the uploaded materials on the Portal that are available by searching / autocomplete. You can add several contents to one lesson.

Quiz

The quiz is the tool provided to support the assessment and self-assessment of the trainees. It supports different types of questions and can be used in different moments of evaluation. (more at <https://www.fosteropenscience.eu/node/474>).

Certificate / Badges

After completing the course, each trainee can download the certificate associated with the course.

More on the use of the Learning Module components can be seen on the “Course about Course Creation”: <https://www.fosteropenscience.eu/content/foster-course-course-creation>

COURSE TEMPLATE

To create a course, the course creator should be able to fill in the following information:

- Title
- Objectives
- Audience
- Contents
- Provider
- Duration
- Language
- Documents / Materials
- Programme / Structure of the Course
- Evaluation

[Use the Course template document]

STRUCTURE OF THE COURSE

Usually, the general overview of a course can be something similar with this 3 different parts:

- **Introduction / Context**
 - Where we define the context, pre-requisites, objectives and other information (like administrative info)
- **Modules / Sessions / Topics / Lessons**
 - There are different ways of organizing a course (with modules, sessions, topics, lessons, tasks,...) Each one must have at least one learning objective. Depends also on the learning approach, like project based learning, task based learning,...
- **Final Evaluation**
 - A way to check if the trainee reach the objectives of the course.

Looking at the FOSTER Context, we suggest the following contents to be considered on the courses:

- Course presentation
- Pre-requisites
- Objectives
- Contents
 - Lesson 1
 - Lesson 2
 - Lesson X (...)
- Evaluation
- Certification

PLAN THE COURSE CREATION (PROGRAMME / STRUCTURE OF THE COURSE)

With the following structure, the course creators can plan sequentially the course by providing and linking learning objectives with contents, duration of the activities and types of modules to be used on the Portal:

General Objective	Specific Objective	Activity	Content	Learning Module*	Duration	Note
Example: Distinguish options for Open Access	Compare Cost/Benefits of Gold and Green Routes	Visualization of a video	Video: https://www.fosteropenscience.eu/content/coar-training-materials-go-open-access-v-green-road-open-access	Content	15 min.	

* The learning module options are: Forum; Lesson; Content; Quiz; Certificate

Other topics ??