Erasmus+ Capacity Building in Higher Education

T@SK project

Towards increased awareness, responsibility and shared quality in social work

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Brief guidelines for the transformation of rough material into online contents

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Editors

Sergio D'Antonio Maceiras (UCM)

Andoni Alonso Puelles (UCM)

David Alonso González (UCM)

Giorgia Bulli (UNIFI)

Indrit Shkupi (Elbasan Univ.)

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Foreword

This guidelines covers the instructions for the transformation of rough materials into online contents in two different aspects of the teaching and researching.

First, it summarizes the aspects of uploading information to the Moodle LMS deployed within the context of the project. In this sense, for more in-depth information regarding the technical and professional aspects of uploading and transforming materials we recommend taking into account the WP 1.3.3 of this project, where the aspects of teaching, and technical Moodle guidelines are developed.

The second part of this guideline starts with the description of a repository, their different types, and different aspects to be taken into account, contents already present in the first version of these guidelines.

Finally, an example regarding how to upload information is provided. In this case, into a well-known european repository, Zenodo, that can be useful for uploading a wide range of materials and provide professionals options for visibilize their intellectual products and materials.

Moodle

First recommendations

It is highly recommended that before translating rough material into online contents teachers have a clear idea of what kind of material they are producing, and for what purpose. If they are going to be internal material for students, any kind of material also suitable for the general public, and/or the size of the files.

PDF's format is very versatile and usually very useful in most cases. But, for example, when uploading material for students in Moodle, if the information is a short piece of material or is some formal information regarding the course (i.e.: office hours, optional bibliography, etc.) is more adequate to create a "Page", using Moodle own resources, or a wiki so the teacher can control comments, changes and so on.

Finally, due to the network constraints that go beyond the reach of the T@SK project, it is highly recommended to avoid uploading big files like videos, audio conferencing and the like. As an alternative, this kind of materials can be uploaded, depending on the case, to: YouTube, Vimeo, etc. or to some third party company like Google Drive, Sharepoint/OneDrive, etc.

In case the institution don't have agreements with this third party companies, a suggested service that respects privacy and provides a significant amount of files is mega.nz[1]

Uploading in Moodle

Use Drag and Drop to Move Items within Your Course

If Javascript is enabled in your browser, you can drag-and-drop items within the Moodle course page.

[1] UCM, or any other partner of the consortium has any relationship with this provider. We suggest it as an example and as a recommendation.

- On your course page, click **Turn editing on** (pencil icon, top right). Editing icons will appear.

- **To move Activities or Resources:**
  Click and drag the **Move** icon at the left of the item link. As you drag, Moodle will dim the items under the item you are dragging. Release the mouse to drop the item into a new location. If you are using the *Collapsed topics* format, open the closed section, by clicking on the **Section name** to move an item into the Section.

Resources

A *Resource* is an item that a teacher can use to support learning, such as a file or web link. Each resource appears as a link preceded by an icon that represents the resource type (*File, Folder, Page, URL*, etc.). Most resources allow settings such as conditions for viewing, or display properties. They can be moved, hidden, and edited by a Teacher or Course Designer, but only viewed/downloaded by students.

- **File:** Post a file for your students to download. A *File* can be a text document, a spreadsheet, an audio file, video file, etc.

- **Folder:**
  To save space on your Moodle course page, you can put multiple files in a *Folder*.

- **Page:**
  Students see a single, scrollable page that an teach creates with the robust HTML editor.

- **URL:**
  Send your students to any location they can reach on their Web browser.

Course template example

Within the scope of the project, teachers have a template course with explained examples which you can download and use inside your institutional LMS following the steps explained in the Moodle guidelines. The link to the course template is: https://doi.org/10.5281/zenodo.4277337

Repositories

Introduction

An Electronic Repository (ER) is a system to upload various kinds of electronic resources ranging from text files, audio, video, databases and alike. In short, everything that can be translated into digital format can be properly stored and retrieved in an ER with their metadata. ER would work as the digital backbone for an institution, individual, association or NGOs[2]. In this dimension, ER are the electronic version of an archive; a "warehouse" where all kinds of different digital materials can be stored.

What is an ER for?

ERs are intended mainly for academic works. It can store PH.D. Dissertations, thesis, papers, articles, pre-prints (for future publications), presentations (Power Point), teaching materials, journals, online courses (such as Moodle) and alike. That material should be easily stored, retrieved, modified and distributed. Being so that provides the community with a powerful tool to feed with new insights, ideas and, at the same time, gives visibility and outreach for other similar institutions and organizations. So being intended and oriented for HEI is also a powerful tool for storing and sharing all sorts of contents from a professional perspective. For example, It can be also used for storing NGOs reports, documents and data. This will give these institutions not only more visibility but also a common space to store their professional production.

[2] For more information see: http://www.rsp.ac.uk

In this sense, online repositories are different from the common academic social networks like ResearchGate, Academia, etc.. Mainly because a repository is not a social media platform, but they are not incompatible.

Also repositories are differs with scientific journals in hegemonic kind of contents (repositories can store a wider range of materials like audio, video, software, datasets, etc.), the contents are not always peer-reviewed. Actually, repositories are the best suitable software to include rough materials that support papers sent to scientific journals, as we are going to show with the example below with Zenodo.

Advantages to use an ER

All major Higher Education Institutions use ER. The total amount of items stored may give a fair idea of how each institution is working, expanding and interacting with society. Also having an ER is neither expensive nor technologically complex. Institutions have at their disposal a reasonable autonomy to build quite different models adapted to their needs. Also managing an ER could be expanded into an Electronic Library management for physical books as an extension of the system. Combining both can solve other questions concerning information management.

How to create an ER

There are three possibilities in order to create an ER: autonomous based ER (in owned) that can be either Do It Yourself Approach (**DIY**), Standard Software Packages (**SSP**) or hosted services (**HS**).

- **DIY** has the advantage of total control for the system. It is easier to reconfigure, meet specific needs and upgrading. On the other hand, DIY requires a high degree of technical expertise and involvement. According to our first survey in Albania, this option seems the most unlikely because there is no appropriate infrastructure. In the first version of this guidelines this point was a goal, at the end of the project two among three of the albanian partners had e-prints installed in their in-house servers.

- **SSP** are handy solutions. They require less expertise, are easier to implement and can be upgraded easily and in short times. SSP lacks control and repositories have to adapt to its features and not the way around.
- **HS** involves a low technological expertise, upgrading occurs according to the provider, is faster to implement and requires minimum maintenance (since providers take care about). However, there are two handicaps: pricing and control. Good ER providers are expensive (about 2000$ per year) and control falls into the provider. In that sense it depends on our financial resources to get this option. Anyway it is interesting to explore the possibility to install a preconfigured package considering costs, resources and available expertise.

  One limited free option in this category is Zenodo. In this platform is possible to include *some* of the materials, precisely those related with research and research outputs, but is not suitable to upload other kind of institutional contents (Bachelor Degree thesis, Master Thesis, PhD thesis, and alike)

Following this choice those are the questions to consider:

Hardware

Having an ER does not take a large investment in hardware equipment. There are two possible solutions: a) having a dedicated server or b) assigning some space inside the ICT general system that provides each university with digital services. If possible, option B would be more interesting because it will require some technical collaboration from the staff in charge of ICT.

Software

If we go for SSP there are different software solutions[3] but clearly and according to European Standards free and open source software should lead our choices. Also free and open software and knowledge are key aspects of UCM and T@SK project's philosophy to create a sustainable environment to develop Albanian ICT infrastructures, both in technical and scientific capacities. Among different possibilities ePRINTs[4] seems the most suitable candidate.

Timing

There are three different steps on running an ER: implementation, maintenance and upgrading. First step requires technical skills and intensive time consuming period although for a quite short period. Maintenance requires to include items, update the system and avoid breakdowns for the system. First question can be addressed directly for no technical individuals: Professors, administrative staff and students may take care of that. Keeping the system working and updated at a reliable pace requires a minimum effort from technical staff. Upgrading and improving the ER could be achieved in an escalated way. It takes both technical and academic decisions in medium and long term.

Design and usability

Organizing the ER depends on what criteria each institution wants to implement. Being Social Work a Social Science discipline there should be journals, online courses, powerpoint presentations, recorded conferences or seminars, enquires and statistics, reports made by academic people, reports from civil society organizations (NGOs), associated partners, etc.. To organize properly those items, metadata and standards are of extreme importance. For instance, documents should be in PDF and video streaming using VLC compatible standards and such. Also it is necessary to design how to classify documents

[3] http://wiki.lib.sun.ac.za/index.php?title=List_of_Repository_Software
[4] http://www.eprints.org/uk/

–metadata- under standards such as author, title, place, kind of work (paper, seminar, enquiry, dissertation, thesis…), journal, etc. Metadata would be used to feed a search engine. For this reason it is crucial to have a reliable standard and quality in order to guarantee usability. Since Albanian Social Work is relatively a small community other institutions and organizations may take part on that ER to improve visibility and the relationships among academia, NGOs and other organizations.

Legal questions

Since this repository should be open to scholar communities it must comply with legal rules about copyright, authorship and other issues. Free access and open content must prevail on those standards either using available licenses such as Creative Commons or similar.

Uploading contents to a repository: an example using Zenodo

According to their website, Zenodo "is derived from Zenodotus, the first librarian of the Ancient Library of Alexandria and father of the first recorded use of metadata, a landmark in library history"[5]. Part of the OpenAire Consortium and the CERN, is an online repository supporting strongly Open Access and giving a high quality service.

It is not the only one, but is one supported and used by the EU. So is a good practice that, not having an institutional repository, upload rough research contents to this repository. Following is a step-by-step guide on how to upload a resource. Also, Zenodo is

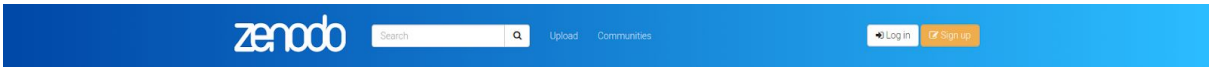
- **Safe** — your research is stored safely for the future in CERN's Data Centre for as long as CERN exists.
- **Trusted** — built and operated by CERN and OpenAIRE to ensure that everyone can join in Open Science.

[5] https://about.zenodo.org/

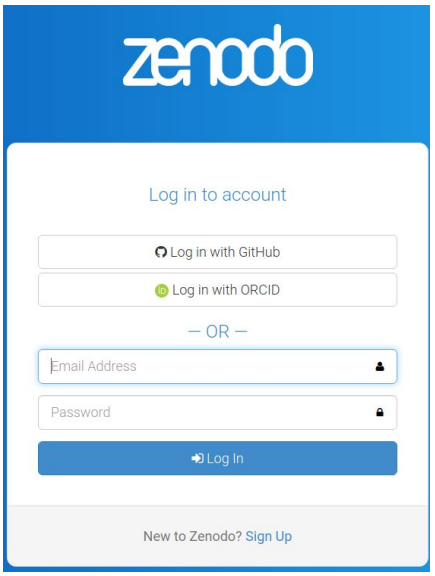
- **Citable** — every upload is assigned a Digital Object Identifier (DOI), to make them citable and trackable.
- **No waiting time** — Uploads are made available online as soon as you hit publish, and your DOI is registered within seconds.
- **Open or closed** — Share e.g. anonymized clinical trial data with only medical professionals via our restricted access mode.
- **Versioning** — Easily update your dataset with our versioning feature.
- **GitHub integration** — Easily preserve your GitHub repository in Zenodo.
- **Usage statistics** — All uploads display standards compliant usage statistics[6]

Step-by-step guide

1) Go to the URL: https://zenodo.org/
   In the upper part of the page you can register/log in.
   It is recommended that use the ORCID account and integrate both services to increase the profiles visibility

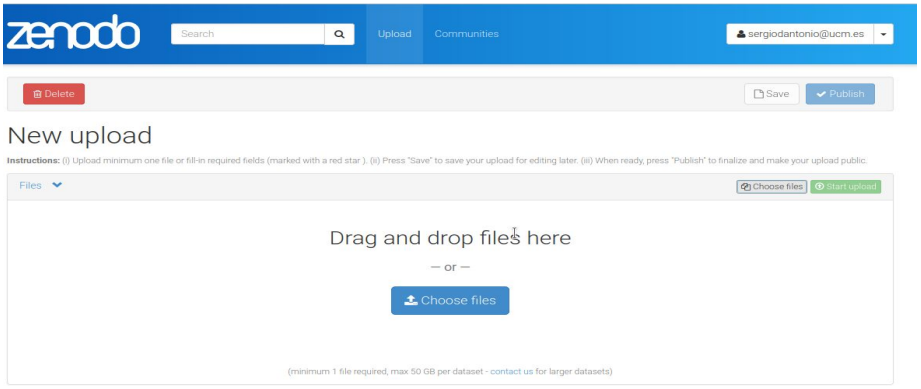


2) The log-in / register screen will show up



[6] https://zenodo.org/

3) Once you log-in into the system, also in the upper side of the page, click in the “Upload” button and the “New Upload” page will show up.



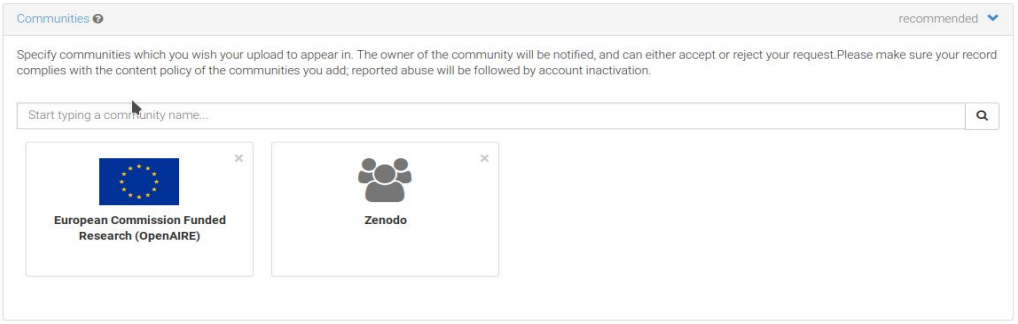
a) Here we can *drag and drop* the files or select them with the “Choose file” button.

b) Is important that, once uploaded the material/resource, click on the “start upload” button, to load the file/s into the platform.

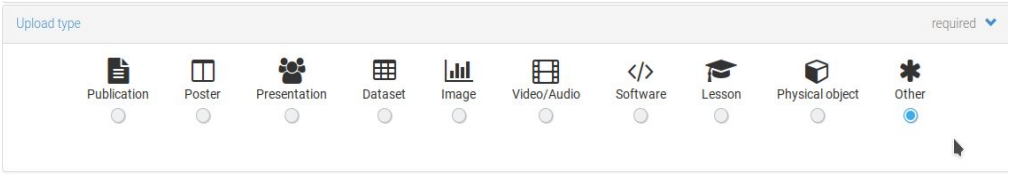
4) In the next screenshots and steps, information and metadata about the uploaded resources are required. It’s very important to fulfill these steps accordingly because this metadata is what is going to be registered and presented on the web. From now, we use the Moodle template course as a concrete example.

a) The first part is related to research **communities**. The platform provides a text field with auto search and autocomplete functions. In this case, as the material is founded by the EACEA, the content is included in the “European Commission Funded Research (OpenAire)” as well as in the default “Zenodo” community. This is helpful to increase and improve the visibility of our materials through the web.

IMPORTANT: Please note that in the upper right part of the box you’ll find that this field is not “required”, but “recommended”. Take a look at the next steps because not all fields are required.



b) The next box refers to the type of material that is being uploaded. Is a **required** field. In this case, as is a Moodle course, the correct type is "Other".

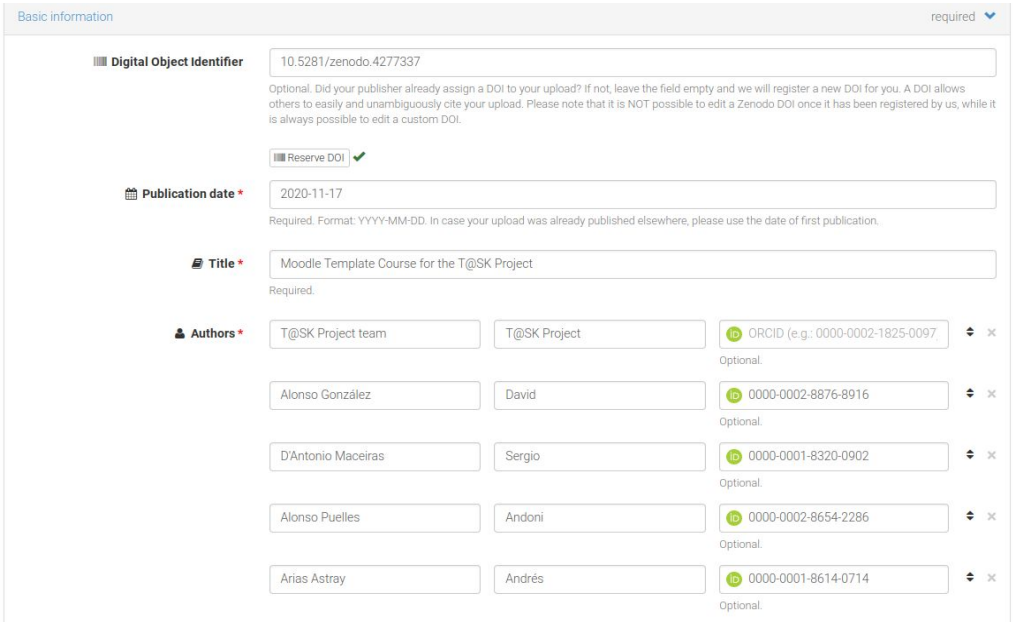


c) This third box is about the *basic information* and includes both **required** and **optional** fields.

   i) First, the **Digital Object Identifier (DOI):** is **optional.** If you already have one because the publisher gave it, it is the place to put it. In any other case there is the possibility to Reserve a DOI number that Zenodo will provide.

   ii) The second is the **Publication date** and it is a **required** field. If the material is not published, the actual date is adequate.

   iii) The **Title** and **authors** are also **required** and obvious fields. Here, it is highly recommended that authors include the ORCID number to increase visibility and quality of the metadata.

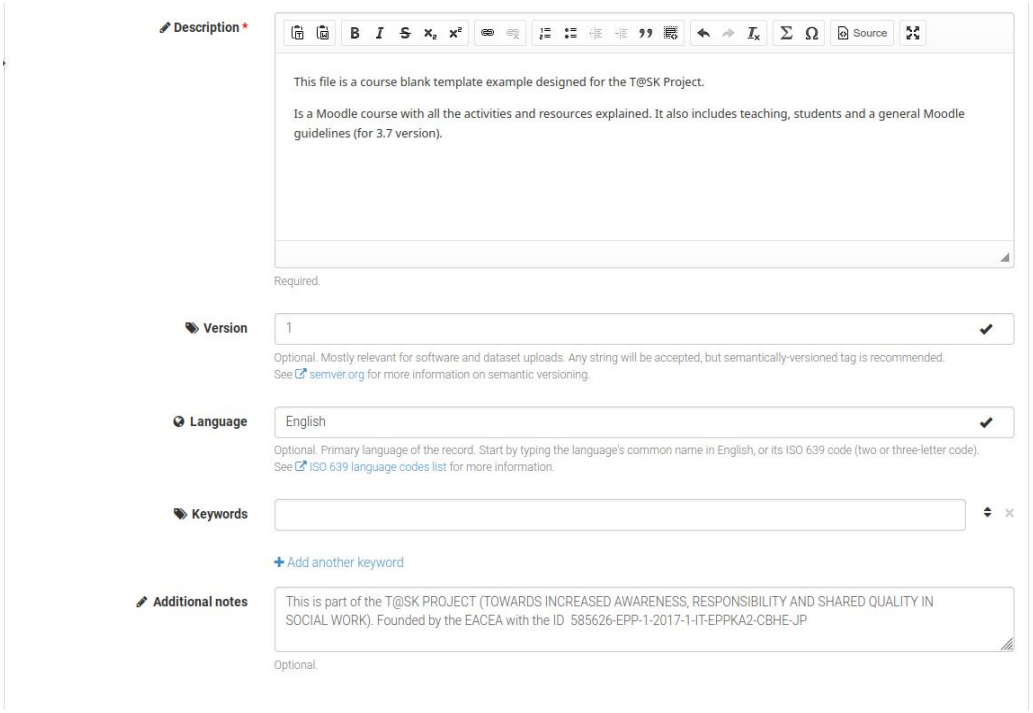


iv) The **Description** field, apart from **required**, is very important for the visibility and comprehension of the materials, as the last figure will show.

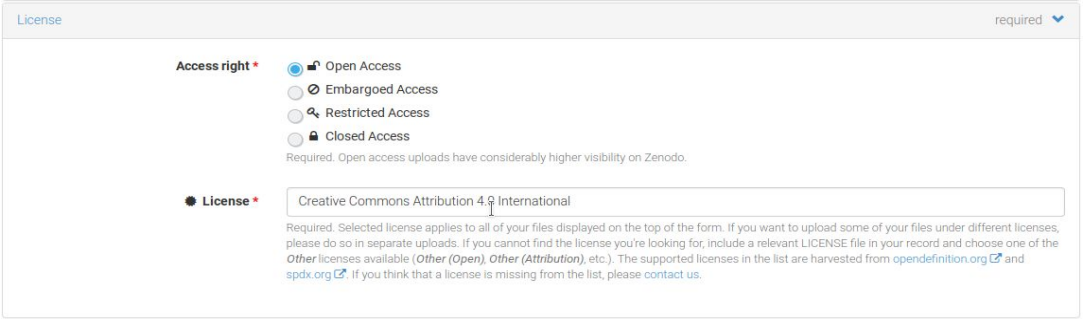
v) The **version** number, is **optional** an mainly is to maintain traceability

vi) **Language** and **keywords** are also optional, and works in the same way as scientific journals.

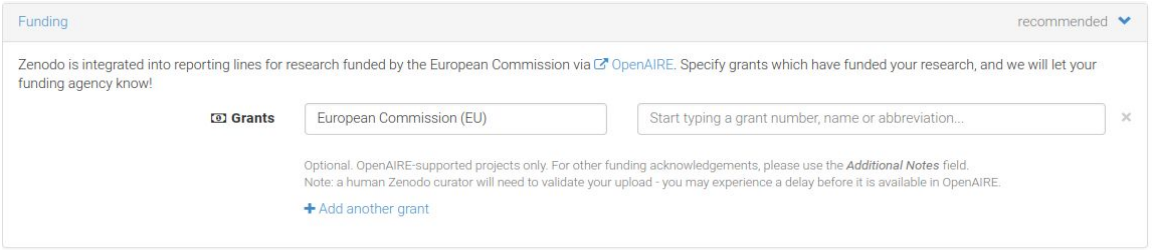
vii) Finally, the **Additional notes**, being **optional**, offers a proper space to include the kind of information that is not directly related to the material in the sense of the production. In this case, for example, the context in which this materials has been produced: the T@SK project



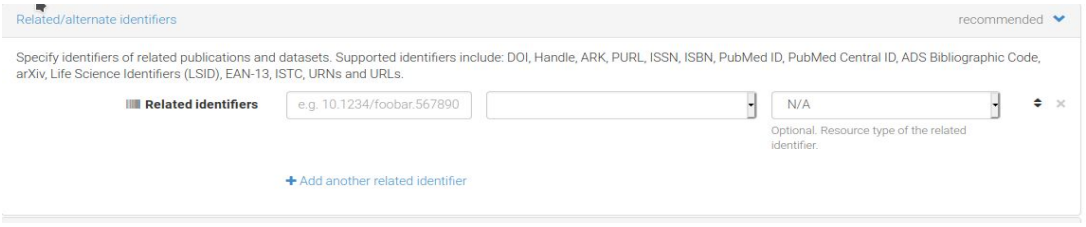
d) The **Licence** box gives us the opportunity to select the type of Access and the concrete licence of the material. As this field can be edited, sometimes it is a good idea to upload this materials, and put them in Closed Access mode, until the main publication (i.e. a paper in a scientific journal) is published. In this case, as a teaching material and founded by the EACEA, it is Open Access.



e) The Founding box is also **optional** for Zenodo, but in most cases is mandatory from the founders perspective. At the moment of writing this guide, it was not possible to include the T@SK project as it is not listed in the OpenAire initiative. Nevertheless, as it is explained, for these cases the Aditional notes is the correct field to include that information.



f) The **Related identifiers** refers to and gives the possibility to link at the metadata level different materials belonging to the same research.

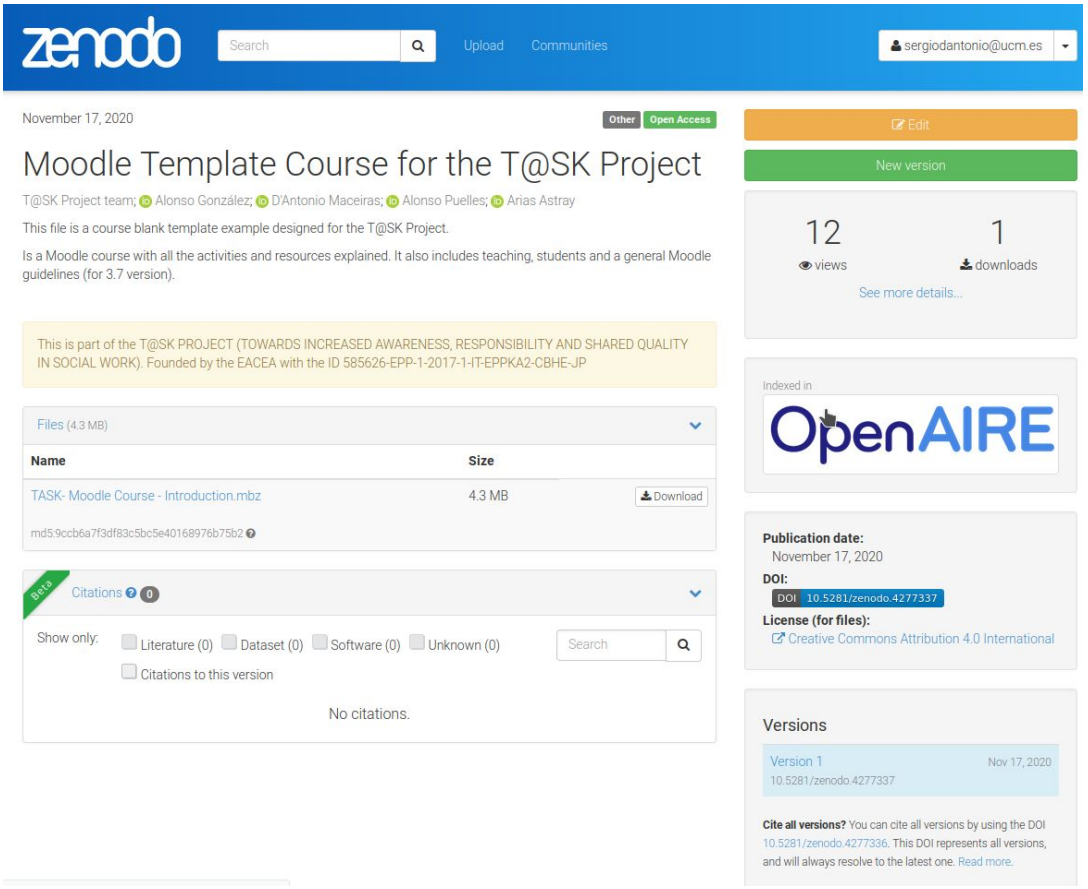


g) The **Contributors** field allows the option to include contributors to the material that are not **authors.**

h) Finally, if the material includes **References**, is a good practice to include them here to increase the visibility of the material and the quality of the metadata.

After saving and publishing the resource, a new DOI and URL is generated with all the information. The next screenshot shows the result that is available at:

- https://zenodo.org/record/4277337
- https://doi.org/10.5281/zenodo.4277337



Now we not only have this rough material transformed into a digital online content that can be shared and referenced elsewhere. Also, the good inclusion of metadata will help to improve and boost the visibility of the materials.

Credits and acknowledgements

- Moodle Docs (https://docs.moodle.org)
- OBS Studio Master Class 2017 by EposVox (https://eposvox.com/)
- Zenodo (https://zenodo.org/)
- Practical considerations for making video-lessons: CC-Attribution - NonCommercial - ShareAlike - No additional restrictions explicitly
  Original Spanish text at:
  https://www.ucm.es/docenciaenlinea/file/pautas-para-realizar-videolecciones-de-forma-rentable-1

Acronyms

ER: Electronic Repository

HEI: Higher Education Institutions

ICT: Information and Communication Technologies

LMS: Learning Management System

OJS: Open Journal System

SW: Social Work