Transformative Digital Pedagogies for Higher Education (TDP4HE)

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Project sustainability plan

University of Technology of Troyes

Technology Management Plan

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Contents

1. Introduction

The Technology Management Plan deals with all the issues related to WP5 (Technical infrastructure for publishing the project results and management of the TDP4HE Open Community of Practice). This technical infrastructure must ensure the availability, accessibility, updating and maintenance of the tools, resources and content developed in the project, such as the TDP4HE self-assessment theoretical framework e-tool (WP2), the open-source learning management system used for the implementation of the training programme (WP3), the digital trainer's guide (WP3), the e-Toolkit and OER/OEP for transformative digital pedagogies (WP4) and the TDP4HE Open Community of Practice platform (WP5) that connects academic teaching staff from different EU institutions.

The Technology Manager (TM) of the project is Juan Ángel Pastor Franco (UPCT) who, as such, overviews and ensures the development and technical quality of the artifacts described in this Plan.

This plan is organised as follows:

- Section 2 gives a bird sight of the elements that constitute the technical infrastructure, as well as their corresponding aims.
- Section 3 describes leadership and participation in WP5
- Section 4 summarise Quality Management in adherence to the TDP4HE Quality Plan.

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2. Technical Infrastructure.

The main elements of the technical infrastructure are the following (Figure 1):

− **The project's website**, which give access to all relevant information about the project (i.e., project's framework, events, training programme, trainer's guide, e-Toolkit), as well as to the rest of the project resources.
− **The TDP4HE self-assessment theoretical framework** e-Tool developed in WP2.
− **The virtual learning platform** for the development of the training programme developed in WP3. This platform consists in turn of two elements:
    o **A Learning Management System** (LMS) (I.e.: Moodle).
    o **A Virtual Space** for hosting the Open Educational Resources (OERs) and supporting the Open Educational Practices (OEPs) that are developed and defined in the project.
− **The TDP4HE open community of practice platform** aimed at supporting and advising academic teaching staff in how to incorporate transformative digital pedagogies into their practices.
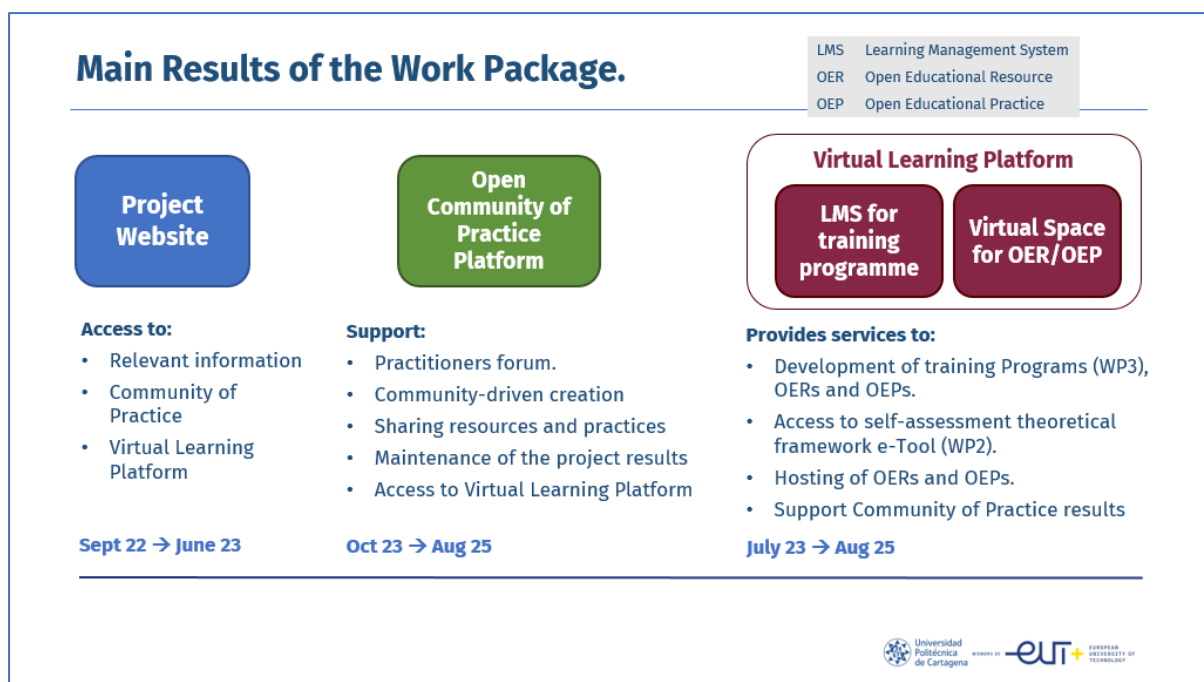

Figure 1: Elements of the Technical Infrastructure.

The project Website.

The project website is the first and main access to the project, so it is important that:

- It connects TPDH4E mission and objectives with the web design, links and services.
- It delivers the proper messages and triggers the appropriate actions.
- It must be consistent with the intended brand (logo, colors, fonts, layout, overall design, etc.).

There is no technical risk in the development of the website. The web page can start with a rather minimalist approach and then grow as project progresses. Commercial tools like WordPress (or the like) can be used for its development, so they provide the means to achieve the intended user experience. Difficulties are mainly related to the very mission of this part of the technical infrastructure (connecting mission and objectives with services, trigger the intended actions and brand consistency).

The overall design of the web page should ease the accessibility of the rest of the parts of the technical infrastructure as well as the elements hosted by them. Main projrect information, links to partners, to community of practise and to virtual learning platform should be easily identifiable and navigation should be reduced to the minimum necessary. For this reasons, the flat and simple design shown in figure 2 is proposed.
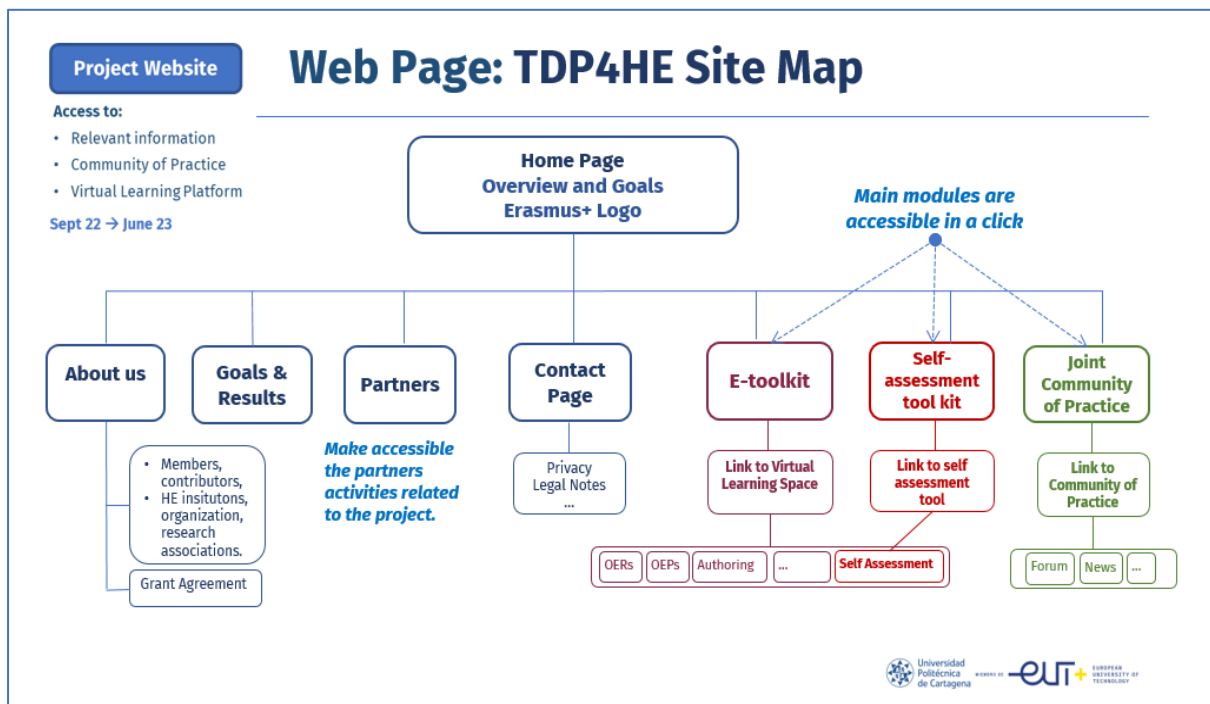

Figure 2: TDP4HE Site Map.

Project website will be developed by UTT aided by UPCT.

The TDP4HE open community of practice platform

This platform is aimed at supporting and advising academic teaching staff in how to incorporate transformative digital pedagogies into their practices. This platform is expected to encourage teaching academic staff to remain active in searching and implementing innovative student-centred pedagogies. The platform will primarily target higher education teaching staff to join and link with each other, but it will also welcome any other stakeholder such as researchers or policy makers. This platform will also contain forum spaces for discussion among teaching academic staff.

Different options have been considered for the development of this platform, including own development and a minimalist approach based on platforms such as Telegram. Both have been ruled out. Own development is too risky, and a minimalist approach does not fit the intended ambition of the platform. Finally, Mahara has been chosen as the supporting platform for the community of practise, for the following reasons:

- Provides CMS functionality.
- Programmer skills are not required.
- Free software that is part of the Moodle sphere with ease of creating portfolio pages.
- It is independent of the LMS, so both can be developed separately and then be integrated by means of mutual links.
- Mahara offers an easier interface than Moodle for sharing and presenting resources.
- License free.
- Open to guests - Some pages are accessible like a website and some pages are restricted like Moodle. Users need to be registered.
- When the community of practice users want to enter the LMS, all they must do is to log in. It will be necessary to authenticate in both systems.

Community of Platform will be presented by UTT and further evaluated.

The Virtual Learning Platform

The virtual learning platform will be developed on the top of an existing tool, developed as part of a previous European Project: UPCT Indie.

UPCT Indie combines the three required elements for the intended virtual learning platform: a Learning management system (fully interoperable with Moodle), a repository to store and manage the content and resources developed in the project and an authoring tool to prepare training materials. Among the features of this platform is worth mentioning the following:

- Virtual space for the newly developed TDP4HE OER and OEP as well as to host OER/OEP developed by teaching academic staff, including self-assessment tool.
- Provides an authoring tool to help teachers become authors of enriched digital learning units (figure 3).
- It includes learning analytics (figure 3).
- Moodle is not necessary. Requested KPIs can be gotten form Indie.
- Every OER/OEP developed with Indie can be exported as SCORM or as Web Object to be used in any other e-learning platform or web server.
- It is possible to get access to all resources from Community of Practice Platform by means of URLs associated to OERs and OEPs.

- Training is available for both content consumers and content producers (Indie OERs).
- Indie accounts for project members can be created immediately (username, e-mail, organization, that's all needed). Training materials are available for registered users.
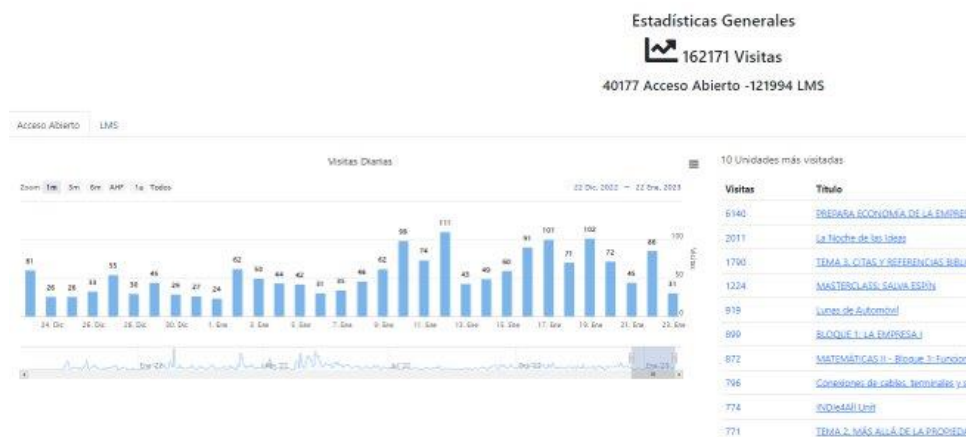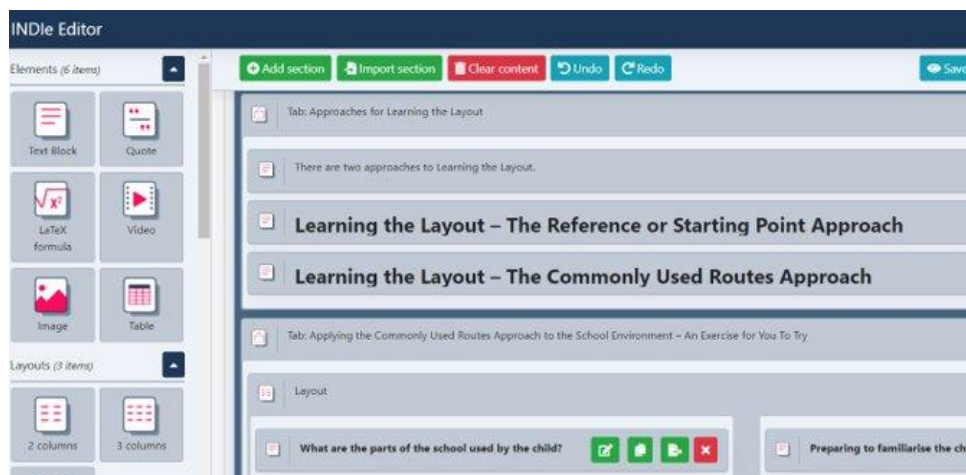- It is already ready to use.

Figure 3: Indie Authoring Tool and Analytics excerpts.

Virtual Learning Platform will be set up and maintained by UPCT.

3. Leadership and participation in WP5

		Leading organisation	Participating organisations
WP5	**Technical infrastructure for publishing the project results and management of the TDP4HE Open Community of Practice**	**UTT/UPCT**	
A5.1	Developing the project's website	UTT	UPCT
A5.2	Setting up the virtual platform for the training programme	UPCT	CUT
A5.3	User support workshops for the training programme facilitators	UPCT	
A5.4	Setting up software management tools to support TDP4HE open community of practice platform	UTT	UPCT
A5.5	Maintaining and updating the technical infrastructure	UTT	UPCT

4. Quality Management

Technological Management Plan adheres to the lines defined in the TDP4HE Quality Management Plan for Work Package 5.

Key Performance Indicators

Project's objectives	Key Performance Indicators (KPI)	KPI Description
Obj. 4: To exchange and spread good and innovative teaching practices in HE across Europe	**KPI10**	The number of active contributors at the TDP4HE Community of Practice platform is 40.
	KPI11	Feedback received in terms of the functionality of the TDP4HE Community of Practice platform is positive.

These KPIs can be further refined during the project and new KPIs can be added if necessary.

Timeline and Milestones.

Milestone	Description	Month	WPs
MS4	The consortium has the pertinent theory, methods, and tools, prepared for the implementation of the training programme	M19	WP2, WP3, **WP5**
MS7	Feedback from users of Virtual space for OER and OEP, as well as for the Community of Practice platform, was collected and available to improve both project's results (M25).	M25	WP4, **WP5**
MS9	Virtual space for OER and OEP, and Open Community of Practice platform are updated based on users' feedback from E3.	M34	WP4, **WP5**

- A first version of the Web page must be available as of June 2023
- A first version of the Virtual Learning Platform should be available as of July 2023
- A first version of the Community of Practice Platform should be available as of October 2023

Risk management.

Risks	Mitigation actions
Internal Risks	
Technical level	Technical risks will be managed by adjusting the available resources provided by the two leading organisations for the technical infrastructure (UTT and UPCT)
External Risks	
Low number of users of the framework e-tool	To avoid low number of users of the framework e-tool an easy-use tool design will be adopted. The tool will be promoted at the project's events, in the training programme and on social media.
Low number of participants enrolled for the academic staff training programme	The consortium will promote the training programme to the right target audiences. The seminars and workshops will take place online with the contribution of all partners and if at one organisation the enrolment is low, it can be compensated by the other organisations.
Low number of users of the Community of Practice	A simple platform with key functions easily integrated in the current practices will be used. The platform will be promoted at the events, on social media, highlighting the key benefits.