

Open European Languages and Cultures Network

IO6 - Development of the OPENLang E-PLATFORM Final Report

December 2021



Grant Agreement 2018-1-EL01-KA203-047967





Authors: Dr. Alex Mikroyannidis (OU, UK), Dr. Maria Perifanou (UOM, GR) Prof. Anastasios A. Economides (UOM, GR) & Dr. Katerina Tzafilkou (UOM, GR).

Project Consortium:

The University of Macedonia, GR



The Open University, UK



The Cyprus University of Technology, C



Contact Information

Website: https://www.openlangnet.eu/

E-mail: mariaperif@gmail.com, panayiotis.kosmas@cut.ac.cy



and the Commission cannot be held responsi-



This licensed under a Creative Commons Attribution-NonCommercial 4.0 International License.





Abstract

This document reports the overall outcomes of IO6 - Development of the OPENLang E-PLATFORM. The remainder of this report is structured as follows. First, we introduce the scope and objectives of the project's E-Platform. We then analyse the criteria that we have established for the selection of a suitable platform to use for the development of the project's E-Platform. Based on these criteria, we present the selection of the platform that has been used as the basis for the project's E-Platform, as well as the rationale behind this selection. We then present the design and layout of the OPENLang Network E-Platform, which was driven by both the OPENLang Network Pedagogical and Design Frameworks (IO2) (Perifanou & Economides, 2021). Subsequently, we present in detail the services that the platform offers to learners and teachers. Finally, we present the evaluation of the platform, the dissemination activities done including our research publications, participation in scientific conferences and dissemination material, and we conclude this report.

Please cite this report as:

Mikroyannidis, A., Perifanou, M. & Economides, A. A. (2020). "Development of the OPENLang Network Platform". Research Report, Erasmus + OPENLang Network project. May 2020.





Table of contents

Abstract	5
Table of contents	6
Introduction	8
Selection Criteria	8
Openness	9
Customisation	9
Interoperability	9
Mobile interface	10
Community support	10
Monitoring	10
Storytelling	10
Interactivity	11
Gamification	11
Platform selection	12
Platform design	13
Platform services	19
Language placement tests	19
Tandem language learning	19
Recommended language OER	21
Suggest and Share Language OER	22
Community discussions	29
OPENLang MOOC	30
Learning pathways	32
Personal dashboard	34
Platform evaluation	36
Web Analytics	38
Date range and tools	38
Overall traffic	38
Audience demographics	39
a. Gender and age	39
b. Location and Language	40
c. Devices	41
Language Placement Tests (LPTs)	42
Tandem Language Learning	45



IO6. Final report: Development of the OPENLang E-PLATFORM

Average Time spend on every service of the OPENLang Network P	atform 45
Platform dissemination	47
Publications	47
Conferences/Events	47
Promotional multimedia material	48
Conclusions	55
References	56
Appendix I: "OPENLang OER Evaluation Checklist"	57
Appendix II: Dissemination Activities Overview	63



Introduction

As outlined in the project proposal document, IO6 regards the development of the OPENLang Network E-PLATFORM, a multiservice online platform that offers a variety of services, including:

- A Personal Member's Dashboard,
- An e-Tandem language learning matching service for 24 EU languages,
- An Open & highly interactive Forum,
- A European database of Language Open Educational Resources (OERs) of high quality,
- A training MOOC material on language OERs/OEPs for language Teachers and learners.

The platform also has a responsive design in order to be accessible through different devices (tablets, smartphones, etc). This is a core output of the project, as it facilitates the building of an Open European Languages and Cultures Network for EU Mobility KA2 participants, and it offers the technological foundations for the success and sustainability of the project's language learning network.



Selection Criteria

In this section, we outline the criteria we have established for the selection of a suitable platform that have formed the basis for the development of the project's E-Platform. These criteria are dictated by the core features that the project's E-Platform should offer to the community.

Openness

As the OPENLang Network project promotes an open approach for language learning, teaching and community support, it is essential that the project's E-Platform, which is at the very centre of this approach, is also open to the community of language teachers and learners, as well as to the general public. We have therefore limited our selection of relevant platforms to the ones that are open for anyone to join, as well as those that make their codebase available as open source to the community and have not considered platforms that are proprietary and closed.

Customisation

As the project's E-Platform offers customised services to the community, it is important that we select a platform offering flexibility and different ways to customise both its front-end and back-end. One popular way for customisation is through plugins, which are software components that extend the codebase of a platform. By developing custom plugins, we aim to address the specific needs of our users and offer them the features outlined in the Introduction section of this report.

Interoperability

Another critical feature of the E-Platform is interoperability, i.e., the ability to exchange data with other systems. This can be achieved by supporting standard specifications for importing and exporting educational data, such as SCORM¹

¹ https://scorm.com/scorm-explained/one-minute-scorm-overview/



and xAPI.² These are standard specifications widely used by educational platforms and facilitate the exchange of data between these platforms. For example, learning materials can be exported as a SCORM package from one platform and be imported into another. Learning Analytics data can be exported as xAPI statements from one system and imported into another for further analysis. Interoperability is essential for our E-Platform as we want to make it as easy as possible to import learning materials, as well as export Learning Analytics data from our system.

Mobile interface

As outlined in the Introduction section, the OPENLang Network E-Platform should have a responsive design and support different types of devices, including tablets and smartphones that have different screen sizes. It is therefore important that the platform we select to use as the basis for the development of the project's E-Platform, supports the development of responsive interfaces for use on devices with different screen sizes.

Community support

As the project has limited resources, it is important that we select a platform supported by the community, in order to receive regular updates of the codebase and bug fixes. This usually goes hand in hand with openness, i.e., open-source platforms have the advantage of receiving support from the community of developers that regularly update the codebase, thus fixing bugs and security holes, plus delivering new features.

Monitoring

An important aspect of online teaching and learning is the monitoring of student progress and tools utilization in online courses. Educational research shows that monitoring the students' learning is an essential component of high-quality education. Feedback about the status and the history of the activities in online-courses can be useful to teachers, students, study program managers and administrators. For example, it can help in better understanding whether the courses provide a sound learning environment (availability and use of discussion forums, etc.) or show to which extent best practices in online

² https://xapi.com/overview/



learning are implemented (students provide timely responses, teachers are visible and active, etc.)

Storytelling

The most effective way to convey information in eLearning is to get the audience to care about the content, connect with the content, and to commemorate the content. This can be done through storytelling, the most fundamental form of communication. Storytelling is how we tap into our common humanity, evoke emotional connection, and facility recall to anything we are learning. Basically, when we are told something in the form of a story, we remember it better than if we are simply exposed to educational snippets, lists, or disconnected piles of information. The first step in creating learning solutions through storytelling is to get learners to care about the content: content creators can do this by simulating the learner's reality by adding characters and/or other real-life and work-life situations and dialogues. The second step is to get learners to connect with the content, and the goal is to elicit emotion: creating an emotional connection with learners helps them to believe in the value of the content and can drive them to want to learn even more. The third step is to get learners to commemorate the content — to get the learners to talk about it, repeat it, and think about it and how it affected them.

Interactivity

Although eLearning platforms are able to overcome the geographical constraints that arise in the conventional class, they also create uncertainty amongst the learners about the quality and frequency of the interaction they enjoy. In distance learning, feedback is categorized into feedback among the learner towards the content, the trainer/educator towards the learner, and finally the learners. Regular interaction among the teachers, the students, and the content is a vital factor in achieving learning objectives. On one hand, educators play a key role in engaging students with other participants in a modern and asynchronous way, encouraging them to respond to their questions by creating a learning community that provides learners with equal opportunities for communication such as live lessons and interaction in the virtual environment. On the other hand, thanks to the interactivity, the learner overcomes the fear of insecurity due to the distance barrier.



Gamification

Gamification has been a huge buzzword in the e-learning industry for a while now, and with good reason. As a teaching tool, it's proven both its effectiveness and popularity time and again. As such, e-learning programs with gamification functionality are in high demand among learners and educators alike. Gamification has many benefits for (e-) learners. Amongst them, it: boosts engagement, provides motivation through goal tracking, improves knowledge retention, promotes team building and offers valuable feedback. Of course, it does all this for a reason: it is fun. And when something is fun, we don't think twice about sticking with it.

Platform selection

In order to best address the core features of the E-Platform as these are outlined in the Introduction section of this report, we have implemented our platform on top of a Learning Management System. A Learning Management System (LMS) is a software system for the administration, documentation, tracking, reporting and delivery of educational courses, training programs, or learning and development programs. An LMS essentially allows learners and educators to manage the learning process. The core features of an LMS are in line with the core features of the project's E-Platform, especially regarding the provision of learning materials in the form of OERs or MOOCs, the availability of a personal dashboard, as well as features for community building and interactions among the community members.

Several LMS options are available, both proprietary and free ones, such as Moodle,³ Sakai,⁴ Canvas,⁵ Blackboard,⁶ and more. We have selected Moodle, as it fulfils the aforementioned criteria:

³ https://moodle.org/

⁴ https://www.sakailms.org/

⁵ https://www.canvasvle.co.uk/

⁶ https://www.blackboard.com



- **Openness**: Moodle is completely free and open source.
- Customisation: Moodle supports custom plugins to extend its codebase.
- **Interoperability**: Moodle supports the most widely used standard specifications for educational data, including SCORM and xAPI.
- **Mobile interface**: Moodle offers a dedicated app for mobile devices and supports the development of responsive interfaces.
- **Community support**: Moodle has a vast community supporting it, currently consisting of more than 800 developers.⁷
- **Monitoring**: Moodle allows students to monitor their progress when studying a course. Moodle also offers detailed reports to teachers about the progress of their students.
- **Storytelling**: Moodle supports storytelling via its tools for course authoring and via third-party plugins.
- **Interactivity**: Moodle offers various tools for facilitating interactivity, such as discussion forums, private messaging, live chats, and more.
- **Gamification**: Moodle supports gamification via tools such as badges and also via third-party plugins.

Additionally, Moodle has been adopted by the Open University (OU) for several years as:

- The main VLE (Virtual Learning Environment) for all OU students.
- The OER repository OpenLearn for informal learners across the world.8
- The main LMS for a variety of EU research projects, such as the European Data Science Academy (EDSA).⁹

As a result, we have accumulated significant experience at the OU in maintaining and further developing this platform. We have put this experience to use in order to develop the project's E-Platform on top of Moodle.

⁷ https://moodle.org/plugins/

⁸ https://www.open.edu/openlearn/

⁹ http://courses.edsa-project.eu/



Platform design

The platform is hosted by the Knowledge Media Institute (KMi) of the Open University and is available at https://openlang-network.kmi.open.ac.uk/. The design of the platform is based on the open-source theme Adaptable. This is a highly customisable and responsive theme, designed for use on both large university installations, as well as small training companies.

Figure 1 shows the design of the platform's homepage. The green bar on the top of the page contains the user menu, from which the user can change their personal preferences, receive notifications, as well as exchange private messages with other users. Below the area that contains the project logo and title of the platform, there is a menu with a link to the homepage and the personal dashboard of the user. A number of "calls to action" about the platform and the project are also featured on the homepage, in a carousel banner right below the home/dashboard menu. More specifically, the featured "calls to action" are the following:

- Join the OPELang MOOC: This call prompts users to join the OPENLang MOOC.
- Watch the platform tutorial: This call invites users to watch the video tutorial (developed by the dissemination leader Pixel) about how to use the platform.
- Watch the OPENLang webinar: This call invites users to watch the OPENLang webinar delivered as part of Erasmus Days 2020.
- Answer the OPENLang survey: This call prompts users to respond to the OPENLang survey (IO1) about mapping the language learning profile of Erasmus+ KA1 mobility participants.

¹⁰ https://moodle.org/plugins/theme adaptable



The main area of the platform's homepage is populated with the services that the platform offers to learners and educators. These services are presented in more detail in the following sections, but are also listed here:

- OPENLang MOOC
- Language placement tests
- Tandem language learning
- Recommended language OER
- Suggest and share language OER
- Community discussions

Additionally, two learning pathways are featured on the homepage of the platform, which are intended to guide learners and educators in using the platform services. These pathways are presented in more detail in a subsequent section of this report.

The footer of the platform, which is visible in every page, contains links to the project website, the platform's privacy and cookie policy, as well as a link to a contact form, through which the public can contact the project partners for any questions or suggestions about the platform and to receive technical support about the platform. The footer also displays the Creative Commons license of the content of the platform. The right sidebar features a short introduction about the platform and the project, a list of the user's favourite pages on the platform, as well as a navigation menu, giving access to the main areas of the platform.



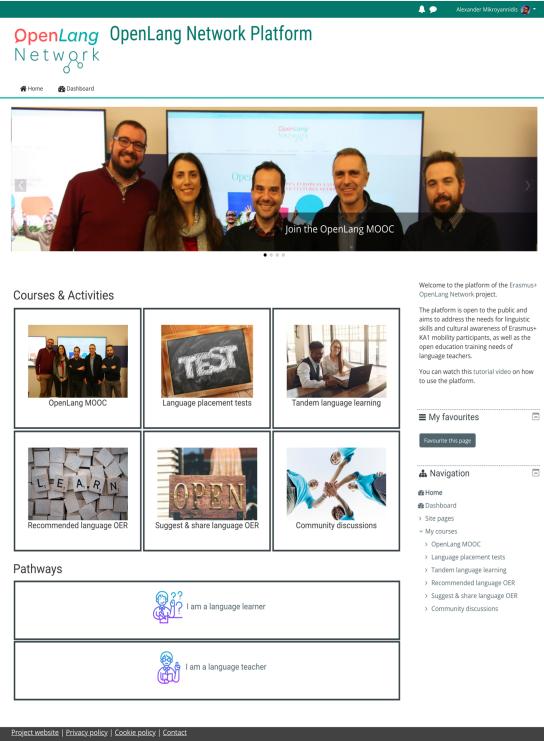




Figure 1: Snapshot from the platform's homepage.



The responsive design adopted in the platform is aiming to offer access to the platform from web browsers used in different devices and screen sizes. Additionally, the Moodle mobile app¹¹ can be used to access the platform from mobile devices. Figure 2 shows a snapshot of the platform and specifically the personal dashboard, viewed inside the Moodle mobile app. The app is available to download both for iOS and Android and allows users to access the platform from any mobile or tablet device. To this end, we have enabled the mobile web services on our Moodle installation.

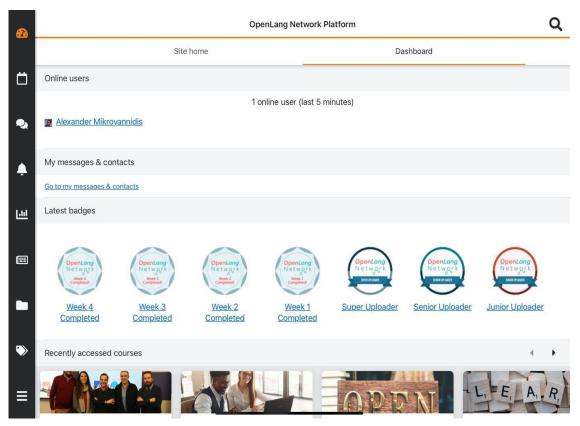


Figure 2: The platform displayed inside the Moodle mobile app.

The design of the platform has been majorly driven by both the "OPENLang Network Pedagogical and Design Frameworks", IO2 (Perifanou & Economides, 2021). The OPENLang Network open and collaborative language learning environment is designed to provide multiple types of interaction to learners who belong in a community of language practice. Each learner of this environment is seen as an autonomous learner who can use the open educational material content (OERs), but also as a learner who can interact

-

¹¹ https://download.moodle.org/mobile



with other peers and/or the teacher in a one-to-one pair or in small groups or even in a big community. Learners are placed at the center of the OPENLang Network online language learning environment and are free to take their own personalised learning paths

The following table presents the recommendations about the platform that were derived from the IO1 & IO2, as well as how these recommendations have affected the design of the platform and the services that it offers to learners and teachers.

Recommendations	Impact on platform design
Offer short-intensive language course before the mobility	The platform offers a wide variety of recommended OER for language learning, including short-intensive language courses.
Gamify language learning	A gamification approach has been adopted in the platform by awarding badges to users when reaching certain milestones, e.g., when they upload a language OER.
Offer more interactive lessons	Interactivity has been critical for the design of the platform which features several interactive learning activities that are uploaded at the OER database. Platform's "Tandem language Learning" service promotes interaction.
Provide language quizzes	Additionally, the platform offers a wide variety of language placement tests for enabling learners to determine their language proficiency level. It also offers a big variety of language quizzes at the language OER database.
Provide a chat-discussion forum	Several discussion forums are provided by the platform, which are presented in the following sections of this report.
Provide administrative support	Technical and administrative support is offered to the users of the platform via the discussion forums and via a dedicated contact form.
Inform future participants regarding the particularities of each country	Several of the recommended OER offered by the platform are intended to inform mobility participants about the cultural contexts and the particularities of each country. ¹²

Table 1: The recommendations derived from the IO1 and IO2 and their impact on the platform design.

_

¹² See for example:

https://www.open.edu/openlearn/languages/german/advanced-german-language-culture-and-history/content-section-0?active-tab=description-tab and

https://www.open.edu/openlearn/languages/spanish/advanced-spanish-language-context/content-section-0?active-tab=description-tab



Platform services

The following sections present the various services offered by the platform to learners and educators.

Language placement tests

This service of the platform offers 24 language placement tests, covering all European languages. Users of the platform can take these tests in order to assess their level of expertise in a particular language. Each test is available via a link and a PDF file. Users may visit the link to take the test online or download the PDF file to take the test offline. Figure 3 shows a snapshot from this service of the platform, including the set of English language placement tests.

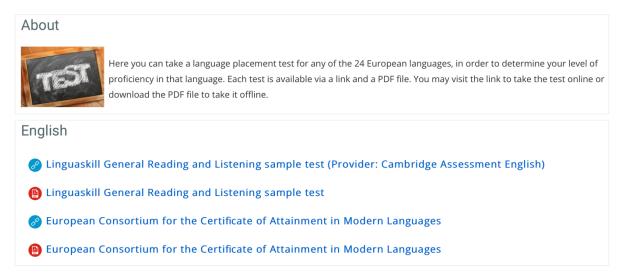


Figure 3: Snapshot from the platform's language placement tests.

Tandem language learning

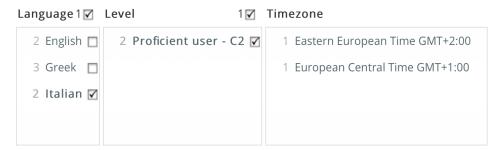
This service of the platform offers a matching service between members of the OPENLang platform. Through this service, a user of the platform is able to discover other users, with which they can communicate synchronously and asynchronously, in order to practice a language together. Figure 4 shows the



search interface for finding tandem language learning partners. Through this interface, members of the platform can find other members to practice in Tandem a specific language using specific search filters such as the language, the language proficiency level and the timezone. All platform users can view the profiles of the other members in order to connect with them and start studying a language and exploring another culture together.

Find tandem learning partners

Find community members to study with them and improve your language skills.



Search results



Figure 4: The search interface for finding tandem language learning partners.

In order to communicate with them, they can send them an instant message via their profile page and add them as friends. They can use the communication tools proposed in the platform *Skype* and *Google Meet* (fig. 5) or others if they wish, use the proposed language learning material on *Padlet* (https://padlet.com/mariaperif/avv6n26p9kxe471l) or start a discussion with other members on a topic of their preference at the discussion forum. All members of the platform can also consult the information provided about Tandem language learning in the same page (guide, video, etc.).



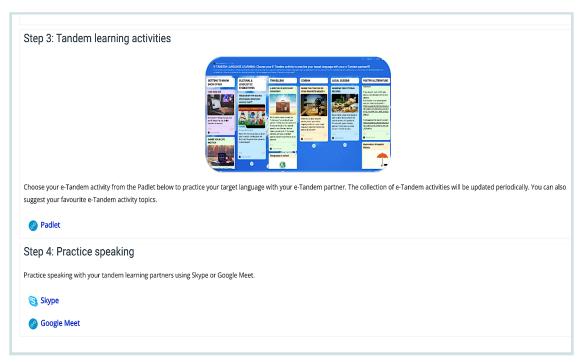


Figure 5: Tandem Language Learning activities and communication tools.

Recommended language OER

This service of the platform offers more than 250 language OERs recommended and evaluated by the OPENLang Network project members who are experts in the area. These are high-quality OERs or MOOCs that are offered by renowned educational institutions for learning a European language. Users of the platform can search these resources using a variety of filters in order to customise their search results, for example by specifying the language of the resource, its target language, its level, its type, and more. This search interface with all available search filters is shown in Figure 6.



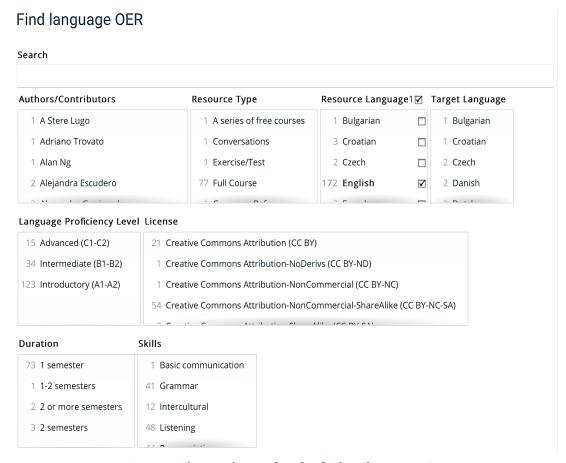


Figure 6: The search interface for finding language OER.

Suggest and Share Language OER

In this service of the platform, users of the platform can share language learning resources with the community and find language OERs shared by other members of the community.

Users can share several types of resources (fig. 7) and are also invited to share their own language teaching scenarios (fig. 8). A template has been created (fig. 9) for that purpose that can be downloaded by anyone who would like to upload his/her language teaching scenario as OER.



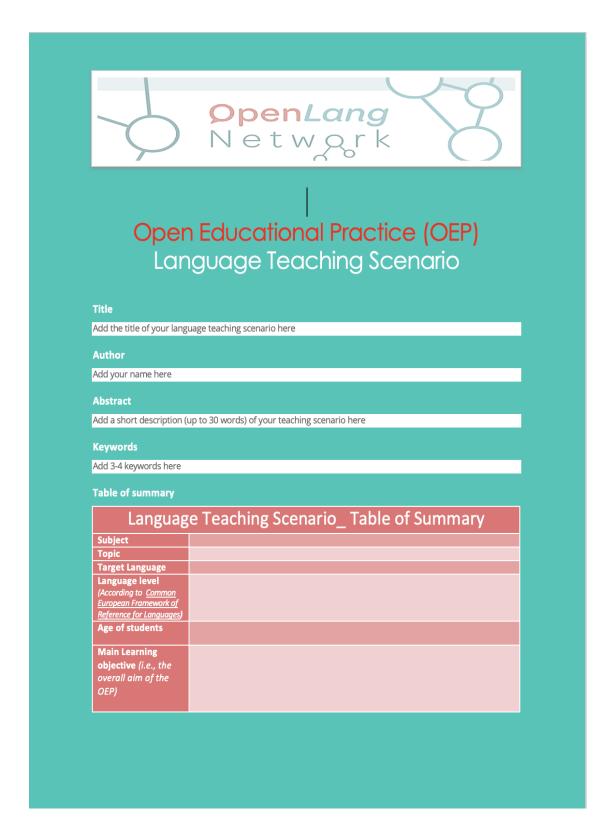
Resource Type *
Full course
Learning Module
Lesson Plan
Textbook
Exercise/Quiz/Test
Grammar/Syntax
☐ Video/Audio
Mobile App or Game
Cultural material
Teachers' support (companion, teaching strategies, assessment, etc.)
Other:

Figure 7: Type of Resources that can be uploaded on the OENLang Network platform

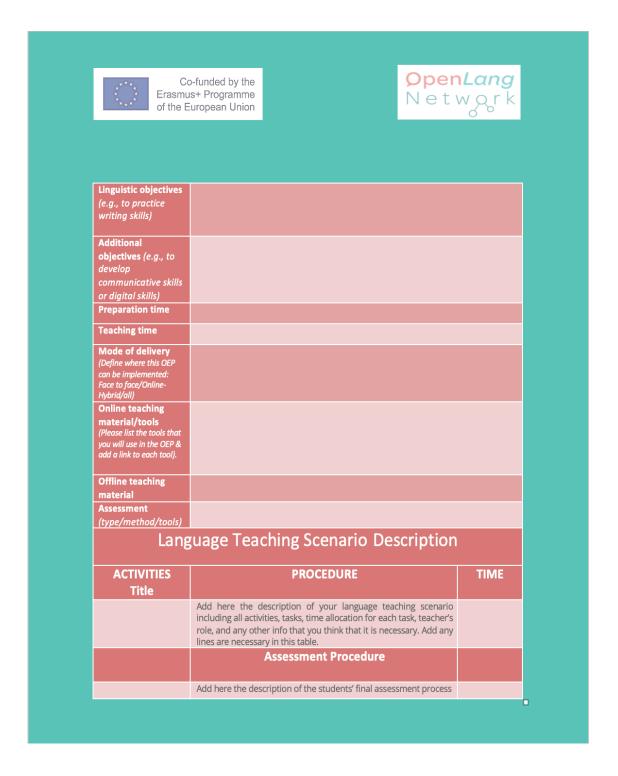


Figure 8: Sharing a Language Teaching Scenario











IO6. Final report: Development of the OPENLang E-PLATFORM







Figure 9: Template for Sharing a Language Teaching Scenario as OER



As in the previous platform's service, the search for shared language learning resources can be filtered based on a set of metadata. Users that share language OER reach the following statuses on the platform:

- *Junior Uploader*: The user has uploaded their first language OER.
- *Senior Uploader*: The user has uploaded 5 language OER.
- Super Uploader: The user has uploaded 10 language OER.

Figure 10 shows the badges that are awarded to the users of the platform that reach the aforementioned uploader statuses when sharing language OER on the platform.



Figure 10: The badges awarded to users that share language OER on the platform.

Sharing a Language OER of good quality is really important for the OPENLang Network platform team who aims at offering to all users selected resources of good quality. For this reason, users have the opportunity to check the quality of their language OER during the "uploading phase" of the OER. More concretely, each user needs to fill out a google form providing all the information/metadata needed for the language OER that aims to upload on the platform. In the same form, there is a section (Appendix I) where the users can do their quality control of their OER. The "OPENLang OER Evaluation Checklist" (Perifanou & Economides, 2020) is a complimentary evaluation tool that has the format of a simple checkbox and can be used by language educators, designers, librarians and learners who wish to do a complete and efficient quality control of any language OER they want to use. This evaluation tool can be used also as a guide by those who wish to create their own language OERs.



The quality checklist can be also downloaded as a pdf from this platform's service.

In this service of the platform, users also have the opportunity to download the OPENLang OER Toolkit (Fig. 11) in order to be guided about the discovery, (re)use, creation and sharing of language OERs.

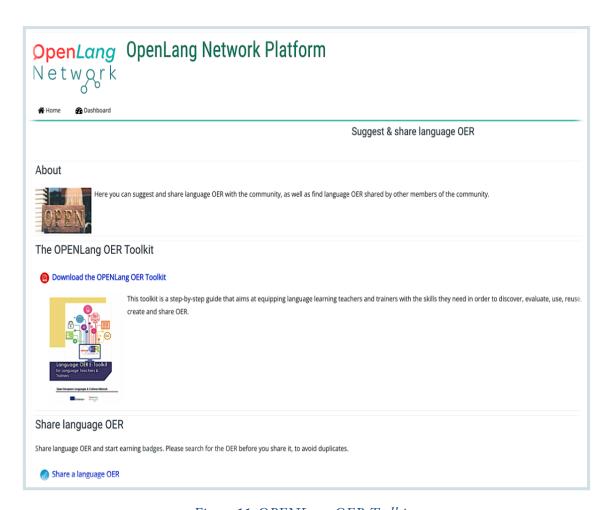


Figure 11: OPENLang OER Toolkit.

Community discussions

This service of the platform offers a forum dedicated for discussion between all users of the platform. Through this forum, users can ask questions, search for answers, exchange experiences, seek advice, etc. Users of the platform can also subscribe to the whole forum or certain discussion threads that interest them, so that they receive notifications when a new message is posted in the forum. It



should be noted that a discussion forum is also provided within the OPENLang MOOC, which is presented in the following section.

OPENLang MOOC

The OPENLang MOOC is a 4 weeks' Massive Open Online Course hosted in the OPENLang platform. The MOOC is entitled "Exploring how to (re)use Language Open Educational Resources (OERs)" and is addressed to language teachers, trainers, and learners who wish to explore the discovery, (re)use, creation, and sharing of Language OER.

Each of the 4 weeks of this MOOC consists of a set of modules and a quiz. After learners study the modules of each week and pass the quiz, they are awarded a badge. Figure 12 shows the 4 badges corresponding to the completion of the 4 weeks of the MOOC.



Figure 12: The badges awarded to the learners of the OPENLang MOOC.

After learners complete the whole MOOC, they earn a free certificate of participation. The certificate of participation includes a QR code, which can be scanned to verify the validity of the certificate. Figure 13 shows an example certificate of participation.





Figure 13: Example certificate of participation in the OPENLang MOOC.

The MOOC features an Announcements forum and a Discussion forum, where announcements about the MOOC are made and discussions about the MOOC take place between learners. It should be noted that several learning activities within the modules of the MOOC invite the learners to use the e-services of the platform. For example MOOC participants are invited to create, evaluate and share language OER using the "Suggest & Share a language OER" service, explore the language OERs proposed at the "Recommended Language OERs" section and post useful educational material or share their views and reflections with other learners at the 'Discussion forum'.

Additionally, the content of the MOOC has been published as an OER, a free eBook, available to download from the platform in the EPUB and PDF formats. The contents of the eBook are licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License. The eBook can be cited as follows:

Perifanou, M., Kosmas, P., Parmaxi, A., & Economides, A. A. Mikroyannidis (2021). Exploring how to (re)use Language Open



Educational Resources (OERs). OPENLang Network project. Available at: https://openlang-network.kmi.open.ac.uk/ebook/openlang_MOOC_eBook.pdf

Figure 14 shows a snapshot from the introductory materials of the MOOC, featuring a promotional video, a short description of the MOOC, as well as links to the two forums of the MOOC.

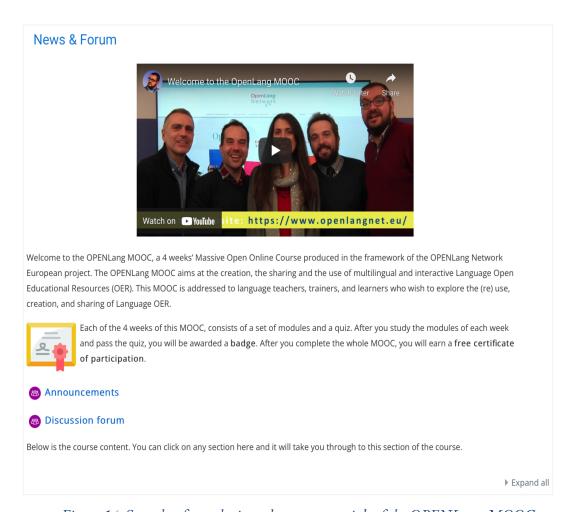


Figure 14: Snapshot from the introductory materials of the OPENLang MOOC.

Learning pathways

The platform features learning pathways that are intended to provide guidance to learners and teachers on how to use the platform services. More specifically, the following two learning pathways are provided by the platform:

• Language Learner Pathway



• Language Teacher Pathway

Each of these pathways consists of a set of steps that should be followed by language learners and teachers when using the platform. Figure 15 shows the steps suggested by these two learning pathways as these are presented in the platform.





Step 1: Take a language placement test to determine your language proficiency level.

Step 2: Find other community members for tandem learning of a language.





Step 3: Find Open Educational Resources for learning a language.

Step 4: Share Open Educational Resources for learning a language.





Step 5: Start and join discussions with language learners and teachers.

Step 6: Join the OpenLang MOOC to learn about the creation, sharing and use of Language Open Educational Resources.





Language Teacher Pathway

Step 1: Register your language proficiency level to join tandem learning.





Step 2: Find Open Educational Resources for learning a language.

Step 3: Share Open Educational Resources for learning a language.





Step 4: Start and join discussions with language learners and teachers.

Step 5: Join the OpenLang MOOC to learn about the creation, sharing and use of Language Open Educational Resources.



Figure 15: The learning pathways provided by the platform.

Personal dashboard

The OPENLang Network platform offers a personal dashboard for its users. This dashboard provides an overview of a member's personal data in the platform, including the courses that a user has registered for, the messages they



have sent and received, their network of contacts in the platform, their awarded badges, the other users that are currently online on the platform, and more. Figure 16 shows a snapshot from the personal dashboard of a user of the platform.

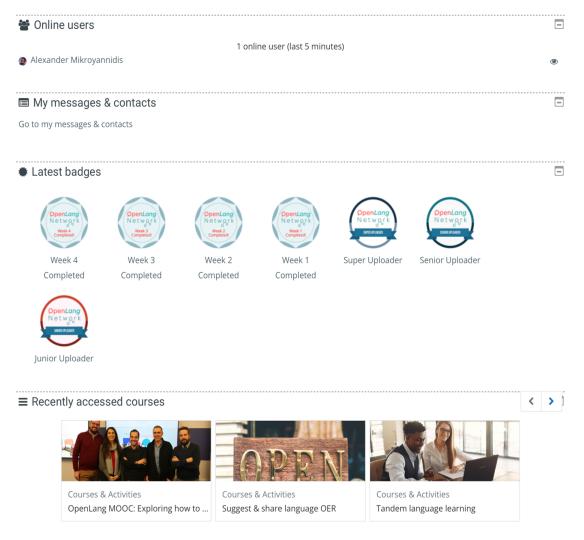


Figure 16: Snapshot from the personal dashboard of a platform user.



Platform evaluation

Evaluation of the platform by project partners

All project partners have thoroughly tested and evaluated the platform throughout the project duration and especially before the launch of the OPENLang MOOC, in order to make sure that the platform is fit for purpose, i.e., that it offers the required quality level of services and that it is absent of technical issues and bugs. Based on this evaluation and on the feedback collected from the project partners, the platform has been significantly improved in most of the services that it offers. More specifically, the improvements suggested by the project partners and implemented on the platform include the following:

- We have enabled users to rate OER and add comments to OER on the platform.
- We have enabled users to bookmark OER or any other page on the platform, by selecting "Favourite this page" from the sidebar.
- We have enabled users to receive badges when they upload OER.
- The form for uploading OER has been structured in steps in order to make navigation easier and improve the OER submission process.
- An OER evaluation checklist has been added to the final step of the OER submission process.
- All content on the platform has been licensed under CC BY-NC-SA, which is stated in the footer of all pages on the platform.
- The recommended OER available on the platform has been increased to 242 language OER with submissions from all project partners.
- Several improvements have been made to the e-Tandem Language Learning service, for example we have included tutorial videos and other guidelines about e-Tandem language learning, we have added the time zone in the available search filters for finding tandem learning partners, and we have included an interactive <u>Padlet</u> containing various e-tandem language learning activities.



Evaluation of the OPENLang Network Platform by Users

Fourteen OPENLang MOOC participants (female =9, males= 4, N/A=1) submitted their feedback. The participants' average age was 35-15 years, six of them were Language Teachers, five were Language Teachers' trainers and three were Researchers. Most of them had a PhD educational degree (PhD=7, MA, or MSc=4, BA, or BSc=3), while most of them (eight) were of a medium level of digital skills, four stated a high level and two perceived themselves of low-level digital skills.

As depicted in the following Table 2, all items were rated above 4.00/5.00 indicating a positive experience with the MOOC platform.

Questionnaire item		Minimu	Maximum	Mea n	Std. Deviation
		m			
Q18	The MOOC's platform is easy to	3	5	4,36	,745
	use.				
Q19	The speed of the MOOC's	3	5	4,50	,760
	platform is sufficient not causing				
	any access delays.				
Q20	The MOOC can be accessed	3	5	4,43	,646
	using any device (desktop,				
	laptop, smartphone, etc.) and				
	any operating system (Windows,				
	MacOS, iOS, Android, Linux,				
	etc.).				
Q21	The MOOC's platform	3	5	4,57	,646
	functions well all the time.				
Q22	The technical support of the	3	5	4,00	,784
	MOOC's platform solved any				
	technical problems that I				
	encountered.				

Table 2 Descriptive statistics of the participants submitted feedback regarding their experience with OPENLang Network Platform



Web Analytics

Date range and tools

The OPENLang Network e-Platform data were collected and analyzed through the Google Analytics Platform and the Moodle build-in reports. The visualization graphs were generated through Data Studio Platform. The date range of data collection was set from 1 Aug 2020 to 31 Dec 2021.

Overall traffic

A total of 2051 users visited the website in the given time range, and 22.362 pages were viewed, with average session duration 5 minutes. The overall bounce rate was 37.07%.

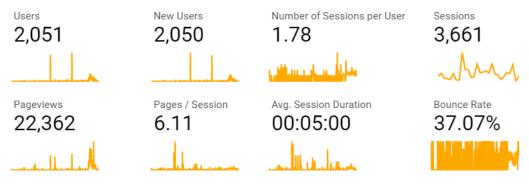


Figure 17 Overall Traffic

A total of 282 users registered in the OPENLang Network Platform. 144 users participated in the MOOC course, several users were registered in one or more of the OPENLang Network Platform services. In particular, 68 users registered in the 'Language Placement Tests', 68 in the 'Tandem language learning, 58 users registered in the 'Recommend language OER', 58 users



registered in the 'Suggest & share language OER, and 21 participated in the 'Community Discussions' (Forum).

Audience demographics

a. Gender and age

Most visitors were women (68.1%), and in the age groups of 18-24 or 35-44 years old.

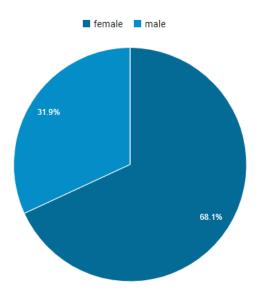


Figure 18. Visitors' gender distribution



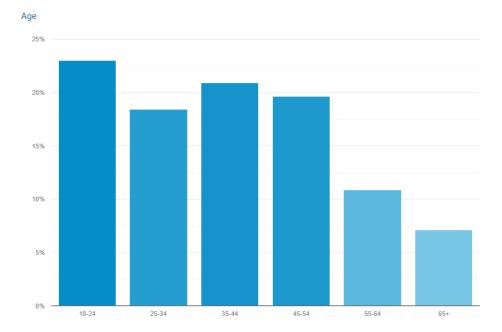


Figure 19. Visitors' age distribution

b. Location and Language

There was no significant difference between new visitors (44%) and returning visitors (56%), and most visitors were from Europe (767) and America (456), while Asia (490), and Africa (120) followed. The most popular countries were the United States (25.57%), Greece (13.63%), Cyprus (3.82%), United Kingdom (3.58%), and Spain (3.14%). The diagrams below depict the visitors' location, and browser language.





Figure 20. Country breakdown

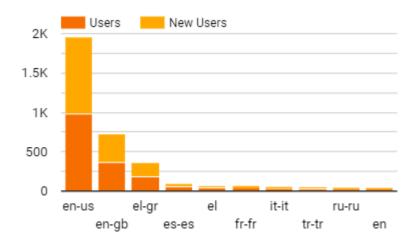


Figure 21. Language breakdown

c. Devices

As depicted in Figure 22. Most visitors accessed the OPENLang Network Platform through desktop devices, while several users accessed it through mobile devices as well.



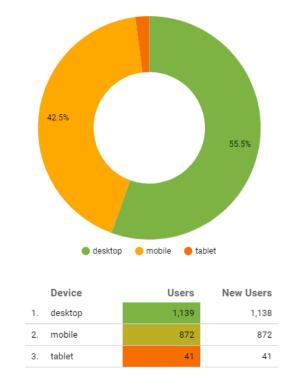


Figure 22. Devices used to access the website

Language Placement Tests (LPTs)

The OPENLang Network Platform's service 'Language placement test' received 278 total views from 68 enrolled participants, with an average of 1.4 views per participant.

Figure 23 depicts the number of views and users for each one of the language modules. As depicted in Figure 8 English was the most preferred language and received significantly more views than either language. Italian, Spanish, Greek received several views as well, while Romanian and Polish were viewed by none of the participants.



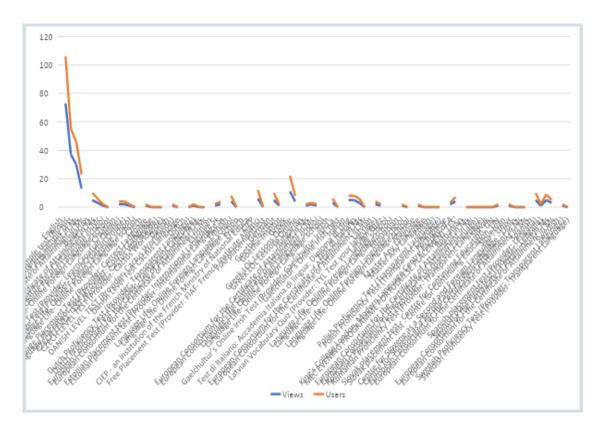


Figure 23. Views and users per language module



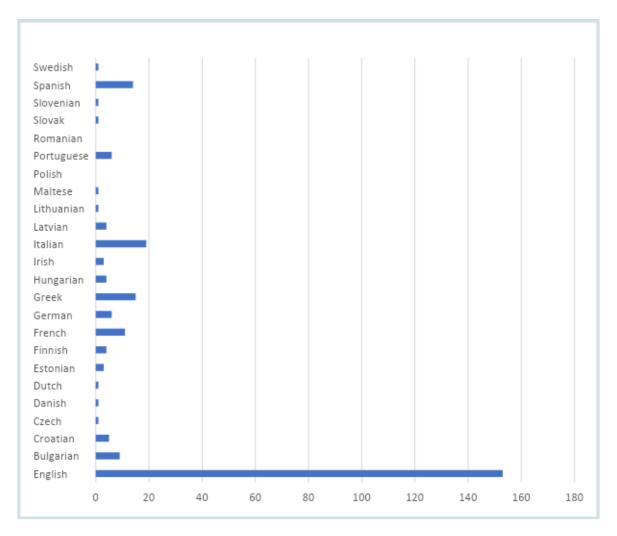


Figure 24. Total views and users per language

Tandem Language Learning

The Tandem language learning service was enrolled by 68 users and received 180 total views from the learners. Table 4 depicts the most frequently viewed modules, and the number of users.



	View	User
Module	S	s
What is tandem learning?		
A manual for eTandem Autonomous Language		
Learning with a Partner	9	7
Step 1: Record your language proficiency level		
Definition of language proficiency levels	39	18
Step 3: Tandem learning activities		
Padlet	15	9
Step 4: Practice speaking		
Skype	38	9
Google Meet	15	12

Table 3 Views and users per Tandem language learning module

Average Time spend on every service of the OPENLang Network Platform

Table 2 depicted the number of page views and the time spent on each one of the platform services, as regards their main pages. As presented, the Suggest & share language OER service gained the highest duration of time spent on the page, followed by the Language Placement Tests.

		Avg. Time on Page
Service	Page views	(seconds)
OPENLang MOOC: Exploring		
how to (re)use Language Open		
Educational Resources (OERs)	1204	58



212	112
657	89
358	79
196	124
85	90
	657 358 196

Table 4. Views and time spend on the platform's services



Platform dissemination

Publications

The development of the platform has led to the publication of a scientific article, which was presented at the 23rd International Conference on Interactive Collaborative Learning (ICL2020) on September 23-25, 2020 and was published in the proceedings of this conference. This annual interdisciplinary conference is focused on the exchange of relevant trends and research results, as well as the presentation of practical experiences in Interactive Collaborative Learning and Engineering Pedagogy.

The article is entitled "The OPENLang Network Platform: Building a European Community of Language Learners and Teachers" and presents the lessons learned from the development of the OPENLang Network platform as an open and collaborative online environment for networking between language learners and teachers across Europe. The article can be cited as follows:

Mikroyannidis, Alexander; Perifanou, Maria; Economides, Anastasios and Giordano, Antonio (2021). The OPENLang Network Platform: Building a European Community of Language Learners and Teachers. In: Proceedings of the 23rd International Conference on Interactive Collaborative Learning (ICL2020), Volume 1, 23-25 Sep 2020, Tallinn, Estonia (Virtual Conference). Available at http://oro.open.ac.uk/71951/.

More publications that discuss the design of the services of the OPENLang Network platform can be found at the project's official website and at the Appendix I.



Conferences/Events

Perifanou, M., Mikroyannidis, A. & Economides, A. A. (2020). "The OPENLang Network platform: Using Moodle to build a European community of language learners and teachers". In: *MoodleMoot Greece-Cyprus 2020*, 27 & November 2020.

https://pretalx.ellak.gr/moodlemoot2020/talk/MMU88K/

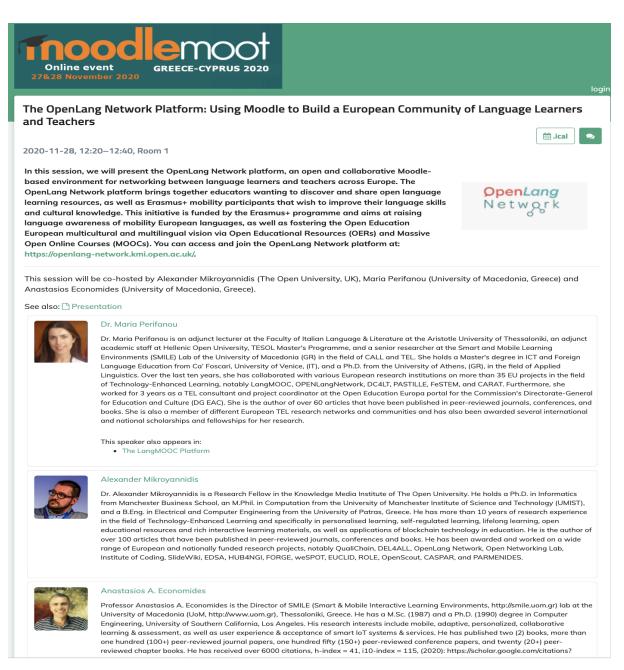
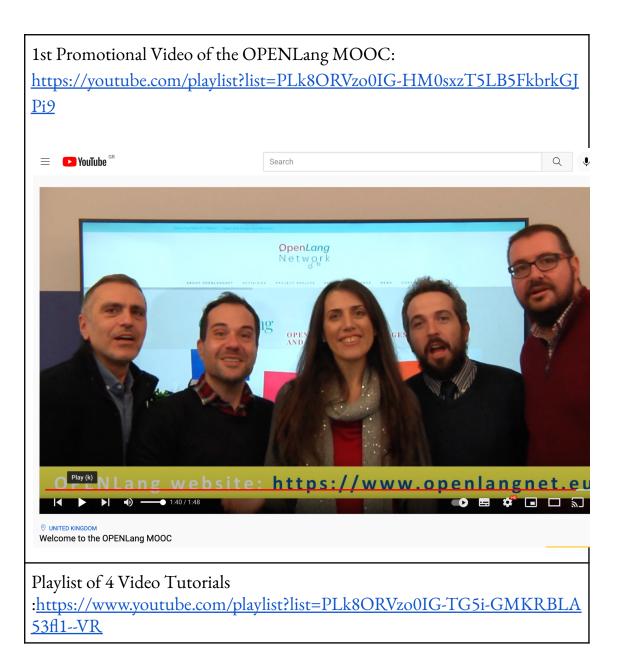


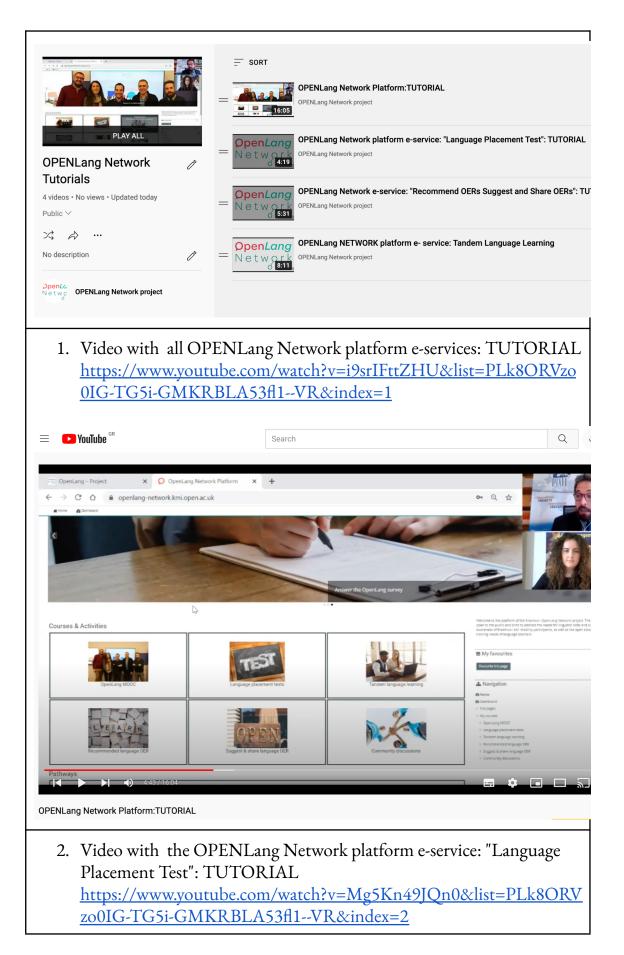
Figure 17: Snapshot from the MoodleMoot conference programme webpage.



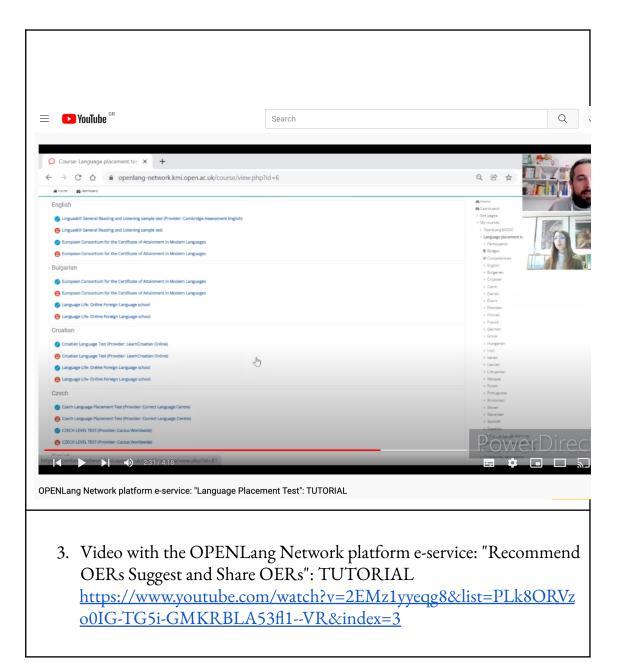
Promotional multimedia material



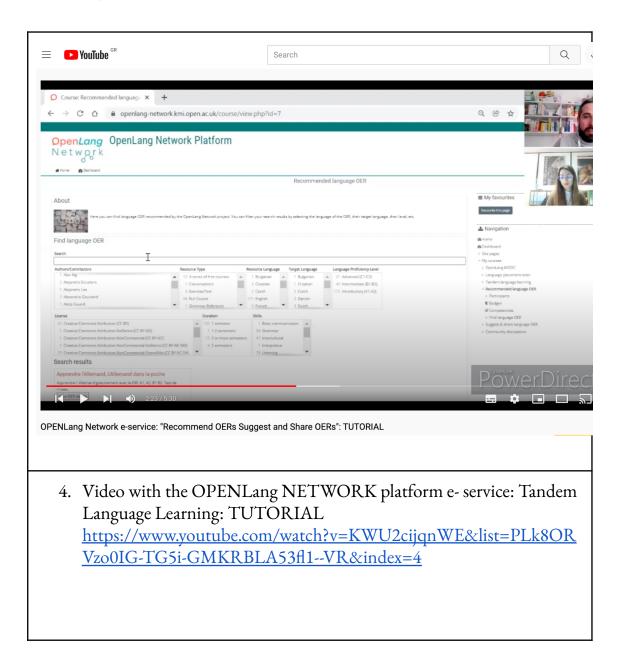




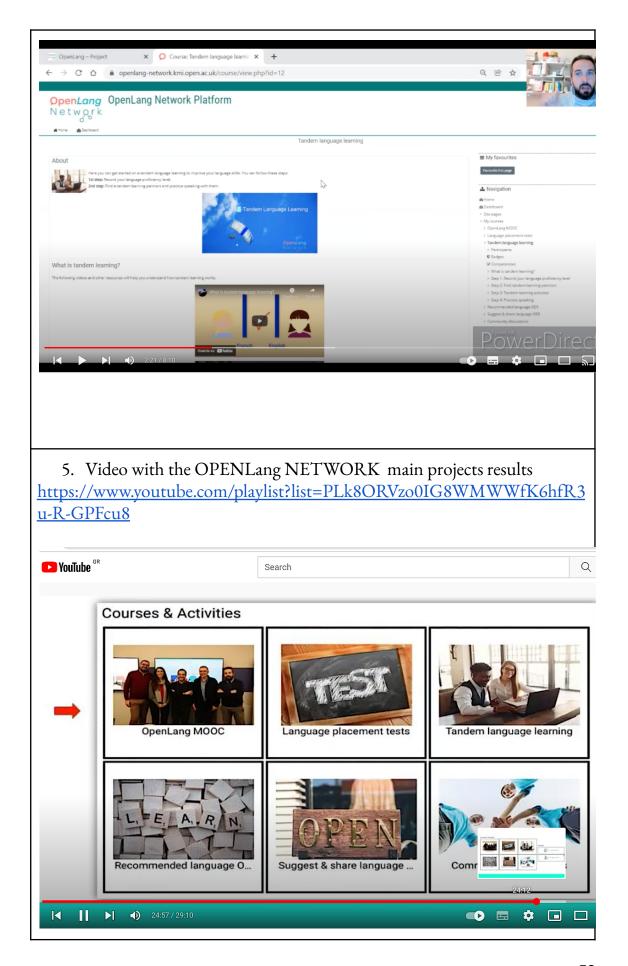




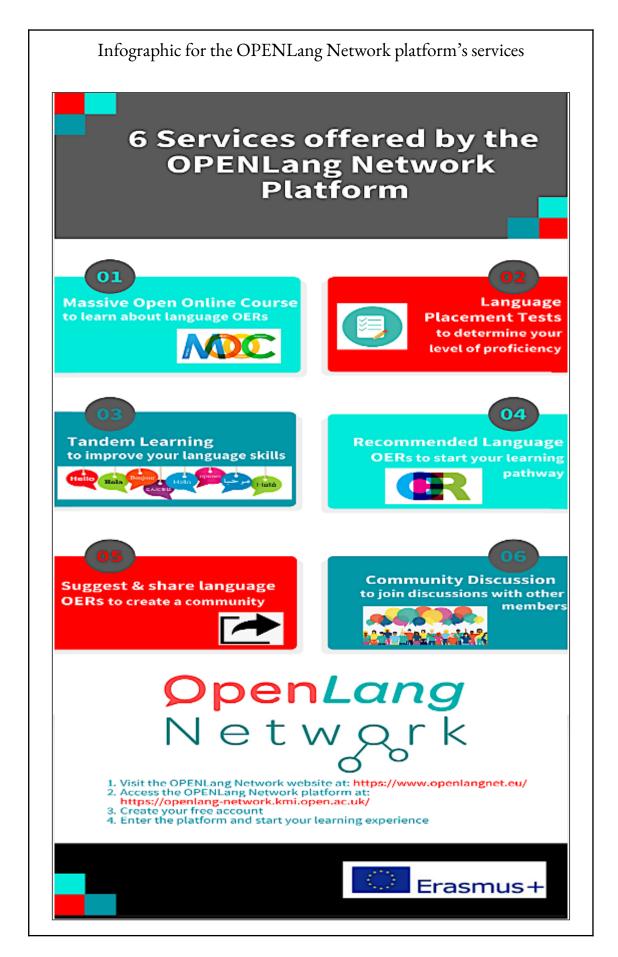














Conclusions

This report has presented the overall outcomes of IO6 - Development of the OPENLang E-PLATFORM. In particular, we have presented the scope of the project's E-Platform and have analysed the criteria that we have established for the selection of a suitable platform to use for the development of the project's E-Platform. Based on these criteria, we have selected Moodle as the platform that has been used as the basis for the project's E-Platform. We have also presented the design and layout of the OPENLang Network E-Platform, as well as the ways that both the *OPENLang Network Pedagogical and Design frameworks* (IO2) (Perifanou & Economides, 2021) have affected this design. Additionally, we have presented in detail the services that the platform offers to learners and teachers, the evaluation of the platform, as well as the scientific article published in the proceedings of the 23rd International Conference on Interactive Collaborative Learning.

The OPENLang Network E-platform is a key output of the project, as it facilitates the building of an Open European Languages and Cultures Network for EU Mobility KA2 participants, and it offers the technological foundations for the success and sustainability of the project's language learning network. As such, the platform will remain operational and will be maintained for at least 5 years after the project has ended. All the services currently offered by the platform, including the OPENLang MOOC, will remain available to learners and teachers to use for free for their learning and teaching purposes.



References

Mikroyannidis, A., Perifanou, M., Economides, A., & Giordano, A. (2021). The OpenLang Network Platform: Building a European community of language learners and teachers. In: Auer M.E., Rüütmann T. (eds) Educating Engineers for Future Industrial Revolutions. ICL 2020. Proceedings of the 23rd International Conference on Interactive Collaborative Learning (ICL) and 49th International Conference on Engineering Pedagogy (ICEP), 23-25 Sep, Tallinn, Estonia. Springer, Cham. DOI: 10.1007/978-3-030-68198-2_64

Perifanou M. & Economides A. (2020). Quality framework for language OERs. Research report, OPENLang project. https://www.openlangnet.eu/outputs/

Perifanou M., Economides A.A. (2021). The OPENLang Network Pedagogical Framework: Designing an Open and Collaborative Language Learning Environment for Erasmus+KA1 Mobility Participants. In: Zaphiris P., Ioannou A. (eds) Learning and Collaboration Technologies: New Challenges and Learning Experiences. 23nd International Conference on Human-Computer Interaction, HCII 2021. Lecture Notes in Computer Science, vol 12784. Springer, Cham. https://doi.org/10.1007/978-3-030-77889-7_10

Perifanou, M. & Economides A. (2022). The OPENLang Quality Assurance Framework For Language OERs. In: *Proceedings 16th annual International Technology, Education and Development Conference* (INTED) 2022, 8-9 March, IATED.





Appendix I: "OPENLang OER Evaluation Checklist"

"OPENLang OER Evaluation Checklist" (Screenshot of the google form that the platform users are invited to fill out in order to do OERs' quality control when they upload a language OER on the platform)

OPENLang OER evaluation checklist

The "OPENLang OER Evaluation Checklist" (Perifanou & Economides, 2020) is a complimentary evaluation tool that has the format of a simple checkbox and can be used by language educators, designers, librarians and learners who wish to do a complete and efficient quality control of any language OER they want to use. This evaluation tool can be used also as a guide by those who wish to create their own language OERs.

1. CONTENT

	Fulfilled criterion
The Lang OER fits the educational purpose (e.g. target language, students' proficiency level);	
The Lang OER is credible (Certified, accurate, correct, objective, good reputation of author and organisation);	
The Lang OER is current, updated and updatable/reusable	
The Lang OER is authentic, useful & practical, (Applicable, experiential, pragmatic);	
The Lang OER is interactive;	
The Lang OER is adaptive, varied & flexible;	
The Lang OER is clear/comprehensive/coherent;	
The Lang OER's quantity is appropriate/sufficient;	
The Lang OER is interlinked with other resources.	



2. PEDAGOGY

	Fulfilled criterion
The Lang OER's Applied Pedagogy aligns with appropriate	
Language learning theories, approaches & instructional strategies. (e.g. inquiry-based language learning, problem-based language learning, project-based language learning, authentic & situated language learning, game-based language learning; flexible language learning; learner-centered language learning; autonomous & self-regulated language learning; personalized & adaptive language learning; collaborative language learning);	
The Lang OER helps the language learner to practice one or most of the basic language skills (i.e. speaking, writing, reading and listening) and/or to understand the use of the language (grammar and vocabulary);	
The Lang OER supports one or more different types of interaction (autonomous, peer-to-peer, group, group/peer-to-peer to class, group/peer-to-peer to outsiders);	
The Lang OER proposes one or more types of assessment (peer review, self-assessment, teacher-assessment);	
The Lang OER offers information about the mode of learning (i.e blended, fully online, face-to-face).	



3. DESIGN

	Fulfilled criterion	
The Lang OER's design has nice aesthetics;		
The Lang OER's design has appropriate & consistent format;		
The Lang OER 's design uses the appropriate Multimedia (i.e. video & audio of high quality), Augmented, Virtual, Immersive &/or Mixed Reality.		
4. USABILITY		
	Fulfilled criterion	
The Lang OER is easy to access/accessible;		
The Lang OER is easy to save, download, and install;		
The Lang OER is easy to use it;		
The Lang OER is easy to use it; The Lang OER is easy to extend it;		
The Lang OER is easy to extend it;		



5. OPENNESS

	Fulfilled criterion
The Lang OER is open to find (Seek, locate, discover);	
The Lang OER is open to access (view, watch, read, listen, hear);	
The Lang OER is open to store (Save, retain, download, copy, duplicate, print);	
The Lang OER is open to use (Control, manage, select);	
The Lang OER is open to create (Design, develop, produce, construct, modify, alter, change, adapt, revise, translate, mix, integrate, combine);	
The Lang OER is open to Interact (Communicate);	
The Lang OER is open to Collaborate (Cooperate, Co-Create);	
The Lang OER is open to Evaluate (Assess, review, critique, rank);	
The Lang OER is open to Share (Distribute, teach, publish, display, show)	
The Lang OER is open to abandon (free to quit, drop out, leave, depart) without any penalties, charges, fines, obligations, punishments etc.;	
The Lang OER is without any cost restrictions (allows anyone to participate at no cost);	
The Lang OER is open from any place (allows anyone to participate from anywhere);	
The Lang OER is open without any time restrictions (allows anyone to participate anytime).	



6. TECHNOLOGY

	Fulfilled criterion
The Lang OER is interoperable & compatible;	
The Lang OER is compliant to Standards;	
The Lang OER is self-sufficient (No need for extra technology);	
The Lang OER offers security, safety & privacy;	
The Lang OER offers mobile design (Responsive - Adaptive);	
The Lang OER offers a good platform with reliable Interaction speed;	
The Lang OER is interconnected with with other OERs;	
The Lang OER is co-existent (smoothly integrated) with other SW & HW;	
The Lang OER offers tech support;	
The Lang OER offers metadata;	
The Lang OER offers Tools for editing, co- creating, peer-reviewing, interacting, communicating & collaborating, etc.;	
The Lang OER offers customisation services;	
The Lang OER offers assessment, badges, &/or automated certifications.	



Appendix II: Dissemination Activities Overview

Dissemination	Event	Links
Type		
Multiplier Events (ME)	1 st ME by PIXEL	https://www.openlangnet.eu/2021/06/23/free-online-event-in-partnership-with-the-international-conference-the-future-of-education/
		https://www.openlangnet.eu/2021/06/30/meet-our-key note-speakers/
		https://www.pixel-online.net/news.php?id=759&page =1
		https://www.youtube.com/watch?v=eXcFxNMZ13g
		https://www.youtube.com/watch?v=dj7zxYuzHrc
		in partnership with the International Conference "The Future of Education" (https://conference.pixel-online.net/FOE/)
Multiplier Events (ME)	2 nd ME by OU	https://www.openlangnet.eu/2021/12/06/multiplier-event-december-10-2021-open-educational-resources-and-practices-in-language-learning-and-teaching/
		https://www.youtube.com/watch?v=_qshjDDzs-A
Multiplier Events (ME)	3 rd ME by CUT	https://www.openlangnet.eu/2021/12/10/multiplier-event-december-13-2021-by-cyprus-university-of-technology-and-openlang-network/
		https://www.youtube.com/watch?v=SwtwjfMkvwU
Multiplier Events (ME)	4 th ME by UOM	https://www.openlangnet.eu/2021/12/11/multiplier-event-december-15-2021-open-language-learning-interactive-environments-exploring-language-oers-e-tandem-language-learning/
		https://www.youtube.com/watch?v=2GQTlmgaD-E



Website	OPENLang Network website_Intellectual Outputs page	https://www.openlangnet.eu/outputs/
Platform	OPENLang Network Platform	https://openlang-network.kmi.open.ac.uk/
OPENLang Webinar#1	Erasmus Days 2020	https://www.openlangnet.eu/2020/10/18/erasmus-days-actions/ https://www.openlangnet.eu/2020/10/10/openlang-network-webinar-online-friday-october-16-2020-1300-1400-cet/ https://www.youtube.com/watch?v=cqrG0ci_D2I
OPENLang Webinar #2	Online Workshop 1 (Testing Tandem Language Learning service & other platform services)	https://www.youtube.com/watch?v=i6IiBDhiecc&list =PLk8ORVzo0IG_YGMyPANI1Lc6vstHsP6lf&inde x=3&t=1471s
OPENLang Webinar #3	Online Workshop 2 (Testing Tandem Language Learning service & other platform services)	https://www.youtube.com/watch?v=TMQNXECSK3 Y&list=PLk8ORVzo0IG YGMyPANI1Lc6vstHsP6lf &index=2
Erasmus dissemination activity	Erasmus Days 2021- Presentation of the platform	https://www.openlangnet.eu/2021/10/14/erasmusdays-2021/ https://www.erasmusdays.eu/event/the-openlang-network-platform-building-a-european-community-of-language-learners-and-teachers/
Conference Presentation	MoodleMoot 2020	https://pretalx.ellak.gr/moodlemoot2020/talk/MMU88 K/ https://pretalx.ellak.gr/moodlemoot2020/schedule/ https://www.openlangnet.eu/2020/
Conference Presentation	MoodleMoot 2021	https://pretalx.ellak.gr/mootgr21/talk/GM97QS/ https://pretalx.ellak.gr/mootgr21/schedule/
Publication	Open Learning: The Journal of Open and Distance Learning	Perifanou, M. & Economides, A. A. (2022a). Measuring quality, popularity, demand and usage of repositories of open educational resources (ROER): A study on thirteen popular ROER. <i>Open Learning: The Journal of Open and Distance Learning</i> . DOI: 10.1080/02680513.2022.2033114
Conference	Proceedings of the 6th International	Perifanou, M., & Economides, A. A. (2021b). Discoverability of OER: The case of Language OER.



Presentation &	Conference on Smart	In: Proceedings of the 6th International Conference
Publication	Learning Ecosystems	on Smart Learning Ecosystems and Regional
	and Regional	Development (SLERD), 24-25 June, 2021. Smart
	Development (SLERD),	Innovation, Systems and Technologies, Vol. 249,
	24-25 June, 2021.	Óscar Mealha et al. (Eds): Ludic, Co-design and Tools
		Supporting Smart Learning Ecosystems and Smart
		Education, 978-981-16-3929-6, 511796_1_En,
		(Chapter 5). DOI: 10.1007/978-981-16-3930-2_5
Conference	Proceedings of EUNIS	Perifanou, M., & Economides, A. A. (2021a).
Presentation &	2021- A New Era of	Challenges for finding Language OER: Suggestions to
Publication	Digital Transformation:	Repositories' Administrators. In: Proceedings of
	Challenges for Higher	EUNIS 2021- A New Era of Digital Transformation:
	Education.	Challenges for Higher Education. European
		University Information Systems organization, 9-11
		June, 2021.
		https://www.eunis.org/eunis2021/wp-content/uploads/
		sites/18/2021/05/EUNIS_2021_paper_59.pdf
Conference	Learning and	Perifanou, M. & Economides, A. A. (2021c). The
Presentation &	Collaboration	OPENLang Network pedagogical framework:
Publication	Technologies: New	Designing an open and collaborative language
	Challenges and	learning environment for Erasmus+ KA1 mobility
	Learning Experiences.	participants. In: Zaphiris P., Ioannou A. (eds)
	23rd International	Learning and Collaboration Technologies: New
	Conference on	Challenges and Learning Experiences. 23rd
	Human-Computer Interaction (HCII)	International Conference on Human-Computer Interaction (HCII) 2021, 24-29 July, Washington DC.
	2021,	Lecture Notes in Computer Science, vol 12784.
	2021,	Springer, Cham. DOI:
		10.1007/978-3-030-77889-7 10
Conference	Proceedings of the 15th	Perifanou, M., Kosmas, P., Parmaxi, A. &
Presentation &	annual International	Economides, A.A. (2021). The challenge of creating
Publication	Technology, Education	the OPENLang Network's online open database of 24
	and Development	European language placements tests. In: <i>Proceedings</i>
	Conference (INTED)	of the 15th annual International Technology,
	2021,	Education and Development Conference (INTED)
		2021, 8-9 March, IATED. DOI:
		10.21125/inted.2021.1285.
Conference	ICL 2020. Proceedings	Mikroyannidis, A., Perifanou, M., Economides, A., &
Presentation &	of the 23rd International	Giordano, A. (2021). The OpenLang Network
Publication	Conference on	Platform: Building a European community of
	Interactive	language learners and teachers. In: Auer M.E.,
	Collaborative Learning	Rüütmann T. (eds) Educating Engineers for Future
	(ICL) and 49th	Industrial Revolutions. ICL 2020. Proceedings of the
	International	23rd International Conference on Interactive
	Conference on	Collaborative Learning (ICL) and 49th International
	Engineering Pedagogy	Conference on Engineering Pedagogy (ICEP), 23-25
	(ICEP)	Sep, Tallinn, Estonia. Springer, Cham. DOI:
Dukli 4i -	E Dools ODENI	10.1007/978-3-030-68198-2_64
Publication	E-Book: OPENLang	https://www.openlangnet.eu/2020/10/17/new-publicati
	MOOC content	ons/



Publication	E-Book: Open Language Teaching Scenarios	https://www.openlangnet.eu/2020/10/17/new-publications/
Promotional YouTube video	1 MOOC/Platform promo video	https://www.youtube.com/watch?v=i9srIFttZHU
Promotional YouTube video	1 OPENLang Project results promo video	https://www.youtube.com/watch?v=ExAgQVkSrKg& list=PLk8ORVzo0IG8WMWWfK6hfR3u-R-GPFcu8
YouTube Video Tutorials/ Educational Material	Total: 10 Videos a) 4 Video Tutorials for the OPENLang platform services	https://www.youtube.com/channel/UCTh_vc5kZHggb_vsHzlLMCBg https://www.youtube.com/playlist?list=PLk8ORVzo0I
	b) 6 MOOC Module videos	G-TG5i-GMKRBLA53fl1VR https://www.youtube.com/playlist?list=PLk8ORVzo0I G_Y5fYuUwNRU9SySsKMKhBy
Websites	Project partners' websites	(please, see the Dissemination Report)
Other Events	Dissemination of the platform in other events in which partners participated/organised	(please, see the Dissemination Report)
Press	Dissemination of the platform in the press (local papers, etc.)	(please, see the Dissemination Report)
Newsletter	Dissemination of the platform in the press (local papers, etc.)	(please, see the Dissemination Report)
Social Media	Official project's Facebook page	https://www.facebook.com/openlangnetwork Numerous posts (please, see the Dissemination Report)
Social Media	Official project's Twitter channel	Numerous posts (please, see the Dissemination Report)
Social Media	Official project's LinkedIn group	Numerous posts (please, see the Dissemination Report)
Dissemination Material	Infographic 1, e-Services of the platform	(please, see the Dissemination Report)
Dissemination Material	Infographic II, III e-Toolkit content	(please, see the Dissemination Report)
Dissemination Material	Promotional Leaflet/Flyer	(please, see the Dissemination Report)





Grant Agreement 2018-1-EL01-KA203-047967