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Curricular modernization by implementing MOOCs model

Intellectual Output 3:
Redesigned MOOC-based HEI curricula

Staatlich anerkannte, private Fachhochschule des Mittelstands (FHM)

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ANADOLU UNIVERSITY

P.PORTO

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INTRODUCTION

Intellectual output 3 under MODE IT project was considered a practical realization of the MODE IT approach. The aim of this output was to redesign existing formal curricula at participating MODE IT HEIs through developing, integrating and delivering at least 1 MOOC per each HEI to formal HEI students within their regular studies as well as to non-formal learners within their extracurricular activities.

MODE IT stands for the Erasmus+ project "Curricular modernization by implementing MOOCs model"/ www.mode-it.eu, which was implemented by five higher education institutions from Germany (Fachhochschule des Mittelstandes), Lithuania (Kaunas University of Technology), Turkey (Anadolu University), Portugal (Polytechnic Institute of Porto), and Romania (Polytechnic University of Timisoara). The project aimed at introducing innovative MOOC-based pedagogical approaches to the design and delivery of higher education courses. To achieve the objective set, three intellectual outputs were designed, developed and piloted during the project's lifetime as follows:

- Intellectual output 1: Online self-assessment tool,
- Intellectual output 2: Open online training program for HEI educators,
- Intellectual output 3: MOOC-based redesigned curricula.

This document outlines the MODE IT approach developed and tested at partner institutions under the activities related to the design and implementation of the Intellectual Output 3, provides insights into the features of MOOCs developed by partners, their pilot delivery and evaluation by learners, indicates links for open access for the MOOCs, and shares the recognition modalities put in place to award the performance of non-formal learners who attended these MOOCS and who are interested in attending these MOOCs in the future.

Redesign of formal curricula: MODE IT approach

MODE IT approach linked to the redesign of existing curricula was put in practice as follows:

- 15 pilot teachers for IO3 were selected from those who accomplished either the entire MODE IT IO2 training "Introduction to MOOC design and delivery" or selected modules as follows:

Institution	Number of pilot teachers
Fachhochschule des Mittelstands (FHM)	2
Kaunas University of Technology (KTU)	4
Polytechnic Institute of Porto (IPP)	4
Polytechnic University of Timisoara (UPT)	3
Anadolu University (AU)	2
Total	**15**

- Pilot teachers analysed curricula and modules they taught, as well as formal students under those modules. When selecting suitable student cohorts, the teachers opted either for BA students from the higher semesters or for MA students. This was due to the specifics of learning via MOOCs which required a portion of self-discipline and could be expected by advanced students rather by beginners. Afterwards, the modules for the redesign were selected.

- Within the selected modules, at least 1 topic was identified which had to be redesigned to a MOOC using open pedagogies.

- The requirements to each topic were:

a. It had to represent a self-contained learning experience;
b. The acquisition of knowledge and competences under each topic should be enabled through MOOC format resp. using MOOC-based pedagogies;
c. The student's workload to learn each topic had to be at least 25 - 30 hours (including assessment tasks).

- Redesign of the selected topics: pilot teachers outlined scenarios for the redesign of the lessons they taught in a traditional way (basically as live-webinars or in-presence lectures and seminars) to a MOOC using strategies they learnt from the IO2 training program. In other words, they had to create their own small-scale MOOCs. When designing the MOOC scenarios, it was important to:

  a. ensure the self-regulated and competence-based learning,
  b. ensure the interaction between the content and learners,
  c. encourage virtual collaboration among learners,
  d. activate reflection and critical thinking.

- The main elements of the new MOOCs were:

  a. learning videos recorded by pilot teachers (length between 5 – 10 minutes),
  b. supporting scripts,
  c. downloadable PDF files,
  d. links to further OERs (i.e. YouTube tutorials, research papers),
  e. collaborative tasks,
  f. self-assessment tasks (quizzes).

- The digital MOOC learning materials were created by pilot teachers using institutional infrastructure, such as video studios, video post-production and edition tools.

- Institutional LMS (basically, Moodle) were selected as MOOC delivery platforms. The course structure was created on each LMS (either by teacher or by supporting MOOC instructors), all course materials were uploaded to each institutional LMS. The access to LMS to formal and non-formal student was ensured by the technical staff at MODE IT institutions.

- HEI students were informed by their teachers about a new course delivery strategy during the ordinary lectures and/or seminars, and were advised regarding how to successfully learn via MOOCs, the determined time frame (the overall recommendation was to complete each MOOC within 4 - 5 weeks), how to communicate with peers, how the MOOC would be recognized etc.

- All the processes related to the module's selection, course (re)design, content development and its integration to LMS at each MODE IT HEI were supported by the qualified native MOOC instructors, who took part in the corresponding Learning, Teaching and Training activity (LTTA). In this manner, this group of project participants also demonstrated skills and knowledge acquired throughout the project.

- In total, 506 HEI students took part in the piloting of the MOOCs. 244 of them successfully completed them reaching the completion rate of 48% - very good result bearing in mind the average global MOOC completion rate, which is approximately 15% (Jordan, 2015). "Completion" in the context of the MODE IT project means that students performed all tasks and completed a self-assessment quiz **within the pre-defined timeframe** allocated for the MOOC completion. As the MOOCs were part of formal courses, they were completed anyway, but outside the timeframe default by each pilot teacher under his/her course.

- The integration of the pilot MOOCs in formal curricula at MODE IT institutions happened in line with the institutional educational policies (such as respecting the overall students' workload and overall ECTS principles, a fixed ratio of lectures to be delivered in presence), specific features of the module the MOOC was integrated in (i.e. learning outcomes, schedule), and individual course design of a teacher, the recognition of the MOOC completion for formal learners did not require any further negotiations at the institutional and administrative level. Some MODE IT partners provided an additional Certificate of Attendance/Completion to learners, who completed the MOOCs within the pre-defined timeframe. For this, the Moodle statistics were used (whether and when participants completed the suggested assessment tasks, such as quizzes or assignment). To validate the learning performance of students who attended the MOOC, the relevant contents of those MOOCs were retrieved in the scope of final exam at the end of the corresponding module the MOOCs were integrated in.

- At the same time, a promotion campaign for attracting non-formal learners took place including elaboration of recommendations and institutional solutions for their recognition. The term “non-formal learners” in the context of the MODE IT project was used to determine learners, which were willing to attend the MODE IT MOOCs in the scope of their extracurricular activities. This means, they could be registered at participating MODE IT institutions, but the MOOCs were not part of their regular studies. In total, 218 learners registered for MODE IT MOOCs, 109 completed them (completion rate of 50%).

- For the MOOCs recognition for non-formal learners, MODE IT partners introduced different models and approaches in line with their institutional and national policies. We have collected them in the chapter RECOGNITION of this document.

- The developed MOOCs were piloted at MODE IT HEIs between October 2021 - June 2022.

- In total, 11 MOOCs were designed and tested by pilot teachers. 10 MOOCs were created in the respective local language (DE, PT, RO, TR, LT), 1 MOOC (Artificial Intelligence) was designed in EN (by KTU teachers).

In the next chapter, we provide a few statistics on the MOOCs developed and piloted by MODE IT partnership.

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MOOC-BASED CURRICULA: STATISTICS

Partner institution	Pilot teachers	Title of the MOOC	Module/subject the pilot MOOC was integrated in	Pilot formal study program	Number of formal learners		Number of non-formal learners	
					Registered	Completed	Registered	Completed
Fachhochschule des Mittelstandes	Ralf Bruening, Sascha Lord	Competitor Analysis	Company Founding	Craft Management, B.A. students	17	17	31	10
Kaunas University of Technology	Linas Ablonskis, Algirdas Sukys	Entity-relationship modelling	Databases	B.Sc. Informatics Engineering, Informatics, Artificial Intelligence, Software Systems, Multimedia Technologies	196	25	-	-
	Aušra Urbaityte	Multimedia technologies learning objects design	Distance Learning systems	M.Sc. IT for distance education	50	17	20	15
	Armantas Ostreika	Artificial intelligence	Artificial intelligence	M.Sc. Software engineering	48	16	10	9
Polytechnic Institute of Porto	Paula Escudeiro	Game concepts	Advanced Graphical Application	MS. Computer Engineering	16	14	-	-
	Pedro Bessa, Ricardo Costa	Game design	Serious Games	MS. Computer Engineering	25	21	16	12
	Paula Escudeiro	Multimedia application development methodologies	Multimedia Applications	MS. Computer Engineering	23	20	-	-

	Rui Chibante	Simulation in power systems	Power Systems	BSc. Electrical Engineering	34	33	-	-
Polytechnic University of Timisoara	Radu Vasiu, Mugur Mocofan	Internet of Things	Internet of Things	MSc Multimedia Technologies	11	11	-	-
	Mihaela Crisan Vida	Web Graphics Development	Web design. User interface design and graphics	BSc. Informatics	41	33	43	24
Anadolu University	Aslihan Bagci, Çağlar Karaduman	Ethics in Scientific Research	Scientific Ethics and Research Methods	Ph.D. students	45	37	98	39
Total numbers	**15**	**11**	**11**	**13**	**506**	**244**	**218**	**109**

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Access to the MOOCs

The MODE IT partnership was committed to ensure the open and free access to the MOOCs developed by pilot teachers. Below we collected links for all MODE IT MOOCs, and invite everybody to benefit for free from the expertise of MODE IT teachers.

Partner institution	Title of the MOOC (English)	Title of the MOOC (native)	Access (link)	Password (if any)	Comments
Fachhochschule des Mittelstandes	Competitor Analysis	Wettbewerbs-analyse	https://fhm-online-university.de/anmelden/	**Benutzer/User:** modeit2022 **Password**: #ModelT2022	Under the access link, the contents of the MOOC can be learned for free.
Kaunas University of Technology	Entity-relationship modelling	Esybių ir ryšių modeliavimas	https://open.ktu.edu/course/view.php?id=137	no	To access all the 3 MOOCs, a self-registration at KTU Moodle is required (free of charge). Once registered, users can get enrolled to the course concerned by themselves using the option SELF-ENROLMENT.

	Multimedia technologies learning objects design	Daugialypės terpės mokymosi objektų kūrimui	https://open.ktu.edu/course/view.php?id=138	no	
	Artificial intelligence	Artificial intelligence	https://open.ktu.edu/course/view.php?id=139	no	
Polytechnic Institute of Porto	Game concepts	Conceitos de jogo	https://moodle.isep.ipp.pt/enrol/index.php?id=2119	Credentials for all 4 MOOCs: **User name:** mode.it.ext.2022@gmail.com **Password:** M0D3IT_ext	The course contents can be learned by external learners for free using the provided credentials. Should you be interested in receiving a Certificate of Attendance, please contact: Mr Carlos Vaz de Carvalho, cmc@isep.ipp.pt
	Game design	Desenho de jogos	https://moodle.isep.ipp.pt/course/view.php?id=1784		The course contents can be learned by external learners for free using the provided credentials. Should you be interested in receiving a Certificate of Attendance, please contact: Mr Carlos Vaz de Carvalho, cmc@isep.ipp.pt
	Multimedia application development methodologies	Metodologias de desenvolvimento de aplicações multimédia	https://moodle.isep.ipp.pt/enrol/index.php?id=1783		The course contents can be learned by external learners for free using the provided credentials. Should you be interested in receiving a Certificate of Attendance, please contact: Mr Carlos Vaz de Carvalho, cmc@isep.ipp.pt
	Simulation in power systems	Simulação em sistemas de energia	https://moodle.isep.ipp.pt/course/view.php?id=2154		The course contents can be learned by external learners for free using the provided credentials. Should you be interested in receiving a Certificate of Attendance, please contact: Mr Carlos Vaz de Carvalho, cmc@isep.ipp.pt
Polytechnic University of Timisoara	Internet of Things	Internetul lucrurilor	https://unicampus.ro/cursuri/enrol/index.php?id=189	no	To access the both MOOCs, a self-registration at UniCampus UPT is required (free of charge). Once registered, users can get enrolled to the course concerned by themselves using the option SELF-ENROLMENT.
	Web Graphics Development	Dezvoltare Web	https://unicampus.ro/cursuri/course/view.php?id=188	no	

Anadolu University	Ethics in Scientific Research	Bilim Etiği	https://mergen.anadolu.edu.tr/courses/72538	no	For users who want only learn the contents without a certificate of attendance, no registration is required. Users need to follow the introduction text and klick on BURAYA to directly proceed with the MOOC. For those who want to receive a Certificate, an enrollment to this course is recommended (free of charge). Mind the course start date specified on the course webpage.

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Recognition of MOOCs for non-formal learners

The MOOC recognition for non-formal learners directly relates to the non-formal education, which happens in all fields outside of formal educational systems on a voluntary basis of learners.

The recognition, accreditation and certification of MOOCs could be defined in many different ways, but generally, it refers to establishing a set of arrangements to make visible and value all learning outcomes (incl. knowledge, skills and competence) against clearly defined and quality-assured standards (Yang, 2016).

The MODE IT partnership was also engaged with the design and implementation of scenarios for MOOC recognition developed under IO3 activities for non-formal learners. In doing so, the scenarios for MOOC recognition elaborated in the scope of Erasmus+ MOONLITE project (https://moonliteproject.eu/about/mooc-recognition/) were analysed and matched with the institutional environment at MODE IT HEIs. The following findings could be shared:

LITHUANIA

Being an active MOOC provider, KTU is committed to ensure the access and to recognize learning outcomes achieved through MOOCs completion. The LMS Moodle allows a free registration and self-enrolment to a wide range of MOOCs developed either by KTU teachers or in the scope of the national and European projects (https://open.ktu.edu/). The MOOC contents are designed in a way to meet the established requirements to this type of learning. They are sufficient in scope and quality of content and required associated activities to enable a learner to acquire the competences defined in the expected learning outcomes.

The issuing of a Moodle-based Certificate of Attendance for non-formal learners who completed MODE IT MOOCs at KTU will be enabled. To receive this type of Certificate, learners will have to complete all the suggested tasks in the scope of a corresponding module, and to mark them as “done”. Pilot non-formal learners received their Certificates in this way.

In addition, the KTU has introduced an internal procedure towards assessing the competences earned through the MOOCs, which were elaborated under participation of KTU teaching staff and which passed the internal quality assurance check. The opportunity to receive ECTS is also given, for this, learners have to pass an exam at KTU.

TURKEY

State of play: relevance and exploitation of MOOCs at AU.

Although it is not an institutional policy, teaching staff at Anadolu University may ask their students to complete some MOOCs as a requirement of their formal courses. This type of MOOC integration is gaining popularity among professors and instructors due to the fact that there is a growing interest in MOOCs among students. They are not only completing a requirement of their courses and getting credits but also often receiving certificates to be included in their curricula vitae.

AU collaborates with several worldwide known MOOC providers to establish macro-master type of blended MOOC-based online graduate programs, such as master's programs on Technology-based Learning, Educational Communications and certificate programs like Online Teaching, Corporate Teaching etc. In this way, AU is able to integrate MOOCs into formal curricula in different fields.

Anadolu University has a MOOC platform, titled AKADEMA, which offers more than 130 MOOCs in Turkish. A great deal of these courses are created from scratch to be able to:

- show the HE community and especially decision-makers in Turkey that with the right design any subject and competencies including science, music, psychomotor skills, etc., can be taught online as effectively as face-to-face,
- help teaching staff gain online teaching skills and knowhow in their fields.

There are two types of MOOCs: self-paced (always open) and guided (facilitated by real instructors, with certain start and end dates, offered three times a year). The course subjects vary from soft skills to employability skills, from sports to science and from personal development to corporate affairs. The primary target group of these MOOCs is students in Anadolu's distance (over a million) and face-to-face

(25K) programs. The courses are free of charge. Courses especially focusing on employability skills, such as “How to prepare a CV” or “Effective Job Interviews” are the most preferred courses among the students.

Anadolu uses MOOCs, especially in the AKADEMA platform, as a testbed environment for piloting some of the innovative instructional strategies and tools before integrating them into formal courses and programs. For instance, an advance notification system that provides feedback and recommendations based on the students’ time-spend-on-tasks was developed and tested in a MOOC. After revisions, it was integrated into formal courses.

Anadolu also sees the MOOCs in the AKADEMA platform as supplementary materials, or remedial instructional opportunities for the students who fall behind in formal courses. For instance, in the theology program, it was noticed that some students were not able to progress and dropped out of the program due to a lack of Arabic language skills. Anadolu has created several MOOCs on the Arabic Language on different levels and offered them to not only those theology students but everyone who would like to learn. Some of the theology students took benefit of these courses and started to perform better in their formal courses.

In the AKADEMA platform, Anadolu also offers MOOCs on the Turkish language for those who would like to learn Turkish. These courses are recommended to Erasmus or any other students coming from outside Turkey, or refugees who would like to study or pursue their education in Anadolu. Although the international students can also enrol on the face-to-face Turkish language preparation courses when they come to Anadolu, those who complete the MOOCs before coming to the Anadolu spend less time in attending the formal language courses.

Recognition of the MOOC “Ethics in Scientific Research”

The MOOC “Ethics in Scientific Research” has been offered via AKADEMA, the MOOC Platform of Anadolu University. This and other courses in this platform are considered as open educational resources (OERs) and licensed under Creative Common licenses. Anyone without registering the system can view the course content under https://mergen.anadolu.edu.tr/courses/72538 and may learn.

However, if learners want to get a Certificate of completion they have to register to the system and join the course. the registration is open and free of charge. They have to complete all the activities including quizzes and exams to be able to complete the course.

For MODE IT non-formal learners, these two opportunities were elaborated and implemented accordingly. In total, 39 learners enrolled in the course and received a Certificate of completion. This Certificate can be presented as fulfilment of one of the requirements of a core course entitled "Scientific Ethics and Research Methods", which is mandatory for all graduate programs of AU.

Moreover, non-formal learners may receive an advanced Certificate of Achievement with the ECTS earned. For this, they should pay a nominal fee and take an online proctored exam in local branches of Anadolu University located throughout the country.

In this manner, a full recognition of a MODE IT MOOC was given.

For the future, the MOOC "Ethics in Scientific Research" will remain open to everyone. Though, those, who are interested in receiving any type of Certificate, need to respect some fixed start and end-dates for registering and completing the course activities. For instance, the next start date is the second week of October 2022 for the MOOCs in AKADEMA aligned with the academic calendar of the formal courses, including the MOOC "Ethics in Scientific Research".
The promotion campaign of the MOOC has already started. This course can be taken by any students in any graduate program in Turkey. If the home institution can accept the certificate offered by AU, those students might get a credit for their formal courses or programs. However, in Turkey acceptance of these kinds of certificates are based on the institutions. To promote the recognition of MOOC, AU team indicated on the course advertisement materials that the students can submit their certificates and apply for recognition directly at their institutions. This bottom-up approach for recognition of MOOCs is completely new for Turkish higher education sector.

PORTUGAL

At Polytechnic Institute of Porto (PPORTO), the traditional learning scenarios are still very much oriented towards face-to-face and blended learning using a customised Moodle platform http://moodle.isep.ip.pt. MOOCs are used to complement some courses either by recommendation of the teachers or by the initiative of the learners themselves but they are not credited in the formal programme. Thanks MODE IT approach, four courses have integrated MOOC-based learning as formal pedagogical approaches and are formally credited as such. Before that, the MOOC components were not formally recognized or credited.

There are several virtual or blended mobility courses and activities running at PPORTO but they do not use MOOCs as the basis for the contents. These students and the traditional mobility Erasmus+ students normally enrol in the Learning Management System provided by PPORTO.

Summer Schools run only in face-to-face mode. They are recognized as an independent training programme, not included in the formal academic programmes. Teachers might recommend MOOCs as part of the training course.

Recognition of Prior Learning is subject to formal state regulations and is normally subject to an evaluation by professors either to enable entry to degree programmes or to give equivalence to some courses. The recognition of MOOC-based credits is not usual and must be received through a recognized academic entity.

So far, the MOOC Serious games designed under MODE IT project was tested with 16 registered non-formal learners. 12 of them successfully completed the course and received an institutional Certificate of Attendance.

ROMANIA

There are several scenarios of MOOCs exploitation, which exist at the Polytechnic University of Timisoara (UPT). All UPT students are enrolled in the Virtual Campus

of UPT – a Moodle-based Virtual Learning Environment (VLE) accessible under https://cv.upt.ro/. Some courses available there are created in a MOOC-like format resp. using MOOC-based pedagogies. Though, these courses are not "open" and also many of them are not "massive".

Another scenario involves the integration of external MOOCs into the courses under Bachelor of Master programs. Some teachers are giving as a project-based activity or as an exam activity the completion of external MOOC courses, related to the university's course topic.

Finally, several MOOCs are implemented on the open VLE/MOOC platform of UPT, UniCampus https://unicampus.ro/. These MOOCs are open for everyone to register and are offered by teachers from UPT and also from some project partners. All courses on UniCampus are self-paced and have some sort of examination. Some MOOC courses offer a pre-course self-assessment, based on which recommendations are made to learners on which modules of the MOOC to focus upon. Depending on the completed MOOC, participants might receive a digital open badge or a digital certificate.

The MOOCs designed by UPT teachers under MODE IT project (Internet of Things and Web Graphics Development) were published at UniCampus platform of the UPT. Basically, UPT students from other courses completed them in the scope of their extracurricular activities and received a Moodle-based certificate. In the future, UPT team will be working on issuing digital badges for the completion of those MOOCs.

Erasmus students are encouraged to enrol in MOOC courses from the UniCampus platform, too. However, they cannot choose a MOOC course to be recognized through the ECTS system.

UPT respects the ECTS standards. The list of credits obtained by the student is reported in the Transcript of Records issued by UPT. There is an internal university process, respecting the national legislation, for offering credits on the supplement diploma or for offering a post-university studies certificate for those completing certain MOOC courses. UPT, through the Centre for eLearning, has started promoting the use of micro-credentials and digital open badges. However, the national legislation is still very strict regarding the official recognition of these tools.

GERMANY

Unlike to other MODE IT partners, the FHM did not have any experience with MOOC production or delivery before MODE IT project yet. Though, being a private university, the FHM must keep pace with the latest pedagogical trends to remain innovative, attractive and competitive. Following this strategy, the first MOOC at the FHM entitled Competitor Analysis was developed and offered to 17 formal students from the study program Craft Management as part of the module Company founding as well as to 31 non-formal learners within their extracurricular activities.

10 of the 31 registered non-formal participants successfully completed the course and received for free a Certificate of Attendance. To enhance the visibility of the MOOC, to ensure a long-lasting demand of this course and to promote the recognition of the achievements, the FHM is currently implementing the arrangements aimed at publishing the MOOC within the so-called PICK & STUDY program at the FHM https://www.fhm-onlineuniversity.de/iwk/pick-study/.

What is PICK & STUDY?

The Pick & Study concept of the FHM Online University responds to the needs of learners towards receiving flexible and personalized education. The Pick & Study program is considered an individual modular study program for all those who want to be prepared for the dynamically changing professional requirements, who need individual credit points (ECTS) for the recognition of their knowledge at a university, or who just want to further educate themselves in a subject area concerned. Instead of completing the entire study course, learners can choose a module of their specific interest to acquire targeted knowledge, skills and competences. Each module is offered fully online and is composed of a series of scientific texts, audio and video files, and tests. The studies are completely self-paced allowing for completing the module while working. The start is possible at any time.

Within the Pick & Study program, two types of the learning recognition are possible:

Certificate of attendance

The Certificate of Attendance can be issued to learners who are interested in attending a specific module without receiving credit points. For this type of the recognition, learners do not need to fulfil any admission requirements. To prove the attendance of the module, learners need to complete tests at the end of each subject unit. Learners are free in selecting the date and time of the assessment (assuming it will be completed during the period agreed in the study contract). The number of attempts is unlimited.

Once learners have passed all tests of the module, they will receive a Certificate of attendance to be attached to their personal resume. The certificate will display all study contents included in the module concerned.

For this type of certificate, no examination is required.
A fee to be paid for the Certificate of attendance amounts to 89,00 EUR.

University Certificate

The option University Certificate can be chosen by learners who are interested in receiving credit points for the module they attended.

In order to get registered for the option University Certificate under the FHM Pick & Study Program, learners have to fulfil specific admission requirements, such as having a general university entrance qualification, a technical college entrance qualification or vocational training with work experience.

The University Certificate displays the module grade, the course contents as well as the credit points according to ECTS (European Credit and Accumulation Transfer System). This allows for recognizing the university certificate for any regular course of study at the FHM or at other accredited universities in the European Higher Education Area. In this manner, the University Certificate can be considered as a micro-credential.

To obtain the University Certificate, learners have to pass an official university exam after having studied all the module contents. The exam can be conveniently taken online (online proctored exam) without leaving home. Each failed exam can be repeated a maximum of two times during the agreed contract period of six months.

A fee to be paid for the University Certificate amounts to 390,00 EUR.

Recognition of the MOOC Competitor Analysis

The MOOC Competitor Analysis elaborated under the MODE IT project will be added to the Pick & Study program of the FHM Online University by offering the recognition option Certificate of Attendance. Learners will be able to apply for the module by filling in the e-form integrated in the webpage of the Pick & Study program.

In case learners are interested only in consuming the contents of the MOOC without receiving any Certificate, they can access the MOOC for free under the link:

https://fhm-online-university.de/anmelden/
Benutzer/User: modeit2022
Password: #ModeIT2022

Learners' reflection and evaluation

Evaluation of experiences of pilot learners (both, formal and non-formal) with MOOCs developed by the partnership under IO3 activities was pivotal in order to assess the effectiveness, attractiveness, innovative features and long-lasting effect of the MODE IT approach. To this end, the MODE IT partnership led by partner Anadolu University (AU) implemented a comprehensive online survey[1]. Each partner received an individual survey link, which was sent to pilot learners of the respective country. The structure and the contents of the survey were the same helping to ensure the comparability of the results.

[1] Survey template is accessible under https://forms.gle/7Mh1e1begbFEQMqf7

A detailed evaluation report, which reflects pilot learners' and teachers' experience with these pedagogical experiments, was elaborated by partner AU and is available as supporting document at MODE IT website under the link https://a.storyblok.com/f/74732/x/6631f0aece/io3_mode_it_evaluation_report.pdf.

Below only a few relevant insights from the evaluation are provided.

In total, 225 pilot learners (among them, 136 formal and 89 non-formal learners) who completed MOOCs developed by pilot teachers within their regular studies resp. extracurricular activities participated in the survey. The attendees evaluated 11 most important items. For each item, the threshold of at least 50% of positive answers (represented through the total of the answer options "Strongly agree" and "Agree") was expected to meet the quality requirements. The following cumulative results from all 5 countries were obtained:

Overall experience:

- general satisfaction with the MOOCs: confirmed by 79% of learners,
- whether MOOC helped learn differently: confirmed by 76% of learners,
- whether MOOCs/redesigned courses could be recommended further: confirmed by 76% of learners,
- willingness to attend further MOOC-based curricula: confirmed by 76% of learners.

MOOCs design & delivery:

- clear course description: confirmed by 90% of learners,
- clear instructions of facilitators: confirmed by 85% of learners,
- sufficient interaction with peers & facilitators: confirmed by 71% of learners,
- alignment of the course activities with learning objectives: confirmed by 82% of learners,
- sufficient feedback from facilitators: confirmed by 70% of learners,
- appropriate course duration: confirmed by 83% of learners,
- whether learners supported MOOC integration in general: confirmed by 68% of learners (to compare with 12% of learners who were not sure about this integration).

As can be seen from the evaluation results, they confirmed a high quality of the MOOCs produced and feasibility of MODE IT approach within their studies.

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Summary

In the scope of the MODE IT project, MOOCs were of a particular interest not only as stand-alone educational products. The project's focus laid rather on the pedagogical technology used for the design and delivery of MOOCs. A good MOOC is designed in a way that facilitates self-organized and competence-based learning, encourages virtual collaboration among learners, activates reflection and critical thinking. All these relevant competences, based on our understanding, lacked among HEI students and had to be trained when delivery of higher education, which, according to many researchers, was still teacher-centered.

Thus, MODE IT approach aimed to modernize and innovate teaching and learning at HEIs through embedding MOOC-based pedagogies and MOOCs into formal curricula. For this purpose, the project elaborated corresponding strategies and successfully tested them with 15 pilot teachers, 506 formal and 218 non-formal learners: 13 curricula were selected, 11 modules within these curricula were identified for the redesign, 11 redesigned courses were created using MOOC-based pedagogies in terms of applying active learning strategies, peer collaboration techniques, and course delivery via virtual learning environment with a reduced role of a teacher, and delivered to formal students within their regular studies as well as opened to non-formal learners as stand-alone courses within their extracurricular activities. This redesign approach was innovative for HEI curricula, which were traditionally delivered to full- and/or part-time learners in a classroom (physical or virtual) by HEI teachers.

Based on formal learners' feedback, the new MOOC-based course delivery strategy helped better organize themselves and their studies, gave an alternative to a virtual or F2F lecture, changed learners' role from a passive listener to an active knowledge creator, and diversified their learning. Therefore, MODE IT approach can be recommended for further adoption by HE providers.

Though, a few learners stated that such type of studies was much more demanding and difficult (and that's true!), and they still would prefer to stick to the traditional teaching paradigm. This clearly shows the dominance of the teacher-centred model in higher education, which needs to be addressed in the scope of other innovative projects.

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