





Transnational multplier event MOOCification of formal education: good practices, success factors, supporting tools

May 30, 2022















Welcome & introduction to MODE IT project

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Vice-Rector at the Fachhochschule des Mittelstands

<u>www.mode-it.eu</u> 2





MODE IT: Facts & figures

• **Project title**: Curricular modernization by implementing MOOCs model

• **Acronym**: MODE IT

• Funding program: Erasmus+, Key Action 2 - Strategic Partnerships for Higher Education

• **Reference number**: 2019-1-DE01-KA203-005051

• (Horizontal) priorities: 1) Open education and innovative practices in a digital era;

2) supporting educators;

• **Duration**: October 1, 2019 – June 30, 2022 (33 months)

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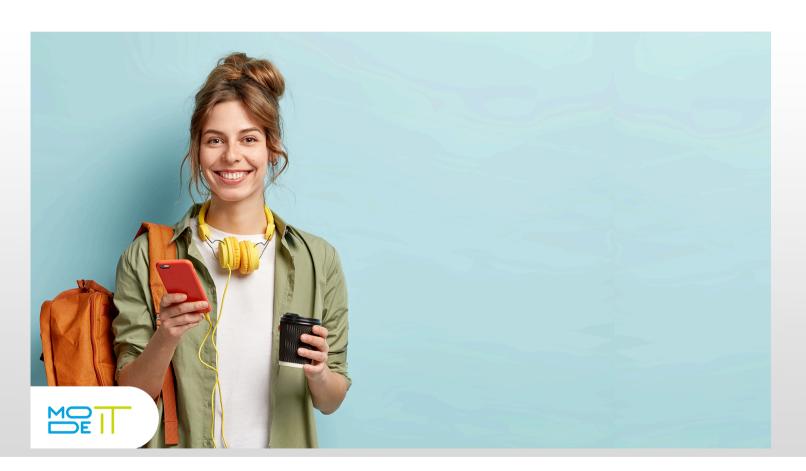
MODE IT Partnership

- University of Applied Sciences FHM: <u>www.fh-mittelstand.de</u>
- Kaunas University of Technology KTU: www.ktu.edu
- Anadolu University AU: www.anadolu.edu.tr
- Polytechnic Institute of Porto IPP: www.ipp.pt
- Polytechnic University of Timisoara UPT: <u>www.upt.ro</u>





What we have been doing?







MODE IT Objectives

Global objective

To modernize formal HE through including MOOCs & and MOOC-based pedagogies to the course design & delivery

Specific objectives

To boost skills & competences of HEI teaching staff relating to the design and delivery of MOOC-based courses

To redesign HEI courses through embedding MOOC-based pedagogies

To improve HEI students' digital & lifelong learning skills





MODE IT innovation

MOOCs - traditional understanding:

- ➤ MOOC is an alternative to formal education
- ➤ MOOC is a stand-alone educational product

MOOCs - MODE IT approach:

➤ MOOCs and MOOC-based pedagogies are part of formal HEI curricula





Intellectual outputs (IO) 1: Online self-assessment tool

- ✓ Real-time identification of current level of didactical and digital skills of HEI academic staff
- ✓ Detection of areas for skills improvement
- ✓ Displaying suggestions for skills improvement
- ✓ Taking responsibility of individual professional development







Intellectual outputs (IO) 2: Open Online Training Programme

- ✓ Support to HEI academic staff when designing & delivering MOOC-based curricula
- ✓ Modular structure
- ✓ Offered as MOOC itself
- ✓ Completion of separate modules or the entire MOOC possible
- ✓ Linked to IO1
- ✓ Language: English







Intellectual output (IO) 3: MOOC-based curricula

- ✓ Redesign of selected subjects using MOOC-based approach
- ✓ Embedding & delivery of redesigned subjects to HEI students within formal curricula
- ✓ Added value: Redesigned subjects = standalone MOOCs!



✓ Offering stand-alone MOOCs also to nonformal learners







MODE IT Methodology: How we did proceed

Identify needs of HEI academic staff related to the design of MOOCs & MOOC-based curricula (60 interviews)

Upskill teacher support staff (12 native instructional designers)

Empower HEI staff to design & deliver MOOC-based subjects (52 teachers completed the developed training modules)

Design, deliver & evaluate pilot MOOC-based courses (12 MOOCs in local languages)

Disseminate good MODE IT practices to wider academic community (3 joint papers, social media, multiplier events)





Beneficiaries

Direct:

- ✓ HEI students
- ✓ HEI teaching staff
- ✓ Non-formal learners
- ✓ Instructional designers

Indirect:

- ✓ HEI managerial staff
- ✓ Employers
- ✓ Wider academic community





Impact

- ✓ Boosting self-organized learning
- ✓ Increased digital competences of teaching staff & of students
- ✓ Increased pedagogical & instructional design skills
- ✓ Modernizing HEI curricula
- ✓ Opening up educational formats





Contact us!



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Intellectual output 1

Online Self-assessment tool:

identification of of HEI educators needs on MOOCs design and delivery

M.A. Sonja Intveen, FHM

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Goals

- Development of an online self-assessment tool for identification needs of HEI educators on MOOCs design and delivery.
- Live testing of the developed self-assessment tool by 50 test persons (HEI educators and instructional designers) from the project participants' own institutions.
- To promote faculty responsibility for the own professional development of HEI educators.





Upon completion of IO1

- ... the project team provided faculty with an opportunity to determine the current state of their pedagogical skills related to MOOC design and delivery.
- ... those areas in which the skills of the educators can be improved were identified and corresponding suggestions for improvement were displayed.
- ... specific training offers were made available within the training program for educators developed in IO2.





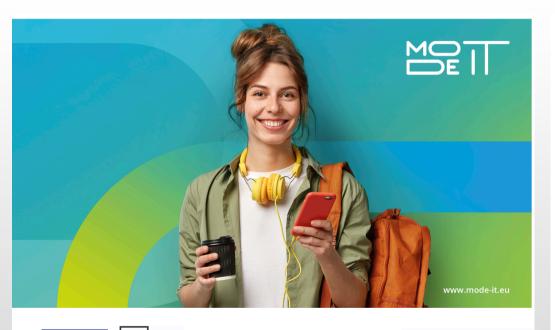
Workplan

- 1. Evaluation of the competency areas of the self-assessment tool using a focus group.
- 2. Development of an online questionnaire as basis of the self-assessment tool.
- 3. Technical implementation of the self-assessment tool on the Moodle learning management platform.
- 4. Test phase with 50 academic staff and instructional designers from the institutions of the project partners.
- 5. Evaluation and assessment of the results.
- 6. Fine-tuning of the self-assessment tool (technical and content-related)





Structure of the SAT



ANADOLU











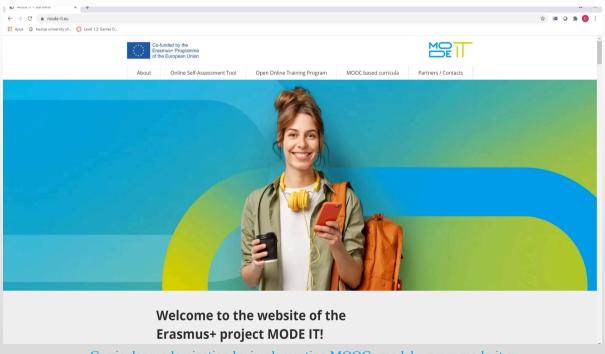
Curricular modernization by implementing MOOCs model – www.mode-it.e

6/9/22





User Guide for MODE IT SAT



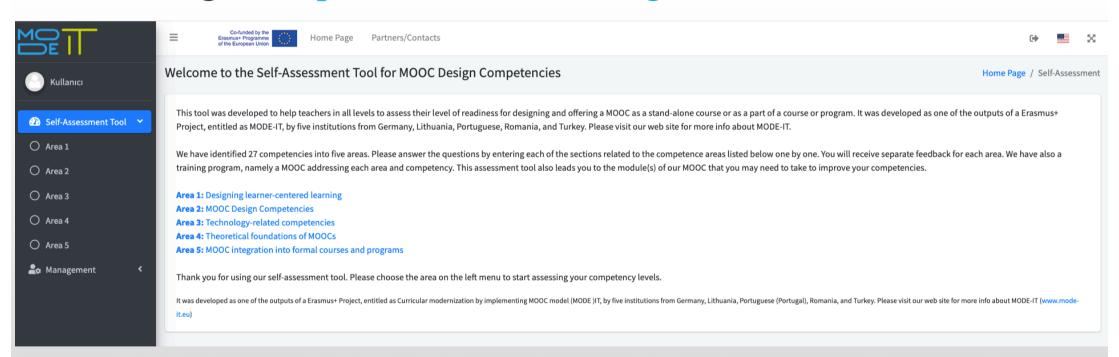


An insight: https://open.ktu.edu/course/view.php?id=74





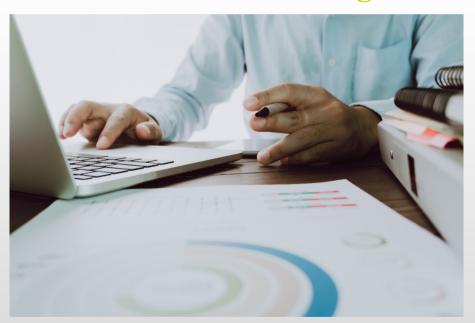
Stand alone Version An insight: https://acikveuzaktanogrenme.com







IO2: Open Online Training Programme "Introduction to MOOC design & delivery"







IO2: Open Online Training Programme "Introduction to MOOC design & delivery"

- ✓ Support to HEI academic staff when designing & delivering MOOC-based curricula
- ✓ Modular structure
- ✓ Offered as MOOC itself
- ✓ Completion of separate modules or the entire MOOC possible
- ✓ Linked to IO1
- ✓ Language: English







IO2 Open Online Training Programme: Learning goals

Develop a deep understanding about essential competencies of student-centered learning

Upon completing the training, participants will be able to:

Design a course based on the most frequently employed competencies in MOOCs

Develop effective, efficient and appealing learning materials for MOOCs

Analyse and select the effective delivery modes of MOOCs

Successfully integrate MOOCs in formal curricula





IO2 Open Online Training Programme: Structure

Modular structure: 5 self-contained modules:

- ✓ M1: Foundations of Online Learning
- ✓ M2: MOOC Course Design
- ✓ M3: MOOC content production
- ✓ M4: MOOC delivery
- ✓ M5: MOOCs in formal learning
- + final project work.

Workload of each module: approx. 12 hrs

Workload of the entire training: approx. 80 hrs

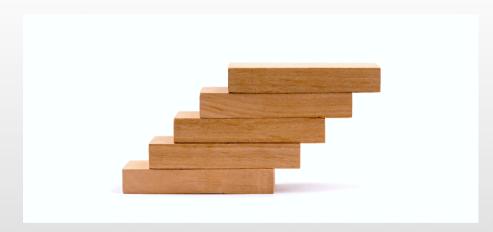


Photo by Volodymyr Hryshschenko on Unsplash





IO2 Open Online Training Programme: Module 1 Foundations of Online Learning (led by KTU)

Essentials of competence-based learning

Learning activities that address the identified competences and/or learning objectives

Activities that foster learners' engagement, collaboration & teamwork

Integration of different formative and summative assessment methods and tools

Provision of feedback on-time





IO2: Module 2 MOOC course design (led by AU)

Anadolu Team



Elif TOPRAK



Evrim GENÇ KUMTEPE



Cengiz Hakan AYDIN





Instructional Designers from Anadolu



Ela ÖZBEK AYGÜN



Abdullah SAYKILI





Design and Development

START



CONCEPTION



Analyses

- Learning Objectives
- Instructional Strategy
- Learning Resources

- Content
- Supplementary materials

Decide on

- Production of
- Videos
- Supplementary materials

IMPLEMENTATION

- Quizzes
- Assessment

EVALUATION



Trial with

- PhD students
- Revise
- Feedback from partners
- Re-production of video intros

DELIVERED



Offered to

- •111 registered
- •26 completed learners





Module Objectives and Organization

Five Objectives, Five Lessons (Learning Units)

Introduction

- 1. Explain specific theoretical considerations about MOOCs
- 2.Design online learning scenarios for large cohorts of students
- 3.List the important points to consider in designing learning materials for MOOCs
- 4. Create assessment activities for MOOCs
- 5. Assess the quality of MOOCs

Module wrap-up

- Assignment
- Evaluation

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Module Competencies

Lessons	Competencies
Theoretical considerations	Basic concepts Recognition of Prior Learning Self-Regulated Learning
Online learning scenarios	Learner Profiles Interaction Types Building Learning Communities
Learning materials	Collaborative Learning Activities Accessibility and Inclusion
Assessment activities	Digital Assessment Strategies Designing Reflective Strategies
Quality	Quality Assurance

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Lesson Structure

Each lesson (Learning Unit)

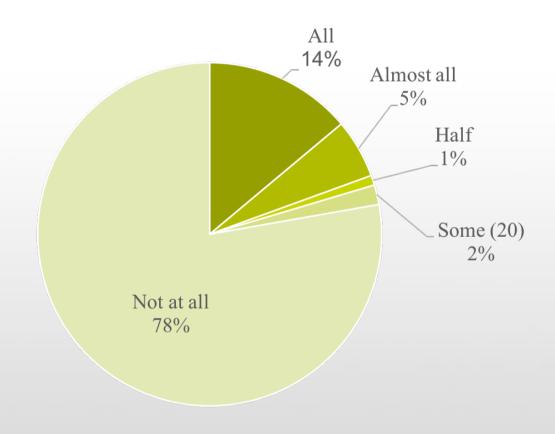
- 1. Intro video
- 2. Information presentation for competence # 1 (video lecture)
- 3. Supplementary learning material for competence # 1 (text-based, enriched with links)
- 4. Information presentation for competence # 2 (video lecture)
- 5. Supplementary learning material for competence # 2 (text-based, enriched with links)
- 6. Information presentation for competence # N (video lecture)
- 7. Supplementary learning material for competence # N (text-based, enriched with links)
- 8. Quiz





Participation

Total 110 participants





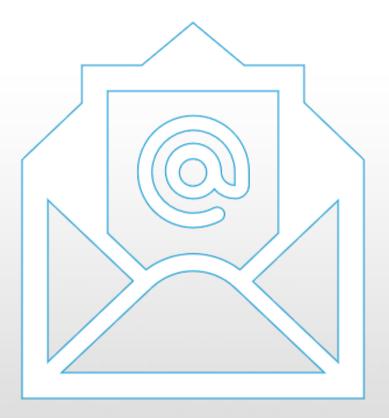


For more info

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IO3 Open Online Training Programme: Module 3 MOOC content production (led by UPT)

Apply various learning design principles to produce open digital learning materials

Apply good practice examples in the creation of high-quality educational videos using different video recording and editing tools.

Use specific tools to produce other types of content like presentations with voice-overs and animated presentations.

Assess the quality of OERs and use variety of strategies to adopt these resources in MOOCs





IO3 Open Online Training Programme: Module 4 MOOC delivery (led by IPP)

Understand the different possibilities offered by the different MOOC providers

Design and offer a MOOC-based learning process on various online education delivery tools including LMSs, Web Conferencing, Web 2.0 tools.

Apply different online communication tools effectively in accordance with the ethical and education principles

Apply pedagogical strategies involving social networking in MOOCs and use them in new situations

Analyze learners' data collected in any learning environment.





IO3 Open Online Training Programme: Module 5 MOOC in formal learning (led by FHM)

Explain the importance and methods to integrate a MOOC in a formal course

Assess the effectiveness and endurance of integrating MOOC-based pedagogical approaches into a formal course of program

Design a course that requires the integration of a MOOC as a relevant component of the learning process

Design a formal study program that requires the integration of MOOCs into the learning process

Design an environment and activities for peer support for professional development of instructors.





IO2 Open Online Training Programme: Instructional design

Designed & delivered as MOOC:

- ✓ open access,
- ✓ self-paced learning,
- ✓ large-scale feedback & peer interaction,
- ✓ Bite-sized learning,
- ✓ Contents: learning videos of length of approx. 8 minutes, supporting texts, quizzes, assignments



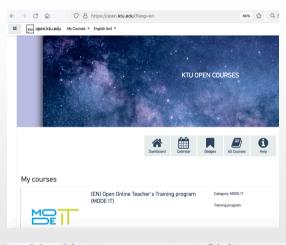
Photo by James Sutton on Unsplash





IO2 Open Online Training Programme: How to access?

- ✓ Option 1: LMS Moodle of partner KTU https://open.ktu.edu/course/view.php?id=74
- ✓ Option 2: MOOC platform iversity https://iversity.org/en/courses/introduction-to-mooc-design-and-delivery
- ✓ Both options are free of charge!(iversity: only certificate has to be paid).









IO2 Open Online Training Programme: Piloting

Module	Completed by persons (in absolute figures)	Completed by persons (in percent, calculated based on the number of active participants: n = 52)
Module 1	49	94%
Module 2	27	52%
Module 3	21	40%
Module 4	20	38%
Module 5	16	31%

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Table 1: Level of the MOOC completion (n = 52, taken from the Moodle statistics)

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IO2 Open Online Training Programme

✓ Your questions?

✓ Feedback?

✓ Suggestions?

✓ Happy to answer them!





Intellectual output 3:

MOOC-based formal curricula – integration of MOOC-based pedagogies to the course design







IO3 MOOC-based curricula: Methodology

Definition of pilot teachers (2-3 per HEI, attendees of the MOOC) and instructors

Analysis of students groups and of curricula

Definition of curricula/modules/units to be redesigned

Design and development of MOOCs/MOOC-based units

Delivery of MOOCs and evaluation (December 2021 – April 2022)





IO3 MOOC-based curricula: MOOCs

- ✓ In total, 12 MOOCs in local languages developed (planned: 5 MOOCs), i.e.
 - Multimedia technologies for e-learning
 - Artificial intelligence
 - Competitor analysis
 - Power systems
 - Computer networks
 - Internet of Things
 - Research Ethics in Educational Sciences
- Volume: between 1-2 ECTS

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IO3 MOOC-based curricula: specifics

The developed MOOCs were delivered to:

Formal learners

(enrolled HEI students from the selected curricula)

Non-formal learners

(any learners interested in taking a MOOC)

MOOC delivery platforms: institutional LMS





IO3 MOOC-based curricula: cases from

- Portugal
- Romania
- Germany
- Turkey
- Lithuania





MODE IT

Curricular modernization by implementing MOOCs model

IO#3: Competitor Analysis A MOOC created and delivered by FHM















MOOC Competitor analysis in a nutshell:

- Workload: 1 ECTS
- Subject: Company Founding
- MOOC designers: Prof. Dr. Ralf Brüning, Prof. Dr. Sascha Lord
- Formal learners: 17 students in the 9th trimester of the Bachelor study program Craft Management
- Non-formal learners: 32 persons
- Design & development: October/November 2021
- Implementation: December 2021 January 2022





What has been done differently?

- Focus on self-regulated learning
- Different type of contents
- Use of Moodle
- Assessment: mainly self-assessment with the opportunity to interact / discuss with other students and professor in a virtual forum





Content & structure of the MOOC:

Basis: defining the learning outcomes!

Structure:

- 1. Goals of a competitive analysis
- 2. Strategic implications
- 3. Suitable instruments / methods
- 4. Summary & conclusion







Introductory videos:









Written texts on the individual topics:



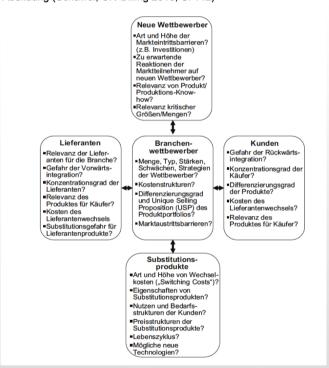


2. Wettbewerbsanalyse: Ziele, Inhalt und strategische Ebene

Um den Erfolg einer Unternehmung sicherzustellen, müssen nachhaltige Wettbewerbsvorteile gegenüber den Konkurrenten geschaffen werden. Ein hoher Stellenwert zur Ermittlung, zum Auf- und Ausbau solcher Wettbewerbsvorteile wird hierbei der Wettbewerbsanalyse beigemessen. Wobei der Begriff "die Wettbewerbsanalyse" ein wenig vereinfacht scheint, denn: erstens gibt es eine Vielzahl von Herangehensweisen und Instrumenten, um das Wettbewerbsumfeld einer Unternehmung zu analysieren und zweitens ist sie grundsätzlich in eine weiter gefasste Situationsanalyse eingebettet, welche schließlich die Grundlage aller strategischen Marketing- und damit Unternehmungsentscheidungen bildet.

Darüber hinaus hängt die konkrete Durchführung einer Wettbewerbsanalyse auch von der Situation bzw. dem Anlass ab: So können sich die Anforderungen und auch die Kriterien, die zu einer Wettbewerbsanalyse herangezogen werden, stark unterscheiden: bei einer Unternehmungsgründung gelten andere Schwerpunkte als z.B. bei einer Produktinnovation oder aber einer strategischen Neuausrichtungen der Konkurrenz. Neben diesen besonde-

Abbildung (Schawel, C. / Billing 2018, S. 142)







Further references:

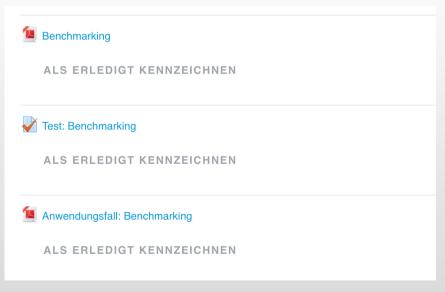
Literaturempfehlungen:

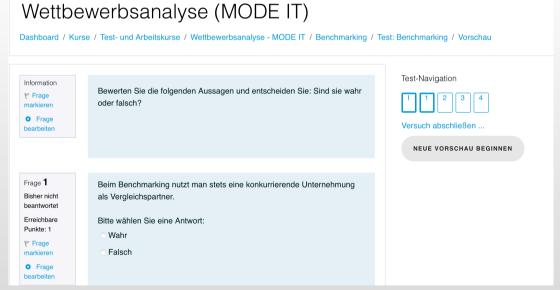
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- Welge, M. K. / Al-Laham, A. / Eulerich, M: Strategisches Management. Grundlagen Prozess – Implementierung. 7. Aufl., Wiesbaden 2017, S. 355 ff.
- Schreyögg, G. / Koch, J.: Management. Grundlagen der Unternehmensführung: Konzepte Funktionen Fallstudien. 8. Aufl., Wiesbaden 2020, S. 170 ff.





Tests & use cases:

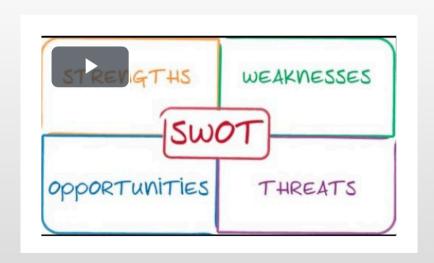








additional selected youtube videos:

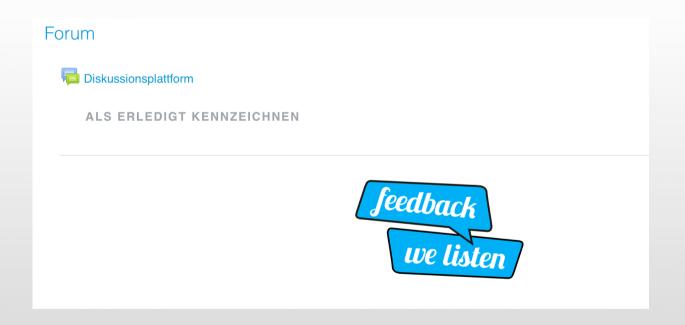








Discussion platform:







Students' feedback (formal & non-formal learners together)

PROS

- Diverse type of contents (cases, downloadable materials, quizzes)
- Good addition to business studies
- Clear links to the overall study subject
- Great chance to deepen the knowledge in this topic

CONS

- Supporting texts do not fully correspond with the wording used in the learning videos
- A bit too difficult without previous knowledge of the topic





MODE IT

Curricular modernization by implementing MOOCs model

IO#3: Ethics in Scientific Research A MOOC created and delivered by Anadolu











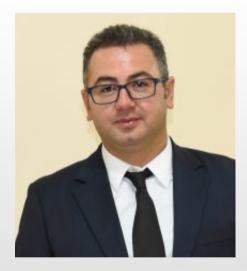




Teachers & Support Staff



Aslıhan BAĞCI SEZER



Çağlar KARADUMAN



Ela ÖZBEK AYGÜN



Abdullah SAYKILI





Design and Development

IMPLEMENTATION DELIVERED START DESIGN EVALUATION Offered to Decide on Production of Trial with Identify a •143 registered • 2 PhD students Content Videos formal •77 completed Materials Supplementary Quality check course & learners Revise Assessment materials topic Quizzes





Course Objectives and Organization

Four Objectives, Four Modules

Introduction

- 1. Discuss the importance of ethics in scientific research
- 2. Explore the types of ethical violations in scientific studies
- 3. Identify the ethical guidelines must be implemented in the research
- 4. List the consequences of ethical violations

Module wrap-up

- Assignment
- Evaluation





Module Structure

- 1. Intro video
- 2. Video lectures (2-3 videos each focusing on one specific topic, no longer than 10 minutes)
- 3. Supplementary learning material (text-based, enriched with links)
- 4. Quiz





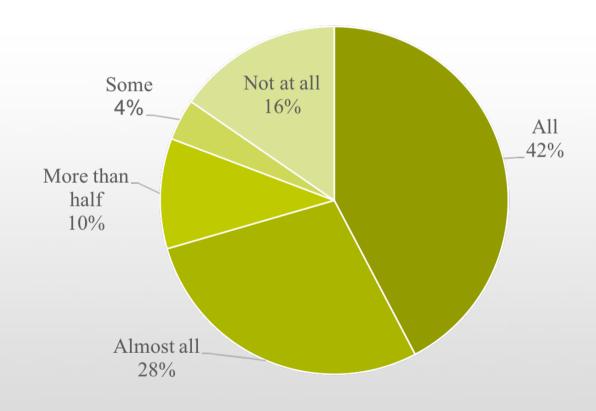
Participation

Total 143 participants

- •45 Formal in 2 courses
- •98 informal

71 Survey Completion

- •32 Formal
- •39 Non-formal



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Lessons Learned

- Marketing (word-of-mouth & social media)
- Participation to the discussions
- Integration is possible and easy
- Anyone can easily create and integrate
- Increased satisfaction and learning



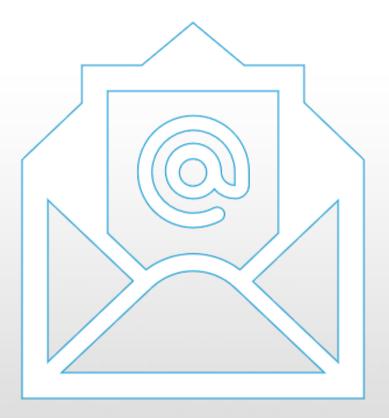


For more info

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MOOCs recognition: FHM' approach

The "Pick & Study" module study





Goals

- Under IO3, the project team has shown that innovative learning scenarios in the form of a MOOC can be integrated into university curricula.
- The reverse conclusion is, that MOOCS developed as stand-alone variants, can also be credited to a university degree program if certain standards are met.
- The FHM has created an example with its "Pick & Study" module course.





Target group

- People interested in further education.
- People who do not want to study, but only want to learn individual contents/ improve der competences.
- People who need ECTS for credit in a higher education context.
- Participants with and without access to higher education.
- Those interested in further education and appreciate maximum flexibility in terms of learning location, duration and timeframe.





General conditions

- Pick & Study Program is subject to a fee.
- Distinction is made between participants who wish to receive a certificate of attendance and those who wish to receive a university certificate.
- Access to higher education is required to earn CP (certificate course).
- There is no limitation of participants.
- The duration of a certificate course is 6 months.
- A certificate course ends with a module examination.
- The awarding of CP requires the passing of the final examination.





Content

- Pick & Study offers FHM study modules prepared as MOOCs.
- The defined learning objectives per course and the implemented learning content are based on the module manuals of the FHM.
- The credtit points to be acquired correspond to a predefined workload.
- The online study materials are provided via the Moodle learning management system.
- The online study material is flanked by 8 live virtual seminars.





Single and yet integrated

- The flanking courses are attended together with enrolled students of FHM.
- The examinations are taken by teachers of the FHM.
- The acquired CP as well as the grade of the final examination are documented by means of a university certificate.





Have a look: Best practice

Pick & Study Module "Agile Project Management"

URL: https://fhm-online-university.de/course/view.php?id=16243

Password: #BeingAgile





Structure of the virtual learning environment

- The author introduces him-/ herself
- Roadmap to the module content
- General info and tips for self-study
- Learning videos (basically for introduction and as summary)
- Description of the workflow for working through the specific course
- Mediation of the learning contents in so-called "submodules"
- Download area
- Feedback area





Structure of the submodules

- Overview of the learning content
- Summary as PodCast
- Qualification goals
- Contents on the basis of scripts
- Exercises, tests, tasks
- Further literature and sources







Interested in Pick & Study?

Visit our Website:

www.fhm-onlineuniversity.de/iwk/pick-study/





Thank you for your attention!











