Lübeck University of Applied Sciences

Open for career advancement

Strategic implementation of „professional Massive Open Online Courses“ (pMOOCs) as an innovative format for transparent part-time studying

Rolf Granow, Andreas Dörich and Farina Steinert

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Overview

1. Introduction
2. Lübeck University of Applied Sciences – Background Information, Online Education and MOOCs
3. The Idea behind the Project
4. The Research Project – Research Questions, Work Packages, Expected Outcome and Sustainability
Introduction

- 3 ½ + 2 ½ year research project, started in August 2014
- Funded by the Federal Ministry of Education and Research
- Title: Strategic implementation of „professional Massive Open Online Courses“ (pMOOCs) as an innovative format for transparent part-time studying
- Expected outcome:
  - Part-time study courses for different target groups, offered in the MOOC-formate, leading to formal certificates
  - Answer to several research questions and the utilization of the results to other institutions of higher education
  - Sustainable change at LUAS: (p)MOOCs are a strategic cornerstone at LUAS
Strategic implementation of pMOOCs...

Lübeck University of Applied Sciences – Background Information

- Fachhochschule Lübeck - Lübeck University of Applied Sciences
- Educational history on that campus since 1808 (College for seafarers)
- Officially founded in 1973
- Today having 4 faculties, offering 27 study programs
- 4,500 students
- Several spin-offs incl. oncampus ltd.
- Institute for Educational Services (former E-learning-department)
- Professional School founded recently
Strategic implementation of pMOOCs…

Lübeck University of Applied Sciences – Background Information
Strategic implementation of pMOOCs...

Lübeck University of Applied Sciences – Online Education

- Virtual University of Applied Sciences
- 8+ study programs
- 10 universities
- 3,500 students
- Hosted in Lübeck
- Since 1997 / 2001

![Map of Germany showing locations related to Lübeck University of Applied Sciences and Virtual University of Applied Sciences](image-url)
Strategic implementation of pMOOCs…

Lübeck University of Applied Sciences – Online Education
Strategic implementation of pMOOCs...

Lübeck University of Applied Sciences – Networks
Strategic implementation of pMOOCs...

Lübeck University of Applied Sciences – MOOCs

- xMOOC
- 10 chapters in 10 weeks
- 70 videos (240min)
- Weekly competitions for best answers to open questions
- Badges
  - 106 got the last badge
  - 160 others at least one badge
- 2000+ participants
- Multiple Choice Tests + Peer Review + Self Study
- Traditional marketing through Hanseatic Day (print media etc)
- General educational / non-academic / no ECTS
- Average participant had academic background (55%) and was older than 40
Strategic implementation of pMOOCs...

Lübeck University of Applied Sciences – MOOCs

- xMOOC
- 12 chapters
- 22 e-lectures = 300+ min

- homework assignments
- peer reviews
- web conferences

- certificate of participation after online exam (215x)
- 5 ECTS university certificate after written exam at five universities (39x)
- 6374 enrolled participants from all over the world (56% Germany)
- 50+% University Degree
- 50+% Full-time employed
Strategic implementation of pMOOCs...

pMOOCs – the Idea behind the Project

- MOOCs are a field of research
- MOOCs are a field of pilot implementations
- ... but there is no strategic implementation yet!

- MOOCs have other target groups than universities
- MOOCs implicate different didactical approaches than universities
- ... but there is no match yet!

- Universities are opening up and scale their education
- The permeability of the educational system is getting bigger
- ... can MOOCs help to fill out the growing gap?

- Let's have a research project!
Strategic implementation of pMOOCs...

7 Research Questions Guiding through the Project

1. How can pMOOCs be presented in content, didactically and technically?
2. How can transition from pMOOC participants into the formal higher education system be supported effectively?
3. How can non-formal learning results from pMOOCs be credited?
4. How can pMOOCs be established at the university financially and organizationally?
5. How can social networks be used for pMOOC development, in order to bring target group orientation and academic profile in an optimum balance?
6. How can MOOCs of other institutions be integrated value-adding?
7. Which resources are needed for the development of sustainable pMOOCs?

Action research + interviews + workshops + surveys + secondary research

Researchers and research objects on equal level
Strategic implementation of pMOOCs…

6 Work Packages Organizing the Project

Lübeck University of Applied Sciences: Open for career advancement

Strategic implementation of Massive Open Online Courses (pMOOCs) as an innovative format of permeable part-time studying

WP 1 Technology/Didactics
Development, testing, evaluation and implementation of technical and didactic scenarios of "professional Massive Open Online Courses"

WP 2 Competence
Competence assessment, measurement of learning outcomes in "professional Massive Open Online Courses" and design of transitions from non-formal to formal learning

WP 3 Networks
Design, test and evaluation of a bilateral dialogue between the university and target groups in social networks in order to bring requirements of the target groups and priorities of developing of pMOOCs in accordance

WP 4 Organization
Concept and establishment of alternative scenarios for the sustainable organization for the recognition of the results of "professional Massive Open Online Courses" in the University

WP 5 Media
Medial implementation of "professional Massive Open Online Courses" to pilot courses
Strategic implementation of pMOOCs...

Work Package 1: Technology / Didactics

**Development, Testing, Evaluation and Implementation of Technical and Didactic Scenarios of "professional Massive Open Online Courses"

- Didactic scenarios, geared to the target group
  - xMOOCs for undergraduate level? (video & peer review based, rather fixed learning path)
  - cMOOCs for (post)graduate level? (collaborative, connectivism, free learning path)
- 6 pMOOCs will test 6 different scenarios = 6 evaluations

- Technical platform has to display the scenarios and the content but will not be the focus of this project

- (we are developing a technical platform – MassiveOpenOnlineInternationalNetwork)
Strategic implementation of pMOOCs...

Work Package 2: Competence

Skills Assessment, Measurement of Learning Outcomes in pMOOCs and Design of the Transitions from Non-Formal to Formal Learning by Crediting Scenarios

- Competences and learning outcomes are more than classic knowledge – and can be gained on various ways (formal / non-formal / informal)
- Role of Universities changes: acquisition of competences happens outside university's reach, but will be credited
- (Reminder: The learning outcome is what we look at, not the learning path)
- Quality management and learning measurement will change, transparent processes needed
- Non-formal learning becomes part of formal learning by recognition
- Plan: recognition of any pMOOC certificate in any online study program in our network
- Processes change, resources will be necessary, national legislation has to be observed
Strategic implementation of pMOOCs…

Work Package 3: Networks

*Design, Test and Evaluation of a Bilateral Dialogue between the University and Target Groups in Social Networks in order to Bring in line Requirements of the Target Groups and Priorities of Developing pMOOCs*

- Dialogue with stakeholders through social media
- Participation of stakeholders through social media
- Target Groups decide on content, scenarios etc.
- Social media can help to gain scope
- Social media can help to reach multiplicators
Work Package 4: Organization

Concept of Alternative Scenarios for the Sustainable Organization and to Sustained Operation of pMOOCs at the University

- Up to now: pilot actions all over Europe
- Target: sustainable structures with resources

- Multiple use of structures and reuse of content reduces costs (scale effects and scope effects)

- Can face-to-face classes be replaced by pMOOCs? Resources could be redirected in the university, MOOCs would become "capacity relevant"

- Other ideas for financing include fees for participation, fees for exams and third party funding
Strategic implementation of pMOOCs…

Connecting Research Questions and Work Packages

<table>
<thead>
<tr>
<th>RESEARCH QUESTIONS</th>
<th>WP 1 TECHNOLOGY/DIDACTICS</th>
<th>WP 2 COMPETENCE</th>
<th>WP 3 NETWORKS</th>
<th>WP 4 ORGANIZATION</th>
</tr>
</thead>
<tbody>
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Strategic implementation of pMOOCs...

Work Package 5: Media

- Multimedia Implementation of “professional Massive Open Online Courses”

- Exemplary implementation of research results in the fields of
  - Entrepreneurship
  - Media computer science
  - Industrial engineering
  - (and many other ideas)

- Gamification of learning
- Badges & highscores in learning

- Use of all existing technologies (from social networks to video conferencing) without boundaries
Strategic implementation of pMOOCs...

Work Package 6: Project Management & Sustainability

- Approach to Sustainability
  - Multiple use of resources
  - Economics of Scale + Economics of Scope
  - Will need financial support & human resources
  - Will change the organizational structure of the University

- Driven by trends like Web2.0 and LifeLongLearning Universities and their role will change – and we want to create this change actively
  - From supply-driven Universities to market-driven Education
  - From passive recipients to digital natives
  - From formal to non-formal and informal learning
  - Global competition

- Active reframing of the University’s strategy to keep pace with the best
### Strategic implementation of pMOOCs…

#### What’s next?

<table>
<thead>
<tr>
<th>Year</th>
<th>WP 1</th>
<th>WP 2</th>
<th>WP 3</th>
<th>WP 4</th>
<th>WP 5</th>
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<tbody>
<tr>
<td>2014</td>
<td>secondary analysis</td>
<td>design measuring instruments</td>
<td>testing measuring instruments</td>
<td>design</td>
<td>secondary analysis</td>
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<tr>
<td>2015</td>
<td>MOOC-Scenario 1+2</td>
<td>testing</td>
<td>evaluation</td>
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<tr>
<td>2016</td>
<td>MOOC-Scenario 3+4</td>
<td>evaluation</td>
<td>test of dialogue scenarios</td>
<td>interviews stakeholder</td>
<td>interviews stakeholder</td>
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<tr>
<td>2017</td>
<td>MOOC-Scenario 5+6</td>
<td>testing measuring instruments</td>
<td>evaluation</td>
<td>testing measuring instruments</td>
<td>model development for quality assurance / business models / resource calculation</td>
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<tr>
<td>2018</td>
<td>publications</td>
<td>evaluation</td>
<td>testing of dialogue scenarios</td>
<td>evaluation</td>
<td>publications</td>
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</tbody>
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**TECHNOLOGY/DIDACTICS**
- MOOC-Scenario 1+2
- MOOC-Scenario 3+4
- MOOC-Scenario 5+6

**COMPETENCE**
- Secondary analysis
- Design measuring instruments
- Testing measuring instruments
- Evaluation
- Stakeholder interviews
- Crediting
- Model development for flat, individual and combined credit procedure
- Publications

**NETWORKS**
- Secondary analysis
- Design of dialogue strategies and instruments
- Testing of dialogue scenarios
- Evaluation
- Testing of dialogue scenarios
- Evaluation
- Publications

**ORGANIZATION**
- Secondary analysis
- Author address
- Interviews stakeholder
- Model development for quality assurance / business models / resource calculation
- Publications

**MEDIA**
- Secondary analysis
- Media Development
- Provision of OER content
Strategic implementation of pMOOCs…

What’s next?
And until then?

- www.mooc.oncampus.de (in German language only)
Thank you very much for your attention. Any questions?

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