



SAARLAND
UNIVERSITY



MOOC Taxonomies and Design

Armin Weinberger, Helmut Niegemann, Allison Kolling



Co-funded by the
Erasmus+ Programme
of the European Union

Overview

- Motivation for MOOC participation
- Challenges of Mass education
- Importance of taxonomies
- xMOOC v. cMOOC
- Design Based Categorization
 - Schneider and Conole



Co-funded by the
Erasmus+ Programme
of the European Union

Different Motives for Learning in MOOCs

- to make a (better) living
- for personal development (Bildung; *Humboldt*)
- to „emerge from self-imposed immaturity“ („selbstverschuldete Unmündigkeit“; *Kant*) to become autonomous and free
- to participate in a community and engage in critical dialogue („prática da liberdade para transformar o seu mundo“; *Freire*)



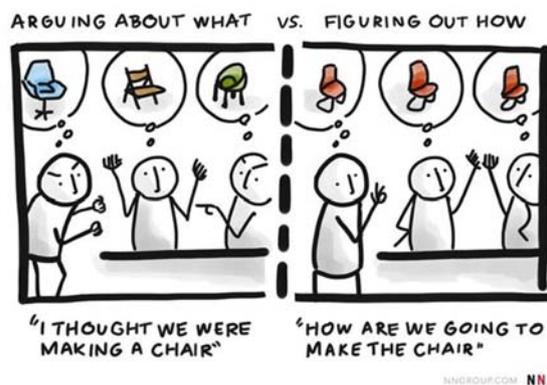
MOOCs enables learning for all - why don't they?

- Technical problems
- Learner requirements
- Motivation and lack of commitment
- Bad or non-existent instructional design



Why are MOOC Taxonomies important?

- Allows for a shared vocabulary
- Makes comparing MOOCs easier and more accurate
- Can help make design and evaluation decisions



Co-funded by the
Erasmus+ Programme
of the European Union

Traditional Split

– cMOOC v. xMOOC

- First MOOCs were cMOOCs (connectivist)
 - cMOOC focus on collectively creating knowledge
 - Highly interactive and users are partially responsible for creating content
 - Community is extremely important
- Most current MOOCs are xMOOCs (eXtension)
 - xMOOC resemble traditional lecture course
 - Usually consist of video lectures and quizzes
 - Users often complete the course completely independent of one another
- Very over simplified as most MOOCs are a cross between the two



Miquel Duran:
<https://www.slideshare.net/quelgir/moocs4all-video33>



Co-funded by the
Erasmus+ Programme
of the European Union

Design Based Categorization

- Several approaches have appeared since 2013
- Do more than provide a common vocabulary
 - Provide a base for making overarching design decisions
 - Provide criteria for evaluation and comparison

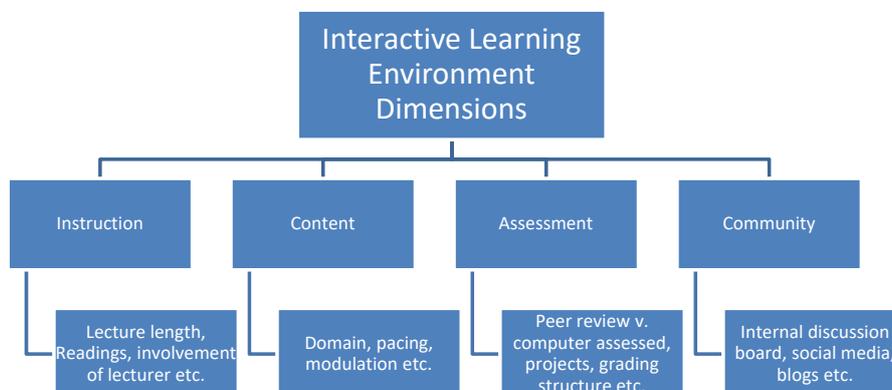


MOOCspace (Schneider 2013)

- MOOCs are described on two levels-general and ILE(Interactive learning environment)
- General includes subject matter, audience, and use
 - Name
 - University or Institution
 - Platform
 - Domain
 - Educational level
 - Target Audience
 - Pace
 - Expected workload
 - Accreditation



MOOCspace(Schneider 2013)



Schneider, E. (2013). Welcome to the moospace: a proposed theory and taxonomy for massive open online courses. In Proceedings of the Workshops at the 16th International Conference on Artificial Intelligence in Education (Vol. 1009, pp. 2–9). Presented at the AIED'2013, Memphis, USA: E. Walker and C.K. Looi Eds.



Co-funded by the Erasmus+ Programme of the European Union

12 Dimensions (Conole 2014)

- Move away from Acronyms and towards a comprehensive view of MOOCs
- Identified 12 aspects of MOOCs that useful for description, comparasion and evaluation

12 dimensions of MOOCs

- | | |
|---------------------------|------------------------|
| – Open | – Quality Assurance |
| – Massive | – Amount of reflection |
| – Use of Multimedia | – Certification |
| – Degree of communication | – Formal learning |
| – Degree of collaboration | – Autonomy |
| – Learning pathways | – Diversity |



Co-funded by the Erasmus+ Programme of the European Union

12 Dimensions (Conole 2014)

- Each Dimension ranked Low to High
 - High ≠ Better
 - Based on the goals and target audience

Ex: An optional course for Medics in a local authority in UK

Dimension	Degree of evidence
Open	High - The course is built using open source tools and participants are encouraged to share their learning outputs using the creative commons license.
Massive	Low - The course is designed for Continuing Professional Development for Medics in a local authority.
Use of multimedia	High - The course uses a range of multimedia and interactive media, along with an extensive range of medical OER.
Degree of communication	Medium - The participants are encourage to contribute to a number of key debates on the discussion forum, as well as keeping a reflective blog of how the course relates to their professional practice.
Degree of collaboration	Low - The course is designed for busy working professionals, collaboration is kept to a minimum.



Conole, G. (2014). A new classification schema for MOOCs. *The international journal for Innovation and Quality in Learning*, 2(3), 65-77.



Co-funded by the
Erasmus+ Programme
of the European Union

Advantages of Design based Categorizations

- Chance to reflect on the goals and needs of the MOOC
- Design with the end in mind- Consider evaluation criteria early on
- Compare apples to apples in the design and evaluation stages.



Co-funded by the
Erasmus+ Programme
of the European Union