



ACT-COI: An Asynchronous Community of Inquiry

Building a Community of Inquiry in a fully asynchronous Master program
by fostering student activity and interactivity

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Context:

100% asynchronous learning

- Online-based postgraduate master program in Health Information Management
- Target group: Healthcare professionals from Germany, Austria, Switzerland
- Pedagogical focus: active learning, critical thinking, interaction
- Fully online (100%), 120 ECTS Credits, asynchronous design:
 - No face-to-face meetings
 - no Zoom meetings
 - all learning & discussions in Moodle

Our challenge

- ✓ How to build engaging group dynamics in the asynchronous online learning?
- ✓ How to keep motivation and activation in asynchronous online learning?
- ✓ How to build social presence in asynchronous online courses?

Our approach

- ✓ Socio-constructivism pedagogy
- ✓ Community of Inquiry (CoI)
- ✓ Etivities: Structured, interactive online learning activities (see example)
- ✓ Role of instructor: Facilitator and coach
- ✓ All module follow the same pedagogy and structure
- ✓ Competence-based assessment, aligned with learning objectives

Etivity 3.1: What are the key concepts of machine learning?

Everybody is talking of artificial intelligence (AI) and machine learning (ML): If we want to successfully apply machine learning methods, we need to know the key concepts.

Goal: Be able to explain the key concepts of machine learning.

Task: Read the following review paper to obtain an insight into the key concepts of machine learning:

Doupe P, Faghmous J, Basu S. Machine Learning for Health Services Researchers. Value Health. 2019;22(7):808-815. doi:10.1016/j.jval.2019.02.012. PUBMED Link (free full text available): <https://pubmed.ncbi.nlm.nih.gov/31277828/>

Identify the key concepts of the paper. Create a mind map with the key concepts of the paper and post the resulting image. Code which concepts were clear or unclear (e.g., by using different colors for the nodes). We will further discuss this in our next meeting. Try not highlight not more than three concepts as unclear. Post what concepts are unclear.

Dialogue begins: Everybody should contribute at least one post discussing similarities and differences of the identified key concepts and the classification of clarity.

Instructor's role: I will follow your discussions and provide additional input or answer questions if needed.

Timing: 22. April

Expected time effort: 6 – 7 hours.

Since 2017: 120+ students from 6+ countries in this Master's program
< 10% dropout rate, high student satisfaction
Clear gain in professional, digital, and transversal competencies