Towards defining a Quality Reference Framework for MOOCs focusing on personalisation & adaptation

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Research Problem
• MOOCs’ openness: consequence a variety of users learning styles, background and motivation
• Primary weakness:
  • largely flat and presentational nature
  • poor learning experiences & low engagement
• Among categories least researched: personalised and adaptive learning in MOOCs (Sangrà, et al., 2015)
• Need for adaptation and personalisation in order to enhance engagement & quality of learning experience (Bakki et al., 2015)
• Additionally, lack of a standardised quality & evaluation framework that could support (Drachsler & Kalz, 2016):
  • evaluate the impact of personalisation
  • compare the effects of different MOOCs

Aim
• Standardised evaluation quality framework (QF) for MOOCs focusing on personalisation & adaptation
• Empirical evidence of the correlation between personalisation & quality of learning experience

Research questions
• Which are the personalisation services that can have effects on the quality of learning experience if transferred in MOOCs?
• Which quality indicators can be validated to measure & evaluate the impact of personalisation of MOOCs?
• How can these selected personalisation services be described & classified?
• How can LA be brought into scale & inform the personalisation of MOOCs (LD) in order to provide quality learning experiences?
• What are the effects that the selected personalisation services have on selected indicators (e.g. learners’ performance, achieved outcomes, collaboration, engagement, & satisfaction)?

Methods
• Design based research and mixed-methods of data collection will be deployed for the experiments such as surveys, observations, interviews, learning analytics (LA), pre- and post-tests and student products

Research Design
• Phase I: Conceptual Design of QRF
  • Initial design of QRF regarding MOOC personalisation services
• Phase II: Validating the framework. The validation will be based on:
  • experts opinions (Delphi study)
  • reviewing running MOOCs
• Phase III: Guidelines for MOOCs personalisation
  • Guidelines/Toolbox on how MOOCs need to be designed, adapted & personalised
  • QRF update

• Phase IV: Design, implement & evaluate a MOOC offering personalised services based on Guidelines
  • Contextualising existing MOOCs for improving their personalisation and adaptation
  • Running 2 pilots with control groups, measurement of impact
  • QRF & Guidelines update

• Phase V: Final fine-tuning of the QRF & the Toolbox

Acknowledgements
This research has been undertaken under the MOOQ project co-funded with support from the EC

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Research Centre for Learning, Teaching and Technology

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