

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

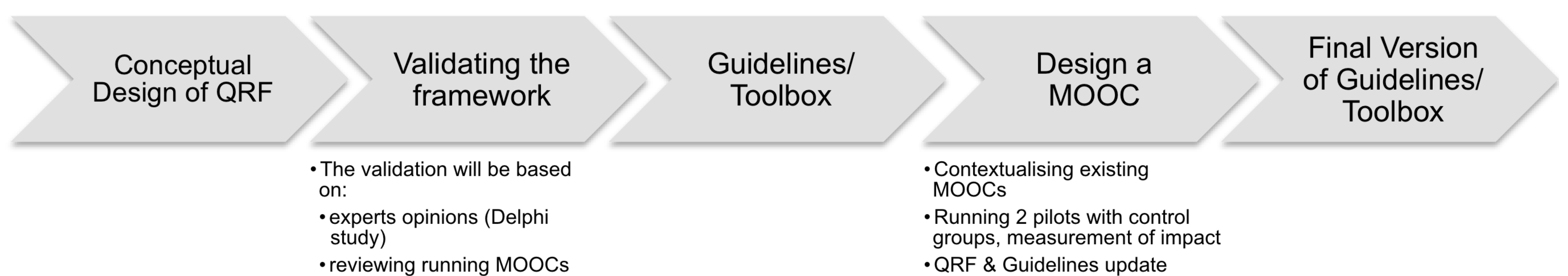
- Standardised evaluation quality framework (QF) for MOOCs focusing on personalisation & adaptation
- Empirical evidence of the correlation between personalisation & quality of learning experience

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 or Group Concept Mapping)
 - 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**

