

# Research on what level various assessment and feedback methods impact students' engagement in MOOCs

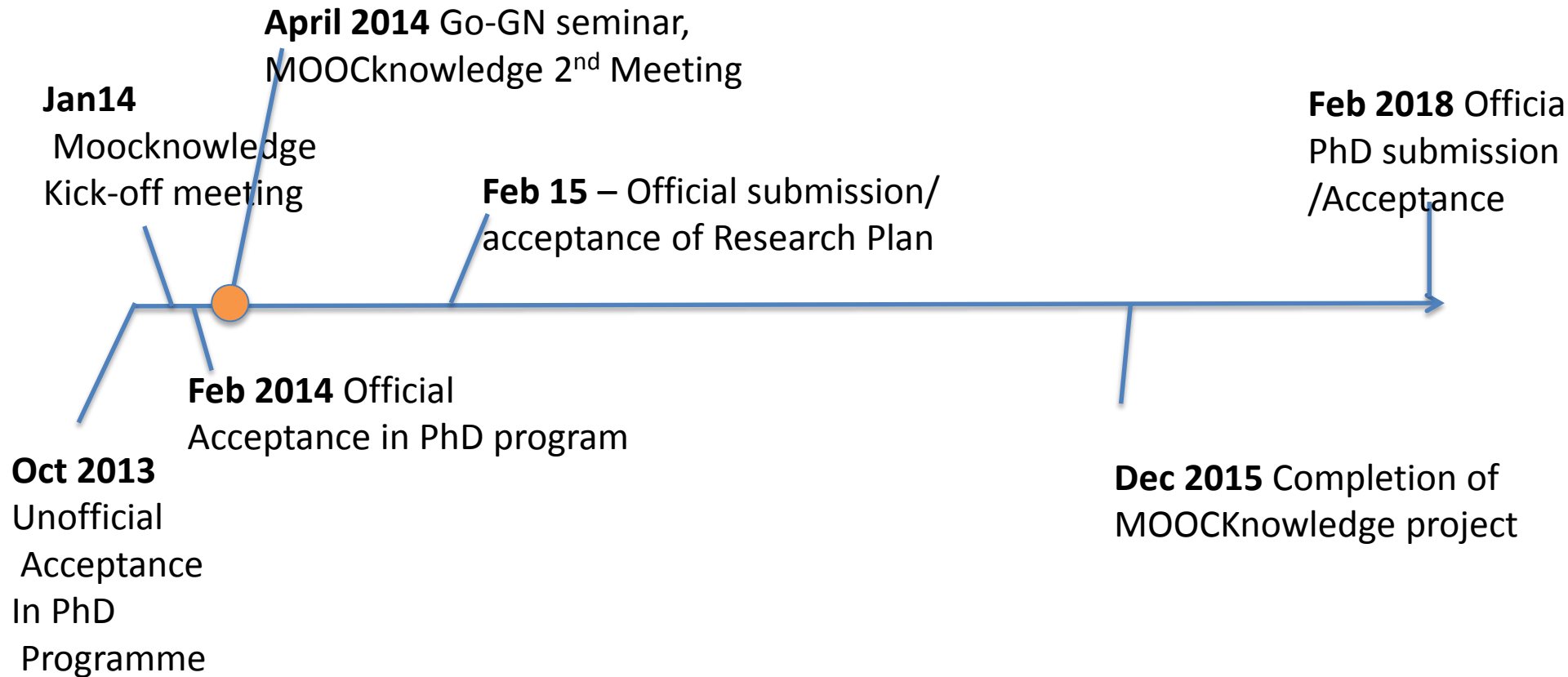
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**PhD Status:** Preparation of the Research Plan

# PhD Timeline



# PhD Connection with MOOCKnowledge

- PhD Aligned with MOOCKnowledge Project
- **MOOCKnowledge Scope:** Study on when, why and how adults are using MOOCs
- **MOOCKnowledge Duration:** 3 years
- **MOOCKnowledge Method:** 5 data collections within 30 months to be analysed based on one Questionnaire
- **MOOCKnowledge Budget:** 60KEUR for travelling and statistical analysis

# Main Problem to be addressed by the PhD

- High drop out rate in MOOCs ca. 90%
- Drop rate due to different motivation factors of the participant
- Ongoing research on these motivation factors
- BUT no significant research to examine the student engagement in MOOCs with respect to the structure of the training provided within a MOOC course

# Born of the PhD Research Question

## Level 1

- How student engagement in MOOCs and motivation is linked with the Course structure

## Level 2

- Educational system highly linked with its assessment procedures (Gibbs et al 2004)
- Feedback provided affects Students' motivation (Shute, 2008)

## Level 3

- at what level various assessment and feedback methods (if any) applied in MOOCs impact students' learning and consequently students' engagement

# Open issue to be addressed

No concrete knowledge on the applied assessment and feedback methods and their percentage of use in the MOOCs community (what kind of assessments and feedback and how much they are used )

No concrete knowledge on the effectiveness of the assessment and feedback methods used in the learning process of MOOCs participants (for which assessment and feedback models, if any, it is evident that are engaging student participation and facilitate the acquisition of the expected learning outcomes in MOOCs

No concrete knowledge on whether and which didactic factors on feedback e.g. time factor, feedback purpose and function, feedback specificity, feedback volume, feedback complexity, feedback type, feedback efficiency, learner characteristics, preparatory actions for self assessment etc. affect student's engagement and the acquisition of expected learning outcomes in the MOOCs

No concrete knowledge on suitable assessment and feedback models and recommendations for students' engagement and acquisition of expected learning outcomes in MOOCs

# Research Aims

Examine what kind of feedback and assessment methods as well as how much are applied in the MOOCs community

Identify any relation between the feedback and assessment methods applied in MOOCs and the student engagement as well as the acquisition of the expected learning outcomes

Identify any relation between didactic factors related to feedback and the student engagement as well as the acquisition of the expected learning outcomes

Describe suitable feedback and assessment models for student's engagement and the acquisition of the expected learning outcomes in MOOCs Probably here we'll have to "create" a scenario where we can implement and analyse the proposal

To analyse related literature and identify various assessment and normative feedback methods that can be applied in MOOCs

## **Approach/Methodology of PhD Research**

To analyse related literature and related didactic factors (e.g. time factor, feedback purpose and function, feedback specificity, feedback volume, feedback complexity, feedback type, feedback efficiency, learner characteristics, preparatory actions for self-assessment, etc) that may impact the learning experience in MOOCs

To analyse related literature and formulate what can be considered as student engagement/active participation in MOOCs

A questionnaire in order to a) examine which feedback and assessment methods as well as related didactic factors and at what level are applied in the MOOCs community, b) identify whether and at what level the identified assessment and feedback methods and didactic factors support the student's engagement and impact the acquisition of the expected students' learning experience in MOOCs

To collect and analyse the questionnaires' responses and conclude which and at what level specific assessment and feedback models as well as related didactic factors a) impact the students' learning experience in MOOCs and b) support the students engagement

# Current PhD Achievements

- Some Literature has been analysed (See bibliography)
- Some Assessment models have been identified
- Some didactic factors have been identified
- Draft Questionnaire on Engagement, Assessment and Feedback has been prepared
- <http://tinyurl.com/moocknowledge>



# Bibliography

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# Questionnaire Structure

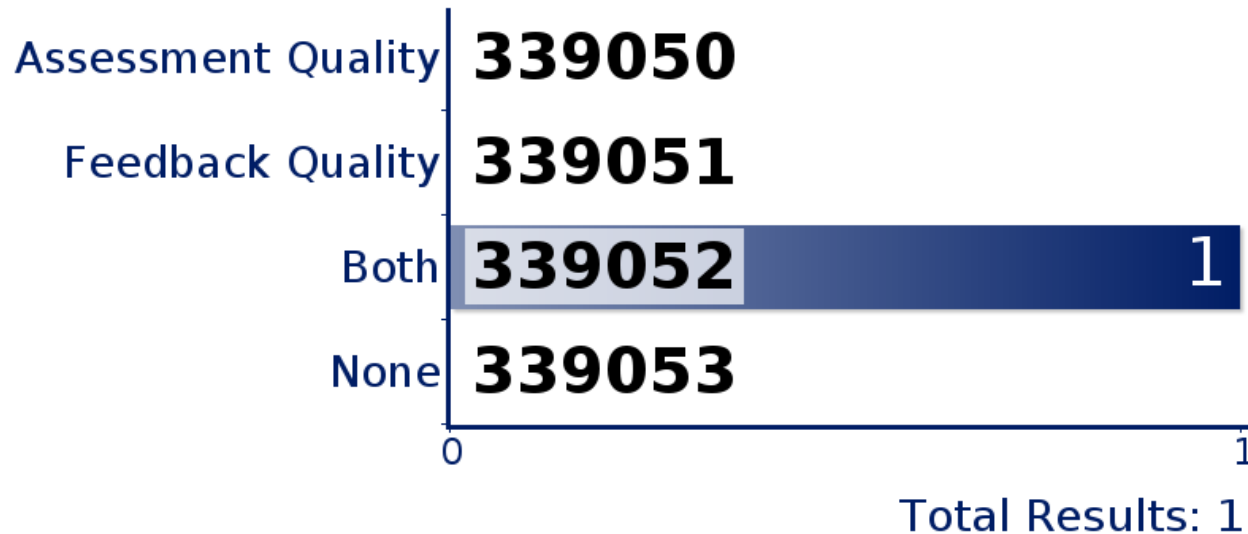
- 1 question for student engagement
- 16 questions for Assessment
- 13 questions for Feedback
- Closed Questions
- Some questions with extra option “*Other please specify*”
- Feedback required on assessing the necessity of each question in relation to the Research Question

# Your view is needed! Please vote

**In your opinion, quality in assessment or  
in feedback is linked more with students  
engagement in MOOCs**

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# Student Engagement in MOOCs

## Suggested Conditions

[Multiple selections possible]

- Watched around half of the course videos
- Read almost all forum discussions
- Participated/contributed in at least one discussion in each of the course topics
- Completed successfully more than two assignments in the course
- Attempted the final exam
- Earned a certificate

# Which Assessment Model(s) in the MOOC

[Multiple selections possible]

- Participation level in forum discussion
- Completing a piece of work and submitting it
- Answering quiz
- Group work
- Implementing other assignments /Other -> please specify

# Which Assessment Model(s) in the MOOC not essential for developing your learning

[linked with the previous question]

- Participation level in forum discussion
- Completing a piece of work and submitting it
- Answering quiz
- Group work
- Implementing other assignments /Other -> please specify

# Assessment achievements

- To discover what you know and can do
- To discover where your abilities are weaker
- To stimulate you to revisit earlier study and motivate you to engage in depth with the subject matter of the course
- To assist the development of your learning
- Other (Please specify)



# Who is responsible to assess

Multiple selection possible

- The student
- the instructor/tutor
- the peers/other students
- the system automatically

# If self-, peer-assessment

- Any guidance on how to assess

# If guidance then which one(s)

- Clear written statements on assessment criteria
- exemplars of performance criteria & performance level definitions
- discussions and reflections wrt assessment criteria and standards facilitated by the instructor/tutor
- workshops organised where students in collaboration with tutors had to devise or negotiate their own assessment criteria
- initiation of assessment exercises for familiarising with assessment criteria and standards before submission
- reviewing feedback in groups, where you are asked to read the feedback comments you have been given earlier on an assignment by yourself or peers, and discuss this in the group
- Asking you to find one or two examples of feedback comments provided by you or by peers that you found useful and to explain how they helped
- having students give each other descriptive feedback on their work in relation to specific criteria
- Other (specify)

# If peer or tutor assessment applicable, then any further guidance

- reviewing feedback in groups, where students are asked to read the feedback comments they have been given earlier on an assignment, and discuss this with peers
- Asking students to find one or two examples of feedback comments that they found useful and to explain how they helped
- having students give each other descriptive feedback on their work in relation to published criteria before submission
- Other (Specify)

# Further Assessment Questions wrt to didactic factors (whereever applicable)

- Volume of Assignments
- Timing of guidance on self-, peer assessments
- How many times the assignment has been self or peer-reviewed
- Link of Assignment with soft skills
- level (↑↓) of engagement from Assessments
- Whether Assessments helped to achieve learning objectives
- Whether guidance on self-, peer- assessment helped to achieve learning objectives

# Own view for Effective Self-, Peer- Assessment Practices (if applicable)

- Clear written statements on assessment criteria
- exemplars of performance criteria & performance level definitions
- discussions and reflections wrt assessment criteria and standards facilitated by the instructor/tutor
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- Other (specify)

# Feedback on MOOCs

- We understand the feedback as a type of support to carry out an assignment or a task. The support can be about the content of the task, planning or monitoring the process of developing the assignment and it can be given while you are developing the activity or at the end.
- Further questions if Feedback applicable

# Type of Feedback

- Written
- Audio
- Video
- Chat or Skype



# The feedback I received was ...

- Individual from the instructor
- Individual from the instructor and peers
- Only from peers
- General (the same for all the participants)

# The feedback I received was...

- Automatic
- By peers
- By the instructor

# Feedback Content

- General comments
- Simple judgement of whether an answer is correct or overall percentage correct
- Solutions of the task/exercise (Informs you of the correct answer to a specific problem, with no additional information)
- Solutions with comments (improvements, common errors, etc.)
- Provision of explanation/comments on why a specific response was correct or not but without presenting the correct answer
- Indicate you a gap between you current and the desired level of performance or goal
- it informs you about an incorrect response and allows you one or more attempts to answer it
- highlights errors in a solution, without giving correct answer
- Worked examples
- Gentle guidance
- Other. (Specify)?

# How much understandable was feedback provided

- Likert scale

# How feedback was provided to you?

- Through dialogue (tried to stimulate response and continuing dialogue)
- Through passive information transmission
- Other (Specify)

# What was the focus of the provided feedback?

- praising effort and focusing students on learning goals
- praising ability or intelligence
- Comparing between your performance with that of other learners
- Comparing performance with other measures of the individual's ability
- Other (Specify)

# When was feedback of your work provided?

- Immediately after submission of my work
- Delayed
- Mixed

# What was the frequency of the feedback provided?

- More frequent than needed
- Less frequent than needed
- As frequent as needed



# Please indicate the length of feedback provided in general

- Feedback was too long
- Feedback was sufficient
- Feedback was too short

How much time in your view did you spent in analysing feedback provided for your answers that you were sure they were correct?

- Little time
- A lot of time
- Same time as for all answers

How much time in your view did you spent in analysing feedback provided for your answers that you were sure they were NOT correct?

- Little time
- A lot of time
- Same time as for all answers
- The feedback provided impacted positively my learning objectives and motivation

# Any suggestion(s) as good practices for effective feedback processes

- One minute questions to be raised by the students before the lesson and answered by them at the end of the lesson (e.g. what was the most important argument in this lesson?)
- To be given the opportunity to specify where you are having difficulties when you submit your assignment for receiving specific feedback there?
- To be given the opportunity to specify as group which question(s) or topics you wish your tutor to address and explain further?
- provide marks on written work only after students have responded on feedback comments
- allocate time for students to rewrite selected pieces of their submitted work
- apply automated testing with feedback that can be attempted as many times as students wish
- allow for draft submissions or resubmissions (i.e. provide feedback on work in progress and increase opportunities for resubmission)
- Introduce two stage assignments where feedback on stage 1 helps improve work on stage 2
- Require some action points during the normal feedback provision
- Involve students in groups in identifying their own action points after they read feedback on their assignments
- Allow resubmissions after providing timely feedback, before it is too late for students to change their work
- receiving corrective advice, not just information on strengths/weaknesses
- limiting the amount of feedback so that is actually read and used
- Receiving feedback that prioritise areas for improvement
- Other (Specify)
- N/A

# Thank you!

For more info  
on Research on what level various  
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