Learner participation in a massive open online course

Wilfred Rubens & Katrien Bernaerts
Inhoud

• Motivation research
• Hypotheses
• Engagement in MOOCs
• Interview
• Personal factors
• Engagement MOOC e-learning
• Design MOOCs and results
• Discussion
SAY 'MOOC'

ONE MORE TIME

Foto: Audrey Watters
Quality issue: research input for improving concept

One more time
Motivation research

• Clow (2013): funnel of participation caused by open and online nature of MOOCs
Motivation research

• Clow (2013): funnel of participation caused by open and online nature of MOOCs

Drop out?
Intentions learners differs
Specific learning needs
Permissiveness MOOC

Enrollments
Completion
Hypotheses

• More complex
• Personal factors
• Design MOOC
• Process MOOC
• Content MOOC

Engagement in MOOC
Engagement learners in MOOCs

• Shortcomings currents definitions
• Time investment
• Amount of activities
• Activities outside MOOC
• Depth of study activities
Kennisnet

Onderwijs- en Leerwetenschappen
Massive Open Online Course: E-learning

Massive open online course

Welten-instituut
Blended learning ontwikkelen

Welten-instituut
Onderzoekscentrum voor leren, doceren en technologie

Open Universiteit
welten-instituut.ou.nl
## Design MOOCs

<table>
<thead>
<tr>
<th></th>
<th>MOOC e-learning</th>
<th>MOOC blended learning</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Turn around time</strong></td>
<td>17 weeks</td>
<td>8 weeks</td>
</tr>
<tr>
<td><strong>Workload</strong></td>
<td>Max. 120 hours</td>
<td>Max. 64 hours</td>
</tr>
<tr>
<td><strong>Group assignments</strong></td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Set up</strong></td>
<td>Masterclasses, study tasks, progress</td>
<td>Orientation, live session, weekly, deepening, end-task, resources</td>
</tr>
<tr>
<td></td>
<td>sessions, resources</td>
<td></td>
</tr>
<tr>
<td><strong>Certification</strong></td>
<td>Via learning track, €285</td>
<td>Directly, €49,95</td>
</tr>
</tbody>
</table>
Interview

• Katrien Bernaerts
Methodology

• Questionnaire
• Activity streams
Personal factors

• Ability to combine work, private, MOOC (important barrier MOOC e-learning)

• Mental barriers: e.g. poor family culture, low aspirations, self esteem (added value own contribution)
Personal factors: intentions

- Minority: certificate
- Continuous professional development
- Specific learning needs
- Curiosity
Personal factors: Learners preferences

- Ghosts (21.3%)
- Tourists (23.7%)
- Explorer (15.6%)
- Philosopher (22.3%)
- Professor (17.1%)
- Student (1.3%)
- Politician (0.9%)
Personal factors: Learners preferences

- Ghosts (21.3%)
- Tourists (23.7%)
- Explorer (15.6%)
- Philosopher (22.3%)
- Professor (17.1%)
- Student (1.3%)
- Politician (0.9%)
Engagement MOOC e-learning

• 226 respondents: 80% started
• 40% stopped after 3 weeks, then gradually
• > 82%: did not (at all) study intensively, 6% did study (very) intensively
Engagement MOOC e-learning (2)

• Lot of content used, relatively low degree of interaction

• 88.5% less intensive than planned, 9.6% as much as planned (intention-behaviour gap)

• 23 participants logged in 3 weeks after closure
Engagement MOOC e-learning (3)

• 51,4% added own thoughts and ideas to content MOOC
• 29% searched for additional information
• 58,7% discussed content with others
• 35,5% made notes
• Other activities: 0-13,8%
<table>
<thead>
<tr>
<th></th>
<th>MOOC e-learning</th>
<th>MOOC blended learning (week 6)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of participants</strong></td>
<td>890</td>
<td>1180</td>
</tr>
<tr>
<td><strong>Learners active in interaction</strong></td>
<td>17%</td>
<td>50%</td>
</tr>
<tr>
<td><strong>Post per learner</strong></td>
<td>0.94</td>
<td>1.52</td>
</tr>
<tr>
<td><strong>Post and replies per learner</strong></td>
<td>1.61</td>
<td>2.68</td>
</tr>
</tbody>
</table>
Results analysis MOOC e-learning

• Attractiveness design influences invested time spend

• Needs more analyses
Discussion and impact

• MOOC ≠ regular course (permissiveness)
• Motivation learners MOOC differ from learners regular course
• Different preferences learners
• Engagement can be influenced by design
• Compared with CSCL: larger groups needed
Contact

- wilfred.rubens@ou.nl
- @wrubens