



Understanding the MOOCs completion: attributions and challenges

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1.Introduction (1/2)

MOOCs completion (retention or dropout) is becoming or has become a focus of research and many scholars have published a lot of literature on this topic.

Given that, there is a need for a thematic analysis of related studies to gain a better understanding of MOOCs completion.

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1.Introduction (2/2)

My study reviews the current published literature focusing MOOCs completion (retention and dropout).

The review follows Creswell's (1994) guidelines which stated that the purpose of a review is to summarize the current state of knowledge concerning a certain topic of interest and highlight issues that have yet to be fully resolved.

Specifically, the goal of this study is to summarize the accumulated state of knowledge concerning MOOCs completion, as well as to identify issues that have yet to be fully addressed or resolved.

2. Research design

2.1 Sources of data

2.2 Research Tool

2.3 Data Analysis



2.1 Sources of data (1/2)

In the first stage, we searched for articles by TITLE in **Web of Science databases using the keyword **MOOC OR MOOCs OR massive open online course OR massive open online courses**.**

By November 23, 2016, a total of 186 articles had been found.

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2.1 Sources of data (2/2)

In the second phase, we examined the titles and abstracts of these articles carefully. Those articles, which provided empirical report on factors affecting MOOCs completion (retention or dropout), were selected for review.

At the completion of the filtering process, 22 articles were found to be eligible for review.




2.2 Research Tool

This study uses **a grounded theory** oriented to qualitative research and selects **QSR-NVivo** as the tool for data analysis.



2.3 Data Analysis (1/2)

The basic process of data analysis is as follows:

- (1)** read the 22 articles carefully, and form a preliminary concept architecture;
 - (2)** establish a new project in the Nvivo, and import the 22 articles to “**Internal Sources**” for unified data management;
 - (3)** screen the 22 texts sentence by sentence in “**Detail View**”, then code these texts and form the nodes;
 - (4)** query and explore codes for a higher level of analysis.
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2.3 Data Analysis (2/2)

We followed Strauss's (1998) method called **“three level coding”** .




Table 1 Coding Results

Open Coding (Free Nodes)			Axial coding (Tree Nodes)	Selective Coding
Node name	the number of data sources	the number of coding reference points		
openness of courses	1	4	characteristics of platforms and courses	Core category: 1. learners' ability and quality;2. characteristics of platforms and courses Subsidiary: social interaction in learning
reputation of platforms and courses	1	5		
instructional design of courses	9	22		
quality of course content	7	11		
support of platforms and courses	5	8		
integration of platform and other social software	3	6		
interest and motivation	12	21	learners' ability and quality	Initial hypothesis: learners' ability and quality as well as characteristics of the platforms and courses are the core factors affecting MOOCs completion.
self-management and self-motivation	13	28		
education experience	3	10		
background knowledge of courses	8	14		
English proficiency	2	4		
active on the forum	9	15	social interaction in learning	
feedback and encourage from teachers	5	11		
peer to peer interaction	9	19		

4. Discussion (1/10)

In this section, we will discuss two key issues or questions that are currently not fully resolved by current research.

The purpose of identifying such issues is to suggest follow-up research that could help advance the knowledge about MOOCs completion.

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4. Discussion (2/10)

4.1 Rationality of considering completion rate as the indicator of MOOCs success

Generally speaking, MOOCs success still follows the standards of traditional courses. For example, *to examine the proportion of exercises/assessments completed and proportion of content watched* (Hone & Said, 2016), *for those students who finish all of the activities and reach some predetermined criterion for the assessments will obtain some kind of certificate or endorsement of completion* (Greene et al., 2015).

4. Discussion (3/10)

However, there are some different viewpoints in the literature. For example,

“in a MOOC, success does not necessarily mean a statement of accomplishment” (Pursel et al., 2016).

Koller et al. (2013) claims *that it is inappropriate to evaluate MOOCs with their completion because it does not take into account the true intentions and goals of the learners. Some students, for example, might define success as the ability to interact with peers interested in the same content* (Pursel et al., 2016). *Others might define success as learning a single concept (out of several) covered in a MOOC* (Pursel et al., 2016; Greene et al., 2015).

4. Discussion (4/10)

Perhaps, in contrast to the traditional courses, the word “completion” must be redefined, **it may be an unique characteristics of MOOCs.**

In this way, MOOCs success needs to consider more scenarios and variables, it remains to be further explored.

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4. Discussion (5/10)

4.2 Application scope of factors affecting MOOCs completion

A number of factors affecting MOOCs completion have been discussed in existing literature, and there are subjects of much controversy among them.

For example, there are different voices in the 22 articles about “**reputation of platforms and courses**”, “**education experience**” and “**English proficiency**”.

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4. Discussion (6/10)

Jordan (2014) confirms that *there is no significant relationship between completion rate and university ranking.*

Goldberg et al.(2015)also confirms that *participants without a university education (vocational certificate and below) were as likely as those with a university education to complete the course and to engage in the online discussions.*

Engle et al. (2015) gives a different perspective on the relationship between English proficiency and completion rate: *a student's proficiency in English does not influence the completion rate, but it does influence their likelihood of earning distinction.*

4. Discussion (7/10)


After further analysis, we find that there are 18 case studies (usually choose a few MOOC courses as a sample or select a small number of learners as the interviewee) in the 22 articles.

Both MOOC courses and MOOC learners are Heterogeneous population.

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4. Discussion (8/10)

Regarding the heterogeneous population, It is difficult for the sample to represent the population if its size is too small. Therefore, **it is an open question whether the conclusion is applicable to all MOOCs.**

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4. Discussion (9/10)

Wang Ning (2008) argues that case study usually belongs to the previous research in the process of **Social Science Research based on samples.**

Its interest is **not to obtain accurate conclusions, but to be familiar with the basic situation of the research,** so as to prepare for the later confirmatory research.

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4. Discussion (10/10)

It is reasonable to believe that the direction of follow-up work on MOOCs completion seems to be **in the confirmatory research**. That is to say, researchers should :

- (1)**form a reasonable research question and research hypothesis based on the previous case studies;
- (2)**extract samples of a specific size in a particular sampling framework using a sampling procedure;
- (3)**carry out quantitative research (questionnaire or experiment) for these large samples;
- (4)**obtain a definite conclusion and extrapolate it to the population represented by the sample.

5. Conclusion

- (1) Learners' ability and quality** as well as **characteristics of platforms and courses** are the core factors that affect MOOCs completion;
- (2) Low completion rate may be an unique quality of MOOCs**, it is not enough to consider completion as the sole indicator of success in MOOCs;
- (3) At present, the research on MOOCs completion is still in the exploratory stage**, and the direction of follow-up work seems to enter **the confirmatory stage of large sample**.



Thank you very much for your kind attention.

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