A Study on the Sustained Participation Behavior of MOOC Learners

Peng Nan, Liu Lu*

East University of Heilongjiang, Heilongjiang, 150060, China

*Corresponding author

Keywords: MOOC; Learning Behavior; Learners

Abstract: With the rapid development of MOOC (MassiveOpenOnlineCourse), the number of learners on the MOOC platform has increased dramatically. Compared with traditional education, MOOC learners come from a wide range of sources, and each learner's learning objectives and knowledge background are very different. This paper attempts to explore and quantify the learning behavior characteristics of learners in open data sets. It provides a reference for the design and development of MOOC platform and provides a basis for the improvement of curriculum teaching in MOOC platform. The study of learner participation is an important aspect of MOOC curriculum evaluation. In order to enable learners to achieve better learning results, we should take certain measures to guide learners to participate in curriculum interaction and improve learners'participation in curriculum.

1. Introduction

In the era of "Internet +", online education market is breaking the constraints of traditional classroom space and time to the network platform, presenting an unprecedented openness and inclusiveness [1]. MOOC delivers quality education to every corner of the world through information technology and network technology. With the rapid development of MOOC, the number of learners on MOOC platform has increased dramatically [2]. Moreover, compared with traditional education, MOOC learners have a wide range of sources, and each learner's learning objectives and knowledge background are very different [3]. Therefore, the study of learners' learning behavior and curriculum influence in the context of MOOC is of great significance.

The global chanting has developed very rapidly, forming a flowering situation everywhere. The learner can not only communicate with the professor online at any time on the MOOC platform, but also can customize the personalized learning content for himself, and the learning enthusiasm and effect are greatly improved [4]. The problems of MOOC mode are gradually exposed. For example, low curriculum completion rate, high dropout rate, low learner communication, etc. This paper attempts to explore and quantitatively analyze the characteristics of learners'learning behavior in open data sets. It provides a reference for the design and development of MOOC platform, and provides a basis for the improvement of curriculum teaching in MOOC platform, so that learners can effectively learn.

2. Materials and Methods

With the continuous emergence and development of China's MOOC online education platform, MOOC's position in the development of higher education and vocational education is increasingly important. At present, MOOC research focuses on the design of teaching modes and the analysis of teaching effectiveness in specific MOOC courses [5]. There is a lack of deconstruction research on the influence of the curriculum and its impact mechanism on different types of MOOC courses at the macro level. The learner engagement is divided into three dimensions, so the learner participation is divided into three dimensions: behavioral dimension, emotional dimension and cognitive dimension [6]. Cognitive participation is defined as learners'intellectual input, effort, in-depth thinking and learning determination in the learning process. Emotional participation refers to the learner's emotional response in the learning process and the relationship with teachers and students.

  DOI: 10.25236/iwedss.2019.192

There is hardly any distance school in the world that operates according to the above model. There are more and more means and methods used by distance colleges to help students learn. Common distance learning patterns can be described as a "catalytic reaction", as shown in Figure 1.

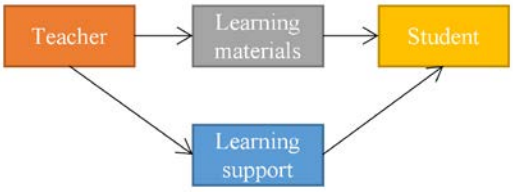

Fig. 1 Catalytic reaction mode of distance learning

Participation is a basic concept in learning theory, which refers to the input intensity of behavior, emotion and cognition of learners in the course of specific course learning. It reflects the degree of attention of learners to the learning objects during the learning process. MOOC teaching is different from traditional teaching. In addition to the relevant knowledge of the course and the traditional teaching skills, the instructors of the MOOC course also need to have the teaching skills related to the special teaching form of MOOC [7]. The importance of learner participation has been widely recognized by the educational community, which can be used to predict the prevention of dropout and improve learning performance. In the learning process of MOOC courses, learners need to watch videos and participate in after-class discussions. Some also need to take the exam, that is, learner's behavior participation.

3. Result Analysis and Discussion

Unlike regular courses, students participate in the classroom in a structured and supervised way. Teachers can directly observe students'behavior and get feedback. As a brand-new teaching mode, the appearance of MOOC is a great challenge to the traditional higher education mode. Teachers with rich experience in MOOC teaching can more attract students to participate in the course, and the teaching experience is represented by the number of MOOC teachers'teaching [8]. The distance and scale of online courses require new ways of providing students'feedback and instructors' involvement. In large-scale open online courses, scholars have different views on learner participation. Learners' exposure to MOOC has a clear cognitive and specific purpose, which can be reflected in the results of our questionnaire, that is, the cognitive participation of learners.

The sharing of the Internet has strong characteristics such as popular participation and independent choice. Fully respecting the individuality and self-selection of the individual of the educated person has effectively enhanced the status of the educated. From the point of view of the penetration rate, the penetration rate of netizens in the population with college education or above has been leading, and it has been close in the past two years. as shown in Figure 2.

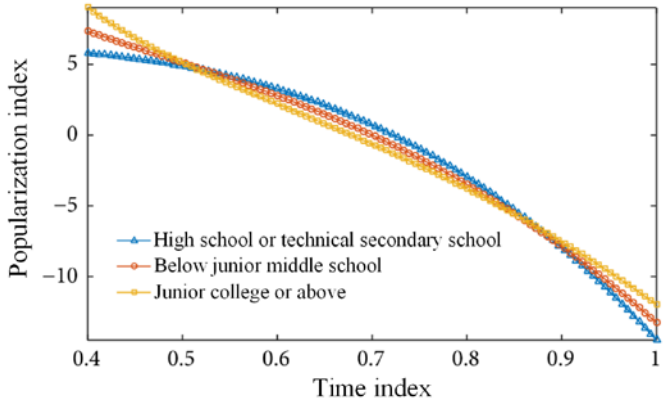

Fig. 2 The popularity of netizens under different educational levels

Learning performance is simply a learning effect, but it is definitely not as simple as academic achievement, but includes short-term and long-term learning effects. In the MOOC learner engagement assessment, it is first necessary to study and evaluate the indicator system and collect

relevant data according to the evaluation work arrangement. For the learner engagement assessment, not only the three dimensions have different importance. The influence degree of different indicators under three dimensions is also different. Teachers are supervisors, guiders and promoters of the course discussion area, helping students to build collaborative knowledge through the discussion of relevant knowledge and skills. The factor set of learner participation assessment is composed of criteria at all levels and underlying indicators.

4. Conclusions

The study of learner participation is an important aspect of MOOC curriculum evaluation. This paper focuses on the influencing factors and mechanism of learning performance of MOOC, a new learning model. Based on learning theory, following the research framework and logical thinking of MOOC autonomy, learning participation and learning performance, this paper discusses the theoretical and practical significance of MOOC learning. A versatile platform provides learners with access to a wide range of course resources and multiple types of technical channels. The study found a significant positive correlation between the interaction between learners and the curriculum and the learning outcomes. In order to enable learners to achieve better learning outcomes, certain measures should be taken to guide learners to participate in curriculum interactions and to improve learners' participation in the curriculum.

References

[1] Hood N, Littlejohn A, Milligan C. Context counts: How learners' contexts influence learning in a MOOC. Computers & Education, 2015, 91:83-91.

[2] Sunar A S, White S, Abdullah N A. How Learners' Interactions Sustain Engagement: A MOOC Case Study. IEEE Transactions on Learning Technologies, 2017, 10(4):475-487.

[3] Durksen T L, Chu M W, Ahmad Z F. Motivation in a MOOC: a probabilistic analysis of online learners' basic psychological needs. Social Psychology of Education, 2016, 19(2):241-260.

[4] Watson S L, Watson W R, Yu J H. Learner profiles of attitudinal learning in a MOOC: An explanatory sequential mixed methods study. Computers & Education, 2017, 114:274-285.

[5] Chen G, Davis D, Krause M. From Learners to Earners: Enabling MOOC Learners to Apply Their Skills and Earn Money in an Online Market Place. IEEE Transactions on Learning Technologies, 2018, 11(2):264-274.

[6] Almatrafi O, Johri A, Rangwala H. Needle in a haystack: Identifying learner posts that require urgent response in MOOC discussion forums. Computers & Education, 2018, 118:1-9.

[7] Chen Y H, Chen P J. MOOC study group: Facilitation strategies, influential factors, and student perceived gains. Computers & Education, 2015, 86:55-70.

[8] Veletsianos G, Collier A, Schneider E. Digging Deeper into Learners' Experiences in MOOCs: Participation in social networks outside of MOOCs, Notetaking, and contexts surrounding content consumption. British Journal of Educational Technology, 2015, 46(3):570-587.