

MOOC Learning Motivation-Based Study on the Inspection of Learning Effect

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**Abstract.** MOOC, as a kind of free open online courses, has rapidly swept the world in recent years and aroused frenzy and widespread concern at home and abroad. In-depth research on MOOC has been conducted from different angles in domestic academic circles. Seen from the high enrollment rate and the extremely low passing rate, it is generally considered in existing research achievements that a low completion rate is a major bottleneck restricting MOOC development\([1]\). Does the low completion rate mean that the overall learning effect is poor? We try finding the answer to the question from another angle. MOOC learning effect is explored from the perspective of the learning motivations of MOOC learners in this paper, and it is innovatively put forward from a new perspective that different MOOC learning effect evaluation systems should be established based on different learning motivations, which has enriched MOOC research-related theories and provided theoretical support for the sustainable development of MOOC.

**Introduction**

MOOC (Massive Open Online Courses), as a kind of massive free open online courses, with no restrictions on such factors as learners’ knowledge, background, knowledge level, region and space, enables the great majority of learners to easily enjoy free abundant learning resources and makes it possible to realize the wishes of education democracy and lifelong learning. As a new favorite in educational circles, the new teaching mode MOOC has rapidly aroused frenzy and widespread concern at home and abroad, but seen from a huge number of registered user and its high dropout rate and low passing rate in striking contrast, its low completion rate has made it the subject of criticism and is even considered as a major bottleneck restricting MOOC development. Can the “High Dropout Rate and Low Passing Rate” mean the poor overall MOOC learning effect and become a major bottleneck restricting MOOC development? The writer will seek the answer from another perspective.

It is well known that motivation is the direct cause of human behavior, and different learning motivations contribute to different learning behavior and have a direct effect of learning activities, and different learning behavior makes learning effect shown in different manifestation forms. In this paper, MOOC learning effect is explored from the perspective of the learning motivations of MOOC learners and the learning motivations of MOOC learners are classified scientifically. It is innovatively put forward from a new perspective that different MOOC learning effect evaluation systems should be established based on different learning motivations of learner groups, which has enriched MOOC research-related theories and provided theoretical support for the sustainable development of MOOC.

**Relevant Concepts and Research Theories**

**Concept of Learning Motivation**

Motivation can be intuitively understood as thoughts or desires to do something, psychologically
generally involving the origin, direction, intensity and persistence of behavior, and a process of a person moving towards the expected goal driven by the internal driving force produced through inspiration and encouragement. The interpretation of learning motivation recognized in academic circles is a power trend that guides and maintains students’ learning behavior and makes them moving towards certain academic goals.

**Concept of Learning Effect Evaluation**

Evaluation, short for “Evaluated Value”, generally refers to the measurement of the role or value of persons or things. Learning effect evaluation refers to a process in which teaching participants, with students’ development as the goal, use scientific methods to evaluate students’ learning quality and level and make value judgment[2]. Based on the particularity of MOOC, the learning effect evaluation involved in this paper is not limited to teaching participants, but also includes learners themselves and all relevant subjects in society that are able to participate in the evaluation of MOOC learners.

**Relevant Research Theories and Research Basis**

Different psychologists interpret learning motivation from different angles, mainly involving the reinforcement theory represented by behavioral psychologist Thorndike, etc., the self-efficacy theory represented by Bandura, the hierarchy of needs theory represented by humanistic psychologist Maslow, the achievement motivation theory represented by Murray, etc., the attribution theory represented by Wiener, etc. and the self-worth theory proposed by Covington.

In spite of abundant research achievements related to the learning motivation of MOOC learners in recent years, focus has been placed on the analysis of the characteristics of learning motivation and relevant influencing factors. For example, Ma Shasha (2015), based on large-scale network background, stated the manifestation and characteristics of learning motivation of MOOC learners[3]. Yang Yuqin (2014), based on the construction of an MOOC learning model, emphasized the individualization of learning, thinking that MOOC contributed to individualized learning modes due to its unique characteristics and that the applicableness of MOOC design and development should depend on the correct cognition of individualized learning[4]. Guo Yujuan, et al. (2015) analyzed the factors influencing the learning motivation of MOOC learners and put forward suggestions for inspiring the learning motivation of MOOC learners[5]. Jiang Lin, et al. (2013) conducted systematic analysis of learning features, learning effect and learning motivation of MOOC learners and make suggestions to learners and teachers for improving MOOC learning effect[6]. Ge Yan, et al. (2015) analyzed the relationships between all factors involved in learning behavior and put forward relevant strategies for maintaining learners’ learning motivation in the MOOC environment[7]. If learning motivation and learning effect are connected, no one has got involved in the establishment of different learning effect evaluation and inspection systems based on different learning motivations.

**Classification of Learning Motivations of MOOC Learners**

Learning motivations are classified into difference categories based on different angles. The virtuality, openness and independency of the online learning environment have contributed to the uncertainty, individualization and dynamism of the learning motivation of MOOC learners. In view of the special MOOC-based teaching mode, the author will classify the learning motivation of MOOC learners into the following three categories.

**Satisfying Emotional Experience**

With the improvement of the material living standards, people pay more and more attention to emotional experience. Seen from a rational perspective, the learning motivations of most MOOC learners can be classified as satisfying emotional experience. The learners of this category can be divided into those who want to have a taste of the demeanor of well-known universities and famous
teachers and realize their long-cherished dreams, enthusiasts who want to satisfy their interests and hobbies and those experience online learning out of curiosity and novelty, etc. First, seen from the current development state of MOOC, MOOC can also be called “UOOC” to a certain degree. Whether released on the three MOOC platforms abroad, i.e. Coursera, Udacity and edX or on the domestic “xuetangX.com” and “CNMOOC” platforms, MOOC is taught by well-known professors from prestigious universities at home and abroad or is a brand course of preponderant disciplines of prestigious universities. Seen from MOOC learners and their learning experience, many of them haven’t been admitted to well-known universities at home and abroad or haven’t been admitted to universities, and they choose MOOC learning mainly for the purpose of have a taste of the demeanor of well-known universities and famous teachers, realizing their dreams of studying overseas, studying at well-known universities and learning from famous teachers. Second, enthusiasts who want to satisfy their interests and hobbies occupy a large proportion of MOOC learners. Besides, some learners experience the high-quality MOOC learning resources and the novel MOOC-based teaching mode out of curiosity, novelty or desire to explore MOOC.

Pursuing Practical Interests

Interests, as a series of products used by human beings to satisfy their own desires, including material needs and spiritual needs, have brought inexhaustible motive force to human behavior. Numerous learners choose MOOC learning for another purpose of pursing practical interests. First, such learners are dominated by students at school and distance education learners, who choose MOOC learning mainly for the purpose of obtain credits and academic certificates and regard MOOC as school education supplement and extension. Second, some choose MOOC learning for the purpose of improving their foreign language and network communication ability and broadening their international vision. Third, there are also some people who seek solutions and answers to problems by means of MOOC learning.

Achieving Self-Actualization

Demand is the root of motivation, and the learning motivations of numerous MOOC learners can be classified as achieving self-actualization, such as the demand improving their own ability and quality, the demand for promoting career development and the demand for elevating the academic research ability and level in a certain field. As for those who advocate lifelong learning, improving their own quality is their persistent pursuit; as for those who want to satisfy the needs of their career development, free, open, cutting-edge and high-quality MOOC is definitely a good choice and the learners of this kind include newly recruited employees in the workplace, “Big Names” in the workplace and other different groups involving student parents, front-line teachers and even MOOC professors, who elevate their own MOOC level by others’ MOOC learning; as for academic researchers, MOOC is also an important channel for elevating the research level and obtaining cutting-edge information.

The learning motivations of numerous MOOC learners can be intuitively displayed in the Fig. 1.
Principles of Evaluation and Inspection of the Learning Effect of MOOC Learners

The diversity and interactivity of the learning motivations of MOOC learners have directly contributed to the diversity and complexity of the learning behavior of MOOC learners. Theoretically, on inspection methods can be used to objectively and comprehensively evaluate the overall learning effect of MOOC learners. Therefore, firstly, the inspection of the learning effect of MOOC learners should follow the principle of diversified inspection methods. For example, those learners who take MOOC courses out of curiosity, novelty or interests don’t take course completion or scores seriously and tend to be the “Onlookers and Incidental Visitors”. They simply need MOOC to satisfy their curiosity, interests and hobbies and they are not concerned about the passing rate. It is obviously improper to evaluate and inspect their learning effect based on their failure to complete whole courses or the scores obtained by them. Second, the principle of dynamic comprehensive inspection should be followed. Though we have classified the learning motivations of MOOC learners, in reality, most MOOC learners have more than one learning motivations, mostly combination of a number of motivations. This kind of mixed learning motivations also changes with the deepening of learning, so it is necessary to conduct dynamic comprehensive inspection based on different learning motivations to realize scientific and objective evaluation of MOOC learning effect.

Learning Effect Inspection System Based on Different Learning Motivations of MOOC Learners

Among numerous learning motivations, except for the motivations involving required credits to be obtained and academic certificates, in which definite courses should be completed and required scores should be obtained, it is not advisable to evaluate and inspect the learning effect of learners with other motivations by simply using the completion rate or the passing rate. We should adopt diversified evaluation and inspection methods, give overall consideration to various learners-related subject factors such as self-evaluation, peer evaluation, teachers’ evaluation, employers’ evaluation and social evaluation and comprehensively consider learners’ learning process and learning achievement presentation forms based on different learning motivations, such as adopting e-portfolio evaluation, BLOG evaluation and MOOC learners’ survey feedback evaluation. Summarizing the existing research achievements, the author has constructed an MOOC learning effect evaluation and inspection system based on different learning motivations, as shown in the Fig. 2:
Conclusions and Innovations

Secretary General Xi Jinping pointed out in his speech delivered at the 2015 International Education Informatization Conference, “The development of information technology calls for education reform and innovation, construction of a network-based, digital, individualized and lifelong education system and construction of a learning-type society where people can learn anywhere at any time.” It can be predicted that the massive free open online education mode, MOOC, will become a main lifelong learning mode in China in future.

In order to promote the sustainable development of MOOC, the evaluation and inspection of MOOC learning effect is an essential link. However, the inspection of learning effect is a comprehensive complex process, and the inspection of the overall effect of a MOOC course learning should be based on the classification and statistics of different learning motivations of learners and it requires big data analysis of and support for the learning motivations and behavior of learners. In view of different learning motivations, comprehensive measurement should be conducted by referring to different evaluation systems and inspection standards.

MOOC learning effect is explored from the angle of the learning motivations of MOOC learners in this paper, and the learning motivations of MOOC learners are analyzed, interpreted and scientifically classified. It is innovatively put forward from a new perspective that different MOOC learning effect evaluation systems should be established based on different learning motivations, which provides theoretical support for the sustainable development of MOOC.

At the same time, the research enables us to have a brand new and objective understanding of the high dropout rate and low completion rate of MOOC. In order to promote the sustainable development of MOOC, it is unnecessary for us to worry too much about the high dropout rate and low completion rate of MOOC. We should think more about how to make MOOC leave the “Altar” of “UOOC” and construct a learning-type society where everyone is able to learn, fond of learning and good at learning on the basis of learning anywhere at any time in view of the groups with different demands.

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References


