Research on development trends and problems of MOOC

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ABSTRACT

2012 is the first year of the MOOC which has been highly concerned both in the academic area and educational word ever since its emergence. This paper explains the main features and the development process of MOOC, meanwhile introduces its development status and future trends in detail. And it summarizes current problems and gives reasonable suggestions in order to provide reference for the MOOC development.

Keywords: MOOC, development trends, problems, suggestion

INTRODUCTION

MOOC is massive open online courses [1]. It setting off centuries never had educational technology reform in 2012 which triggered the education frenzy. As long as interest to the world's leading free online learning classical university courses, Regardless of nationality and identity. This new teaching model has been hailed as the education sector "Tsunami" and "Storm". Which attracted 160,000 students from more than 190 countries enrolled, MOOC with the significant advantages of large-scale, openness and self-organization.

The three pillars of the platform: Coursera, Udacity and Edx received tens of millions of investment support, launched a hundred courses, really high-quality educational resources will be sent to all corners of the world, so that different groups of people all over the world to share resources[2].

The magazine of "TIME" in 2012 called "The first year MOOC"[3].It means "MOOC's" officially kicked off. Follow the development trend of China's universities, Tsinghua University, Peking University also recently announced officially join the Chinese curriculum strongly to the world. Experts predict that in the coming decades, about half of the University of the United States will cease to exist. Visible reform the education pattern triggered ferocious, future immeasurable[].

In view of this, the paper describes the development of MOOC course, introduced its current status and future development trends, summarized in a detailed analysis of the current problems of the effect on the basis of MOOC and gives reasonable suggestions in order to provide a reference for the development of MOOC.

2. The development history and trends of MOOC
2.1 Development of MOOC
The development course of MOOC is shown as Table 1[4-8].

2.2 MOOC development status and future trends
MOOC have three pillars of the platform. It has a good development and big influence. Now three related statistics are shown in Table 2. Although MOOC established a shorter time, but the development of the wave can be described as choppy, contain as much as the number of courses, a wide range of Union University. But for China, although there are 6,000 Chinese students to participate, but seldom universities to join the project, only the more prestigious
Tsinghua University, Fudan University, Chinese University of Hong Kong, National Taiwan University and Shanghai Jiaotong University, and involved the number numbered courses.

Table 1 MOOC generated in the course of development

<table>
<thead>
<tr>
<th>YEARS</th>
<th>DEVELOPMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1989</td>
<td>University of Phoenix was launched online degree program</td>
</tr>
<tr>
<td>1994</td>
<td>University of Pennsylvania launched the online discussion</td>
</tr>
<tr>
<td>2000</td>
<td>UK government-funded UK E-universities Worldwide Limited</td>
</tr>
<tr>
<td>2001</td>
<td>MIT implementation OCW/Open Course Ware Princeton, all schools open courseware</td>
</tr>
<tr>
<td>2002</td>
<td>United Nations posed (Open Educational Resources, OER)</td>
</tr>
<tr>
<td>2005</td>
<td>Open Course Ware Consortium, OCWC was established</td>
</tr>
<tr>
<td>2008</td>
<td>Many Toro University offered Connectivism and Connective Knowledge</td>
</tr>
<tr>
<td>2009-2011</td>
<td>Emphasis on connectivity, collaborative learning and networking knowledge construction eMOOC</td>
</tr>
<tr>
<td>2012</td>
<td>xMOOC, Platform has three pillars Coursera, Udacity and Edx</td>
</tr>
</tbody>
</table>

Table 2 Development status of the three pillars of the platform

<table>
<thead>
<tr>
<th>NAMES</th>
<th>Organizers</th>
<th>Number of university</th>
<th>Course Number</th>
<th>Interactive mode</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coursera</td>
<td>Stanford(2011)</td>
<td>30</td>
<td>204</td>
<td>1400</td>
<td>Credit certificate</td>
</tr>
<tr>
<td>city</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>many</td>
<td>18</td>
<td>450</td>
<td>certificates</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Edx</td>
<td>MIT and Harvard(2012)</td>
<td>many</td>
<td>9</td>
<td>Regional gatherings</td>
<td>Employment programme</td>
</tr>
</tbody>
</table>

According to the survey, the top level in the near future, the University of Mexico, Canada, Europe, Singapore, Japan and Australia will also join the ranks of MOOC, will also add Chinese, French, Spanish and Italian in four medium of instruction. I can safely speculate that in the future there will be more countries, more students to participate in the ranks to MOOC, improve the mechanism to form a multi-lingual teaching truly global resource sharing, national continuing education[9-10].

3. Problems and Recommendations

Despite widespread concern MOOC academia and education, and has been rapid development in the past two years, but as a new thing, its mechanism is not perfect, are not considered mature, existing problems will affect its future development and growth. In view of this, the paper summarizes the MOOC problems exist in the development and give suggestions.

3.1 Problems

First, credibility is yet to be improved. MOOC have not face to face teaching, so the usual assignments, tests and final examination exist "for learning" and "cheating" phenomenon, how to ensure the credibility of the participants received a certificate of the last to be further explored. Prevent counterfeiting are problems with worthy long-term focus and solve.

Second, the quality of teaching needed to be fully protected. In real life, small classes generally have good results, but the massive MOOC teaching methods, the number of participants up to tens or even hundreds of thousands. Then the face of such a huge community involvement, how to ensure the quality of teaching and supervision of concern, in the future we need to propose appropriate coping strategies to ensure the quality of teaching.

Third, the evaluation criteria should be specific. For MOOC final assessment should be given to specific standards, science and engineering courses can be rated by doing the assessment exam questions, and for liberal arts appreciation classes or courses, how to assess their level needs to continue to discuss making MOOC more standardized.

The fourth is "individualized" easy problem. MOOC large-scale participation, so that the participants around the world to become the door of students, and thus the lack of regional differences, it can’t achieve individualized. Manufacture of large quantities will reduce to the characteristics of the development of innovative and individuals.

The fifth is the both quality education and capacity building. Only through measure student achievement is not enough. We must focus on training capacity MOOC education system should be improved to make it more complete in this comprehensive quality requirements so high society.

The Sixth is an urgent need to break the limitations of the language of instruction. Current MOOC courses are mostly English teaching, but for students who are weak in English, there is a big challenge learning courses. So it is a serious problem how to break the limitations of language teaching.
The Seventh is to achieve a balanced development of MOOC and Colleges and Universities. MOOC developments may lead to nearly half of the colleges and universities face closure. Some small and medium school students may be missing, but the reality of college education can give poor, weak foundation for students to continue to enhance the opportunities for self, and therefore should be to achieve a balanced development of MOOC and Colleges and Universities.

3.2 Recommendations
we also made some specific suggestions: (1) Each video should be short, controlled in about 10 minutes. Studies have shown that high concentration of up to people's attention for 10 minutes, then it would decline, so the time for each video should be well controlled. (2) Strengthen teacher-student interaction, to create a good learning atmosphere. Only a relaxed, interactive increase, will mobilize the enthusiasm and passion for teachers to teach the participants to enhance teaching effectiveness. (3)Strengthen feedback, suggestions, positive improvements. Actively collect feedback and suggestions, after the system should be in-depth analysis and positive thinking to improve, making the education system more perfect. (4) MOOC. Increase financial support to provide strong backing for the good development. (5) Strengthen infrastructure construction, breaking the traditional constraints, improve technical operations.

CONCLUSION
MOOC triggered a frenzy education and setting off centuries never had the educational technology reform. The development speed of MOOC is strongly and quickly. This paper describes the main features of the development process and introduces its development status and future trends in the detailed analysis of the impact effect on MOOC summarizes current problems and gives reasonable suggestions. We hope that make full use of the advantages MOOC, but also can continue to be refined, and ultimately achieve new breakthroughs. We must have the courage to face the challenges, make education a real world, to all citizens, to achieve a truly global resource sharing.

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