Challenges of Integrating MOOCs into the Curriculum of YCM Open University in India

Abstract: The term Massive Open Online Courses (MOOCs) was coined by Dave Cormier of University of Prince Edward Island in Canada in the year 2008. However the MOOCs gained popularity in the year 2012, as world's renowned Universities like Stanford University, Massachusetts Institute of Technology and Harvard University started offering MOOCs. The Journey of MOOCs in India started a little late, the Ministry of education formerly known as Ministry of Higher of Human Rights Development MHRD initiated the SWAYAM (Study Webs of Active Learning for Young Aspiring Minds) in the year 2014 and it was full fledgedly open to all the educational institutes to prepare, adopt, integrate the MOOCs into their educational framework by the year 2017. Ultimately the outburst of COVID-19 was observed to be the key factor for aggregation of MOOCs around the world as our present educational system was unable to cater the needs of the learners. In view of the above situation the apex educational body of the Indian Educational System, University Grants Commission (UGC) released a circular about integration of MOOCs into Higher education from previous 20% to 40%. This led to a drastic change in the educational structure of Indian educational system. The learners from different disciplines enrolled to the MOOCs available on various platforms such as SWAYAM, UGC-CEC, and NPTEL etc. due to their easy accessibility and on the go learning facility, many State and Central universities have developed their MOOC policies and have been practicing the MOOC integration into their curriculum. Yashwantrao Chavan Maharashtra Open University being the largest University in capacity of enrolment, lack behind in integrating MOOCs into its educational curriculum. Present study attempts to identify the problems of integration of MOOCs in curriculum of the Yashwantrao Chavan Maharashtra Open University in India. Methodology used for carrying out the research is survey method and the researchers have prepared a structured questionnaire and collected data from the faculties of the YCMO University.

Keywords: MOOCs, SWAYAM, COVID-19, YCMOU.

Introduction

MOOCs have been playing a crucial role in the educational system as they are capable of reaching masses comparatively at a very low cost. Dave Cormier, a professor at the University of Prince Edward Island in Canada, first launched MOOCs in 2008. They became popular after some of the world's most prestigious universities, such as Stanford University, Massachusetts Institute of Technology, and Harvard University, developed MOOCs. In the year 2015, India, the world's second-largest country by population, began integrating MOOCs into its educational system. The Honorable President of India launched SWAYAM on July 9, 2017. With the support of the MHRD (Ministry of Human Resource Development) and AICTE (All India Council for
Technical Education), which is capable of facilitating 2,000 courses. Yashwantrao Chavan Maharashtra Open University is a massive state Open University based in Nashik, Maharashtra, India. It has the greatest ever enrolment of learners, with about seven lakh students enrolled each year. Despite this, it lags behind in terms of incorporating MOOCs into its curriculum. The COVID-19 outburst has multiplied the demand for online and distance education, and the integration of MOOC courses will meet the vast demand of learners for high-quality, low-cost education. The focus of the article is on the problems and prospects of integrating MOOCs into the Yashwantrao Chavan Maharashtra Open University's curriculum. The investigation was carried out using a survey method by the researchers.

Objectives:

- To investigate the challenges of Integrating MOOCs into the Curriculum of YCM Open University in India.
- To ascertain whether integration of MOOCs into the Curriculum threatens the job of lectures at YCM Open University in India.

Hypothesis of the Study

\( H_0 \): There is no significant difference in opinion of YCMOU staff about occurrence of problems by integration of MOOCs in Curriculum of Yashwantrao Chavan Maharashtra Open University.

\( H_0 \): There is no significant difference in opinion of YCMOU staff about threat to Teachers job after Integration of MOOCs in Curriculum of Yashwantrao Chavan Maharashtra Open University.

Research methodology

Present study is based on survey method. The researchers have developed a structures questionnaire and collected responses from the faculties associated with Yashwantrao Chavan Maharashtra Open University working in different schools and departments of the university.

Population and Sampling

A total of 68 participants were chosen for the study, 49 out these total respondents responded to the survey. 23 of whom, were regular university faculty and the rest were on a contract basis. The researchers documented the responses of 17 permanent faculty members and 36 contractual faculty members who replied to the survey.
**Tool used for analysis**

The Chi square 2 test was used to determine the variations in opinion among Yashwantrao Chavan Maharashtra Open University faculty members regarding the integration of MOOCs into the curriculum of the University.

**Review of Literature**

The researchers conducted a deep exploratory review of related literature to understand the perspectives of academics who are investigating the problems and prospects of integrating MOOCs into educational institutions' curricula.

According to Puja Devgun¹, MOOCs can give Indian students the competitive edge they need to succeed in the global market.

Learners adopting MOOCs into their educational curricula have obstacles, according to Lay Huah, Goh², as they struggle to keep up with the pace of MOOC learning, and simply issuing of badges and certificates aren't enough to keep learners engaged in MOOCs.

MOOCs, according to Rita Devi³, are the future of education. Although faculty may be familiar with MOOCs, there is still a lack of understanding about MOOCs. MOOCs have the potential to make science and technology education more accessible to the general public, but they will require students to gain technical abilities. India's prosperity will undoubtedly be aided by an education system based on new technologies and online studies.

According to Rajwinder Kaur⁴, criteria for judging the efficiency and efficacy of MOOCs must be developed. Students' needs and performance must be considered in addition to administrators' and faculty's perspectives. It is vital to evaluate the applicability of MOOCs, their benefits and drawbacks, as well as their potential and limitations.

According to Joyce Chao-chen Chen⁵, the medium of teaching for international students is not always English, at least not the only option. People who want to learn Chinese culture choose to use Mandarin Chinese, either alone or in combination with their native tongue.
According to Anupam Saxena and colleagues, the study looked into several aspects of the teacher, curriculum, and technology. All three have been discovered to be an essential part for the successful deployment of MOOCs in India.

In view of Amit Kumar and et al., the North East Indian region lacks adequate infrastructure, making it difficult to transform creative conceptions and ideas into reality, such as the creation and implementation of MOOC courses for local residents. The lack of expertise of the designers who designed the state's laws and regulations is one of the other impediments. The environment is also a significant influence in society's improvement and development. The region's atmosphere also lacks technological backdrops that would make complete implementation of MOOCs impossible.

According to Yongyan Song, MOOCs have introduced new ideas, new thinking, and new methods into college English instruction. The MOOC teaching concept is implemented into college English teaching practice, resulting in English teaching mode innovation in order to improve the interest and effectiveness of college English learning.

According to Nathan M. Castillo and colleagues, the MOOCs for Development Conference was created to start a discussion and debate about the future of MOOCs and digital learning in poor countries. Some of the trends, difficulties, and possibilities highlighted in this study are summarised in this study. One key point of agreement was the need to concentrate more directly on local MOOC usage, taking into account the diversity of learners and learning situations in different areas.

Santu Biswas and Monalisa Sarkar opine that, MOOCs will make a huge number of courses from world-renowned universities and teachers more accessible. MOOCs may be introduced as an alternate venue to fight the issue of reducing dropouts in higher education in India. As a result, all stakeholders in higher education must be very adaptable and cooperative in order to make MOOCs accessible to everybody.
Sarika Satpute and *etal.*\textsuperscript{11}, despite numerous obstacles to MOOC implementation in India, such as technological infrastructure, learner awareness, educational quality, and a diverse population, there are numerous opportunities for MOOC future development. Conceptual and basic learning, student-centric modules, tailored learning approaches, and other opportunities must not be overlooked.

Dr. Omprakash Tiwari\textsuperscript{12} in his article say that, MOOCs can only improve the quality and accessibility of higher education in developed countries where the majority of the population has formal educational experience and well-developed learning skills, while leaving the majority of the population in developing countries who lack formal educational experience and well-developed learning skills behind. Furthermore, when developing countries attempt to implement MOOCs, they face significant obstacles such as financial constraints, limited internet access, a shortage of trained teachers, policy issues, scalability, language issues, pedagogical issues, dropout rates, and low student motivation, to name a few.

**Data Analysis and Interpretation**

1) **Are you aware about MOOCs**

![Bar chart showing 96% awareness of MOOCs and 4% unawareness.](chart.png)

Out of total 49 responses 96% of the responded that they are aware of MOOCs and rest of the 4% were unaware.
46% of respondents are of the opinion that MOOCs are easy to access, 33% think that MOOCs being offered are of good quality, 9% think that it costs less for MOOCs, 5% think that higher costs are incurred by MOOCs, and none of them think that MOOCs are of bad quality.

2) **Have you ever completed MOOC course?**

Majority of respondents 71% have completed a MOOC course and a few 29% have not completed a MOOC course ever.
3) Do you think MOOCs should be integrated in the curriculum of the programs offered by YCM Open University?

78% of the faculty at Yashwantrao Chavan Maharashtra Open University believe that MOOCs should be incorporated into the curriculum of the university’s programs, 16% are neutral, and a negligible number 6% believe that it should not be incorporated.

4) Are you aware about the MOOCs that bear a resemblance to curriculum of any programme offered by YCMOU?
51% of the respondents are aware of the MOOCs being offered that resemble university programme curricula, 31% are unaware, and 18% responded neutrally.

5) **MOOCs Shall Replace the Present academic structure.**

57% of the faculty at Yashwantrao Chavan Maharashtra Open University believe that MOOCs will not replace the academic structure, 16% believe that it will, and 27% are neutral.

6) **If MOOCs are implemented in the curriculum of YCMOU programmes, credit transfer will be a major issue?**

45% of the respondents believed that credit transfer would not be a major issue, 27% said that it would be a major issue, and 29% were neutral.
7) **Assessment of MOOCs conducted by providers is authentic.**

63% said that the assessment of MOOCs being offered is authentic, whereas 37% were neutral and none of them believed that MOOC assessment is authentic.

8) **MOOCs integrated into the curriculum of YCMOU programmes will impose additional financial burdens on the university.**

37% said that the integrated MOOCs would impose additional financial burdens on the university, whereas 33% were neutral and 31% disagreed.
37% of the respondents responded that integration of MOOCs into the curriculum of programmes being offered by the university would impose additional financial burdens to the university, whereas 33% responded negatively and 31% were neutral.

9) MOOC Integration shall be beneficial for the University

A majority of the respondents (90%) believe that MOOC integration will be beneficial to the university. A negligible number of respondents (2%) believe it would not be beneficial for the university, and 8% are neutral.

10) For integration of MOOCs into the curriculum of YCMOU, additional manpower is required.
53% of the respondents believe that additional manpower will be required for the integration of MOOCs into the curriculum of YCMOU, whereas 35% said no additional manpower is required and 12% were neutral.

11) If MOOCs are integrated into YCMOU’s curricula, the educational system will be jeopardized.

Yes, the incorporation of MOOCs into the programmes of the university's curriculum poses a threat to the educational system, according to 55% of the university's faculty, while 20% believe no threat is posed and 24 percent are indifferent.

**Hypothesis Testing**

$H_0$: There is no significant difference in opinion of YCMOU staff about occurrence of problems by integration of MOOCs in Curriculum of Yashwantrao Chavan Maharashtra Open University.

<table>
<thead>
<tr>
<th>Observed Frequencies</th>
<th>Yes</th>
<th>No</th>
<th>Neutral</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit Transfer will be issue</td>
<td>13</td>
<td>22</td>
<td>14</td>
<td>49</td>
</tr>
<tr>
<td>Financial Load to University</td>
<td>18</td>
<td>16</td>
<td>15</td>
<td>49</td>
</tr>
<tr>
<td>Require Additional Manpower</td>
<td>26</td>
<td>17</td>
<td>6</td>
<td>49</td>
</tr>
<tr>
<td>Total</td>
<td>57</td>
<td>55</td>
<td>35</td>
<td>147</td>
</tr>
<tr>
<td>Expected Frequencies</td>
<td>Yes</td>
<td>No</td>
<td>Neutral</td>
<td>Total</td>
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<td>-------</td>
</tr>
<tr>
<td>Credit Transfer will be issue</td>
<td>19</td>
<td>18.3333</td>
<td>11.6667</td>
<td>49</td>
</tr>
<tr>
<td>Financial Load to University</td>
<td>19</td>
<td>18.3333</td>
<td>11.6667</td>
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<td>147</td>
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<thead>
<tr>
<th>∑(Oi – Ei)²/Ei</th>
<th>Yes</th>
<th>No</th>
<th>Neutral</th>
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<tr>
<td>Credit Transfer will be issue</td>
<td>1.894737</td>
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<tr>
<td>Financial Load to University</td>
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<tr>
<td>Require Additional Manpower</td>
<td>2.578947</td>
<td>0.09697</td>
<td>2.752381</td>
</tr>
</tbody>
</table>

| Chi square calculated | 9.83 |
| Degree of freedom     | 4    |
| Alpha                  | 0.05 |
| Table Value/Critical value | 9.48 |

It can be seen that the estimated Chi square value is (9.83), which is higher than the table or critical value (9.48). The null hypothesis is thus proved to be wrong. The maximum number of respondents believes that additional staff will be required for the integration of MOOCs.

**H₀: There is no significant difference in opinion of YCMOU staff about threat to Teachers job after Integration of MOOCs in Curriculum of Yashwantrao Chavan Maharashtra Open University.**

<table>
<thead>
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<th>Yes</th>
<th>No</th>
<th>Neutral</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you think MOOCs would replace teachers job in near future</td>
<td>8</td>
<td>32</td>
<td>9</td>
<td>49</td>
</tr>
<tr>
<td>MOOCs Shall Replace the Present academic structure</td>
<td>8</td>
<td>28</td>
<td>13</td>
<td>49</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>60</td>
<td>22</td>
<td>98</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Expected Frequencies</th>
<th>Yes</th>
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<tr>
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<td>16</td>
<td>60</td>
<td>22</td>
<td>98</td>
</tr>
</tbody>
</table>
Here, the calculated value of the Chi square test is greater than the Table Value/Critical value. Hence the researchers have accepted the Null Hypothesis.

It can be concluded that the majority of individuals believe that MOOCs will replace academic structures, and that the integration of MOOCs will have no influence on the employment of teachers.

**Conclusion**

Depending on the outcomes of the survey, the researchers have come to the conclusion that the majority of the faculties of YCM Open University are willing to integrate the MOOCs into the curriculum of the programmes offered by the university. Furthermore, some of them believe that the integration of MOOCs will change the academic structure of the university and that there will be a need for additional manpower, but in spite of all of this, MOOC integration will have no impact on teacher employment and it will be definitely benefit the university several aspects. In nutshell, we can say that there are some hurdles which the university can overcome and that in the near future it will integrate MOOCs into the curriculum of the programmes being offered.
References


Castillo, Nathan M.; Lee, Jinsol; Zahra, Fatima T.; and Wagner, Daniel A., "MOOCs for Development: Trends, Challenges, and Opportunities" (2015). *Journal Articles (Literacy.org)*. 6. [https://repository.upenn.edu/literacyorg_articles/6](https://repository.upenn.edu/literacyorg_articles/6)

