



AWARENESS OF MOOC (MASSIVE OPEN ONLINE COURSES) COURSES AMONG STUDENT TEACHERS FOR FUTURE READY CLASSROOM

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Abstract:

This survey study specifically focusing on the awareness of Massive Open Online Courses (MOOCs) among student teachers in Pune city, appears to be limited the objective of this study was Awareness of the MOOC course among the student-teachers in Pune city. A survey method was adopted for this study. Sample of 120 Student-teachers from B. A. B.Ed., B.Ed., M.Ed. Colleges. The results of the present study indicate that the student-teachers are an average level of Awareness of the MOOC, and awareness of SWAYAM based on student-teachers Basic Qualification etc.

Key words: MOOC, Student Teacher, Awareness, SWAYAM, NEPTEL, mooKIT etc.

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Introduction:

The word MOOC was coined in 2008 by Dave Cormier, from the University of Prince Edward Island for a course offered by the University of Manitoba, "Connectivism and Connective Knowledge." The course Connectivism and Connective Knowledge develop by Stephen Downes and George Siemens. UGC feels that Universities can play a pivotal role in disseminating and popularizing the SWAYAM courses amongst its students and the academic fraternity at large, thereby enabling a bigger and wider access to students avail the benefit of MOOCs. MOOC are important because they democratize education, offering accessible, flexible and affordable learning opportunities for a wide audience, enabling skill development, career advancement and lifelong learning. This survey study specifically focusing on the awareness of Massive Open Online Courses (MOOCs) among student teachers in Pune city appears to be limited. Hence, it is need of to do study how student teachers aware about the online course at UG and PG

level. Thus, the Investigator has taken a study in this title.

Title of study:

A Survey Study of the Awareness of MOOC (Massive Open Online Courses) among Student Teachers

Literature Review:

The word MOOC was coined in 2008 by Dave Cormier, from the University of Prince Edward Island for a course offered by the University of Manitoba, "Connectivism and Connective Knowledge." The course Connectivism and Connective Knowledge develop by Stephen Downes and George Siemens.

Characteristics of MOOC :

Bates (2015) specifies the essential elements behind each acronym of MOOC. Common in these definitions are the following aspects to give meaning to the elements of a MOOC

Massive:

designed for unlimited number of participants. This means that the course is designed such that the efforts of all services does not increase significantly as the number of participants increases.

Open:

access to the course is free without entry qualifications.

Online:

the full course is available through the internet.

Course:

the offering is a course, meaning that it offers a complete learning experience, i.e. structured around a set of learning goals in a defined area of study and includes the course materials, quizzes, feedback, examination and certificate of completion

Types of MOOC:

xMOOCs - stands for eXtended Massive Open Online Courses which are based on traditional course structures and make use of established teaching approaches and materials. Students will observe pre-recorded lectures, complete required readings, and participate in discussions as produced and curated by the course instructor or an instructional team from a higher education institution. It follows the behavioristics approach of learning .

- cMOOCs - 'c' in cMOOC stands for connectives', which represents the nature of cMOOC and based on connectives' learning models that privilege collaboration as a form of active learning. Students in a cMOOC will work together to locate, evaluate, and contribute course content, uploading materials (tweets, blog posts, blogs, wikis, etc.) to the course using the learning platform.

MOOCs Providers:

However universities plays important role in creating MOOCs but they rarely provide MOOCs themselves. Instead, they depend on course providers such as:

- Coursera • edX • FutureLearn
- Udacity • NovoEd • Iversity etc.

Indian Platforms for MOOCs :

SWAYAM -Stands for Study Webs of Active Learning for Young Aspiring Minds. It is an India Chapter of Massive Open Online Courses, indigenously developed IT platform, initiated by Government of India, which is

instrumental for self-actualization providing opportunities for a life-long learning. It is an integrated MOOCs platform for distance education that is aimed at offering all the courses from school level (Class IX) to post-graduation level. SWAYAM was developed in 2014, collaboratively by MHRD (Ministry of Human Resource Development) and AICTE (All India Council for Technical Education) with the help of Microsoft and is capable of hosting 2,000 courses.

NPTEL- is an acronym for National Programme on Technology Enhanced Learning which is an initiative by seven Indian Institutes of Technology (IIT Bombay, Delhi, Guwahati, Kanpur, Kharagpur, Madras and Roorkee) and Indian Institute of Science (IISc) for creating online course contents in engineering and science. It is a project funded by the Ministry of HumanResource Development (MHRD) and contents for the courses were based on the model curriculum suggested by All India Council for Technical Education (AICTE) and the syllabi of major affiliating Universities in India

mooKIT- is a light-weight MOOC Management System like EdX which is conceived, designed and developed at IIT Kanpur to deliver and manage a course online. mooKIT Management System has been built ground up at the Computer Science department at IIT Kanpur with best-of-breed features and state-of-art technology.

ITBX- is MOOC platform developed by IIT Bombay through significant customization of open edX code base. IITBX platform is an integration of Drupal 8 with Open edX. The courses are offered using Open edX, while Drupal is used to fetch and display courses in various ways. This platform has been created for learners including academicians, students, researchers, professionals, administrative staff, and novice users, including educationally, socially, economically, physically disadvantaged groups or others that seek to transform themselves through cutting-edge

technologies, innovative pedagogy, and rigorous courses.

IIMBx -is a MOOC founded on the philosophy that management education has strong potential to transform our educational systems and that high quality education must be available to all unconstrained by limitations imposed by location, finances or prior educational background.

Review of Research:

For instance, a study by Shaheen Altaf Shaikh assessed the awareness and perceptions of MOOCs among B.Ed. student teachers. The findings indicated that while 92% of student teachers knew the full form of MOOC, none could name any specific MOOC platform. Additionally, only 2% had enrolled in a MOOC, and none completed the course. The study highlighted a general lack of awareness about the types of courses offered and the certification process, with 83% believing that fees would be charged for MOOCs. The research concluded that student teachers' perceptions were mostly negative, suggesting a need for better guidance to encourage MOOC participation.

ASR Publication Centre+1Academia+1Academia

Another study by Gaurav Singh and Rashmi Chauhan explored the awareness of MOOCs among 156 teacher educators in India. The research revealed that while teacher educators had a basic understanding of MOOCs, there was confusion regarding their role in teacher training and a lack of understanding about Indian MOOC initiatives like SWAYAM. The study emphasized the need to develop proper understanding and provide facilities to integrate MOOCs into regular classroom practices.

ResearchGate+3Academia+3AsianJDE+3

Objectives of the study:

1. To assess the level of awareness about MOOCs among student teachers in Pune city.

2. To identify the sources through which student teachers learn about MOOCs.
3. To evaluate the usage and participation of student teachers in MOOCs.
4. To suggest measures to improve MOOC awareness and participation among student teachers.

Hypotheses:

1. Awareness of MOOC courses among student teachers is not adequate in Pune city.
2. There is no significant difference between the mean scores of awareness about sources of MOOC based on their Basic Qualification.

Delimitation of the study:

1. The selection of sample done only from student teachers at various colleges studying in Pune city only.
2. The study is restricted with only teacher training colleges from Pune city.

Methodology: In this research study Investigator used Survey method for data collection.

Sample- In this research study Investigator 120 student teachers considered as a sample from Pune city education colleges UG (B.A.B.Ed., B.Ed.).PG (M.Ed.).

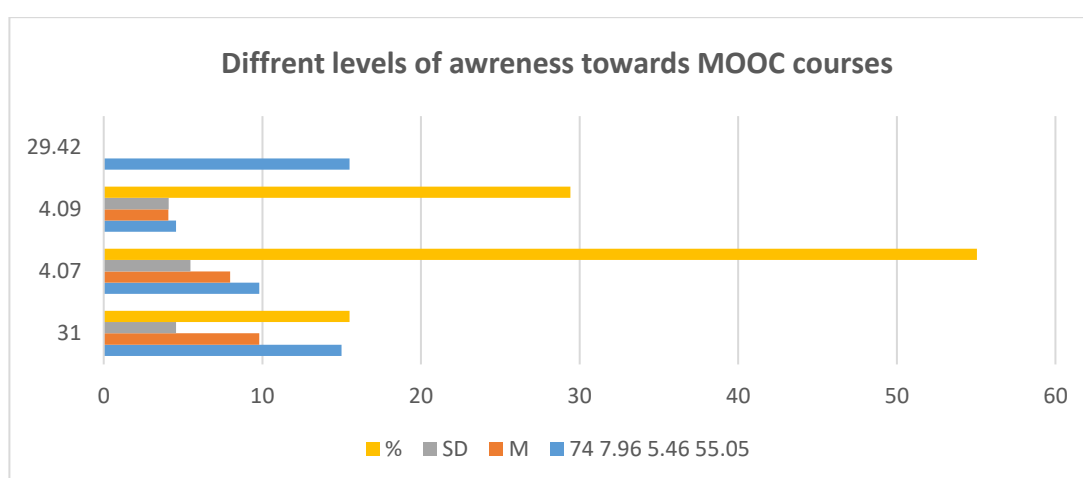
Research Tools- In this research study Investigator used teachers made questionnaire for data collection. In this questionnaire prepared 30 questions related to awareness about MOOC among student teachers.

Data Interpretation:

Percentile Analysis was done to classify the student teachers into three groups namely High (scores above Mean+1 σ), Average (scores between Mean +1 σ and Mean-1 σ) and Low (scores below Mean-1 σ) based on their scores on awareness towards MOOC course among student teachers. Following the Table presents details about different levels of awareness towards MOOC-SWAYAM course among student teachers.


Different Levels of awareness towards MOOC courses:

Different Levels	N	M	SD	%
High	15	9.81	4.56	15.5
Average	74	7.96	5.46	55.05
Low	31	4.07	4.09	29.42
Total	120			



As shown in above Table, only 15.5 percent of student teachers (N=15, M = 9.81, SD = 4.56) fall in the group of high level of awareness towards MOOC course among student teachers. About 55.05 percentage of student teachers (N=74, M = 7.96, SD = 5.46) fall in the group of average level of awareness towards MOOC course among student teachers. There are 29.42 percentage of student teachers (N=31, M = 4.07, SD = 4.09) fall in the group of low level of awareness towards MOOC course among student teachers. Majority of the student teachers had average level of awareness on courses.

Significance of Difference for Basic Qualification:

The t-test was used to find out the difference between the under graduation and post-graduation of awareness towards MOOC course among student-teachers. The result is presented in the following Table

Details of t-test Result for Basic Qualification

Basic Qualification	N	Mean	SD	't' value	Remark
UG	65	22.21	6.13	0.42	Not Significant* (* at 0.05 Level)
PG	55	22.93	5.93		

As shown in the Table, the mean score of student teachers having under graduation (N=65) is 6.13 with standard deviation of 22.21 and the mean score for student teachers having post-graduation (N=55) is 22.93 with standard deviation of 5.93. The calculated t-value is 0.42 ; it is less than the table value of 2.44at 5% level of significance. It is inferred from these results ($t = 0.42 < 2.44$), there is no significant difference between student teachers having under graduation and post-graduation as their basic qualification on awareness towards MOOC course among student teachers.

Results and Discussion:

- Approximately 65% of the student teachers surveyed had heard of MOOCs. 35% were unaware of the term "MOOC" or its full form.
- Among those aware of MOOCs: 42% learned about MOOCs through college faculty or guest lectures. 30% via social media platforms (YouTube, LinkedIn, etc.), 18% from friends or peers., 10% through newspapers or educational websites.
- The most recognized MOOC platforms included: SWAYAM 60% Coursera –48% edX 33% Udemy 25% Others (Future Learn, Khan Academy, etc.) 10%
- Only 40% of those aware had enrolled in at least one MOOC. Of those who enrolled: 12% completed at least one course. 88 % dropped out due to time constraints or lack of motivation.
- Majority of participants felt MOOCs: Improved their subject knowledge (56%), Helped them develop new teaching strategies (48%), Enhanced ICT skills (38%)
- Key challenges reported: Lack of time due to academic workload 52%, Limited internet access or technical issues 28%, Lack of guidance on how to select relevant MOOCs 20%
- Attitude Toward MOOCs in Teacher Education 75% of respondents agreed MOOCs should be integrated into B.A.B.Ed., B.Ed./M.Ed. curriculum. 68% expressed willingness to take MOOCs in the future if given proper guidance.
- There is no significant difference in different groups (High, Average, and Low) of student teachers towards their awareness on Swayam courses for total sample.
- There is significant difference between the Basic Qualification of Graduation and Post-Graduation of

student teachers towards their awareness on Swayam courses.

- There is no significant difference between First Year and Second Year student teachers towards their awareness on Swayam courses.

Recommendations:

- Conduct MOOC orientation programs at teacher training institutes.
- Include credit-based MOOCs in curriculum.
- Provide mentorship and support for MOOC completion.
- Awareness programmes should be conducted to the college and university.
- Students Swayam courses Curricula and courses that can meet the needs of life-long learners.
- Independent courses which may not be part of any set curriculum and may be taught as awareness courses, continuing education programme and for training of specific skill sets.

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