



## SUPPLEMENTING THE PRE-SERVICE TEACHER'S TRAINING THROUGH MOOCS

Yogesh Punia

TGT (Maths), Kendriya Vidyalaya Harsinghpura, Karnal, Haryana

Voice of Research

Volume 5, Issue 4

March 2017

ISSN 2277-7733

### Abstract

*A Massive Open Online Course is a web based distance learning program that is designed for the participation of large numbers of geographically dispersed student having Open Access and interactive participation by means of the bed the participants are provided with those materials that are normally used in a conventional educational setting letters Vision study materials and problem sets.*

**Keywords:** Pre-service, Training, Teacher Training

### Historical Background

Following on from the development of Open Educational Resources(OER) and the Open Education Movement(Yuan ,et al. 2008), the term Massive Open Online Courses was first introduced in 2008 by Dave Cormier to describe Siemens and Downes 'Connectivism and Connective Knowledge' course. This online course was initially designed for a group of 25 enrolled, fee paying students to study for credit at the same time was opened up to registered only learners worldwide. As a result, over to 300 people participated in the cold without paying fees or getting credit.

In 2011, Sebastian thrun and his colleagues at Stanford opened access to the course they were teaching at the University 'Introduction to Artificial Intelligence' and attracted one 160,000 learners in more than 190 countries. Since then, MOOCs have become a label for many recent online course initiatives from institutions, individuals and Commercial organizations.

### MOOCs in India

NPTEL(National Program on Technology Enhanced Learning) was founded in 2006 under the expertise of IIT's a IISC's and provides online video lectures to the students. There are no user registration fees and the content is available for free to all.

In October 2013 SWAYAM(Study Web Off Active Learning For Young Active Minds) platform was launched by the Ministry of Human Resources and Development and launched three different courses - Introduction to Computer Programming by IIT-Bombay; Introduction to Thermodynamics by IIT-Bombay; Quantum Mechanics and Quantum computation by UC Berkeley

### Significance of the study

A traditional teaching practice includes classrooms where teaching is provided in a set manner with limited resources in terms of exploration of concepts that are to be dealt in the class. The need to cover the syllabus in stipulated time and the fixed duration of a class always knocks out

the possibility to have knowledge imparted by Constructivist and Activity Centred approach.

With this ideological clash , it is proposed to have such a course that will be an improvement to the traditional teaching practices with certain extra elements for the learner such as audio-visual aids content with the ease to access the course content at his/her own convenience.

### Objectives of the study

To compare the learning of teacher training through traditional teaching and teaching through MOOCs.

### Hypothesis

Teaching method results in a significant difference in learning of Pre-Service teacher trainees.

### Methodology

The present study is a two group design experimental study. A Sample of 60 students was selected for the experiment. They were equally divided into two groups. Both the groups were taught motivation, thrice in a week on alternate days by using two different teaching approaches.

MOOC group was provided access to the course through Blackboard CourseSites MOOC platform. In order to ensure smooth access to the course the students were given the option to register via Facebook, Twitter or any email ID. Students were also provided with video that shows an animation Clips to enhance their learning experience.

Another group was taught the same topic or content by providing lecture and Discussion method under the conventional teaching approach.

After completing the three days teaching Schedule of each group, a pre-planned test was administered on the students of both the groups at the same time. The scores of all the groups were compared by applying t-test for testing the hypothesis.

Significance of the Difference between mean scores of trainees taught by conventional method and trainees taught by using MOOCs



| Students group    | N  | Mean | SD   | SED   | t' Ratio |
|-------------------|----|------|------|-------|----------|
| Traditional group | 30 | 19   | 3.74 | 1.090 | 2.47     |
| MOOC group        | 30 | 21.7 | 2.91 |       |          |

It is revealed from the above table that interference of MOOCs in classroom teaching results in a significant difference in the learning of Pre-Service teacher trainees. The obtained t-values between the mean scores if two groups was found to be 2.47 which was significant at .01 level of significance (at degree of freedom (df) =58).

The mean scores of two groups were 19.00 and 21.70 respectively. As a result of the given interpretation the Teaching method results in a significant difference in learning of Pre-Service teacher trainees was retained.

**Conclusion**

The advent of MOOCs in the classroom helps in getting the student move towards the knowledge section rather than the information. The inclusion of MOOCs as a medium of Instruction, either solely or as a supplement does result in better achievement of the students.

**Bibliography**

Downes, S. (2001) Learning Objects: Resources for Distance Education Worldwide. *The International Review of Research in Open and Distance Learning*

Du, J., Ge, X., & Zhang, K. (2012). Graduate Students' Perceptions and Experiences of Online Collaborative Learning in Web-Based and Web-Supplemented Learning Environments. *International Journal of Information and Communication Technology Education*, 8(4), 62-74.

*Evidence-Based Practices in Online Learning: A Meta-Analysis and Review of Online Learning Studies*. U.S. Department of Education.

Exploring the Issues and Challenges. *New Review of Academic Librarianship*. 20 (1), pp. 4–28.

Eynon, R. (2014). *Conceptualising Interaction and Learning in MOOCs*

Garrison, D. R. and Cleveland-Innes, M. (2005) Facilitating Cognitive Presence in Online Learning: Interaction Is Not Enough. *The American Journal of Distance Education*. 19 (3), pp. 133–48.

Gilbert, J. A., & Flores-Zambada, R. (2011). Development and Implementation of a “Blended” Teaching Course Environment. *MERLOT Journal of Online Learning and Teaching*, 7(2), 244–60.

Yuan, L. and Powell, S. (2013) *MOOCs and Open Education: Implications for Higher Education* [Internet]. CetusPublications