

A Content Analysis of Massive Open Online Courses (MOOCs) Published Literature 2008-2015

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Abstract:

This study explains the concept of Massive Open Online Courses (MOOCs). The main aim of this paper is to present a content analysis of published literature on MOOCs from 2008-2015. A total 943 papers are classified through the database searches on different criteria. The results revealed that there is a gradual increase of literature on the topic MOOCs.

Keywords: Massive open online course; MOOCs, Content analysis.

1. Introduction

Massive Open Online Courses (MOOCs) are comparatively a new pedagogy of learning and a popular phenomenon in the online learning world. Many universities around the world are adopting MOOCs as a platform to support education especially using the power of web to offer courses online. The term (MOOC) mainly came in 2008 to describe Open online course in Canada, but now it's so much popular in the whole world.

2. Review of Literature

There are plethoras of literature available on MOOCs dealt with various aspects of the topics. Hood N., Littlejohn A., Milligan C. (2015) examines how a learner's current role and context influences their ability to self-regulate their learning in a MOOC. They compared the self-reported self-regulated learning behavior between learners from different contexts and with different roles. The study provides an insight into how an individual's context and role may impact their learning behavior in MOOCs. Longstaff E. (2015) opined that MOOCs can still be a beneficial education resource with an ability to empower even already well-educated members of society. It promotes anywhere, anytime learning; to increase access to world-class higher education; and to connect and empower. Warburton S., Mor Y. (2015) explore the design approaches that experts in the field of online learning have used to develop and deliver Massive Open Online Courses (MOOCs). He has further explored the design approaches that experts in the field of online learning have used to develop and deliver Massive Open Online Courses (MOOCs). Christoforaki M., Ipeirotis P.G. (2015) opined that (MOOCs) has created an increasing need for reliably evaluating the skills of the participating users in a scalable way. Jones M.L., Regner L. 2015 discussed on student privacy and

Massive Open Online Courses and the concerned related to privacy. Mazzola L. (2015) discussed about developing and facilitating MoMA's first MOOC. It is the combination of case study and personal reflection about developing and facilitating MoMA's first MOOC. Ahlberg C. (2014) discussed how recent developments around net-based learning, with massive open online courses (MOOCs) as an example, can provide an opportunity for university libraries to redefine their role within the university organization. Utomo R.G., Rosmansyah Y. (2014) opined that Massive Open Online Courses (MOOCs) is the recent model of distance learning. MOOCs targeting unlimited participants and open access through website. Its main focus is the interaction between the user those are students, teachers and teaching assistants. MOOCs may well be an alternative to how education is delivered and consumed. MOOCs targeting unlimited participants and open access through website. Its main focus is the interaction between the user those are students, teachers and teaching assistants. Dyer R.A.D. (2014) MOOCs represented a new thinking for content design/delivery rooted in the transformation of production and knowledge sharing Tapscott & Williams, (2007) examined MOOCs as a new digital content frontier, their relevance to Caribbean higher education institutions and the challenges that universities face as they become more prevalent. Ramesh A., et al., (2014) discussed probabilistic model connecting student behavior and class performance, formulating student engagement types as latent variables. They discussed that this model identifies course success indicators that can be used by instructors to initiate interventions and assist students. Bernstein R. (2013) the rise of massive open online courses (MOOCs) is shaking up education. For science professors, the Internet offers new opportunities and technological tools to develop new materials, rethink curricula, and teach more effectively, benefiting students both on campus and on the web. The rise of massive open online courses (MOOCs) is shaking up education. Hofmann D., et al., (2013) Aim of the paper is the demonstration of a paradigm shift in shape, color and spectral measurements in industry, biology and medicine as well as in measurement science, education and training. Laboratory applications will be supplemented and replaced by innovative in-field and point-of-care applications. Aim of the paper is the demonstration of a paradigm shift in shape, color and spectral measurements in industry, biology and medicine as well as in measurement science, education and training. Wu K. (2013) The author discusses the unique characteristics of MOOCs, speculates on the benefits of MOOCs on higher education, and explores the impact of MOOCs on academic libraries and how librarians can respond to it. Findings - MOOCs create global learning communities that benefit both students and universities, and generate unique challenges and opportunities for academic libraries. The author discusses the unique characteristics of MOOCs, speculates on the benefits of MOOCs on higher education. Tovar E., et al., (2013) analyzed the characteristics of MOOCs that can be incorporated into environments such as Open Course Ware. Zhang C., Qiu K., Ma C. (2009) discussed a new study method that is under independent case of multiple optical orthogonal codes to derive the probability function of MOOCs-OPS networks, They discussed the performance characteristics for a variety of parameters, and compare some characteristics of the system employed by single optical orthogonal code or multiple optical orthogonal codes sequences-based optical labels.

3. Methodology

A large number of published literatures are analyzed based certain criteria which are discussed under:

- (a) **Database:** Scopus Database used to get a clear picture of published literature from 2008-2015. Only published literature in Journals and Conferences are included in the study.
- (b) **Year:** The term **MOOCs** has been coined in 2008 that is the reason to start our study from this time period.
- (c) **Search Query:** Simple and Advanced Search techniques have used to get results. Further Boolean, and Truncation search also performed to get a comprehensive results. A total of 943 papers published in the Journals and Conferences are retrieved.

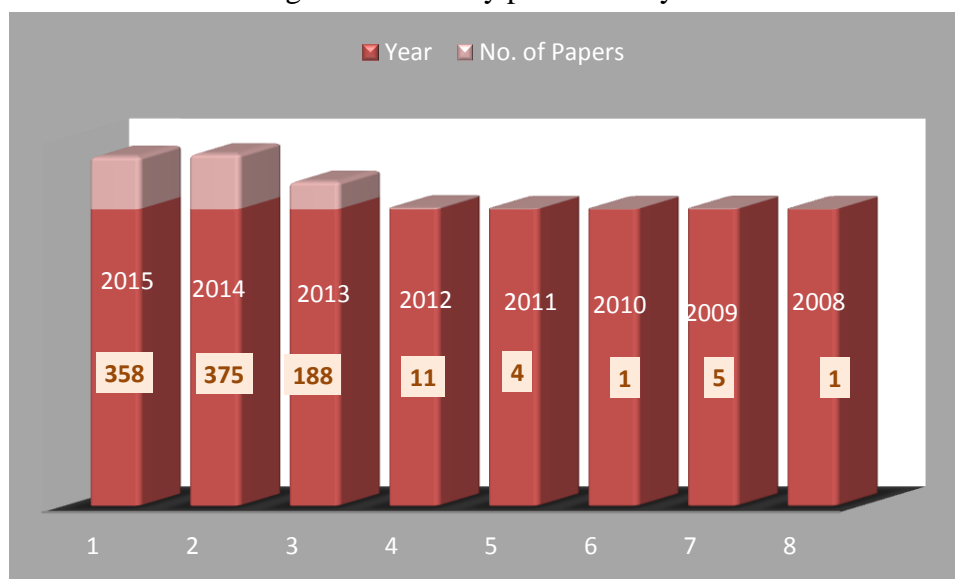
4. Key Findings

- (a) **Articles by publication year:** A total of 943 papers published in various Journals and Conferences are included. The resultant data is further classified according to their year of publications depicted in table 1.1& figure 1.1 below:

Table 1.1 Articles by publication year

S. No.	Year	No. of Papers
1.	2015	358
2.	2014	375
3.	2013	188
4.	2012	11
5.	2011	4
6.	2010	1
7.	2009	5
8.	2008	1

Fig.1.1 Articles by publication year



(b) Main Area / Thrust Area: The papers are further classified on the basis thematic area/Thrust area. In first instances, all the keywords categorized separately, which are more than 200 keywords, these keywords are further covered the hundreds keywords. Table 1.2 presents top twenty Main Area / Thrust Area.

Table 1.2 Top 20 Thematic Areas

S. No.	Main area/Thrust area	Frequency
1	Teaching & its elements	246
2	Students & related activities	240
3	Learning & its system	230
4	massive open online courses (MOOCs)	226
5	On-line learning systems	219
6	Education System	185
7	E-learning	180
8	Social networking (online)	140
9	Engineering and computer science	98
10	Open educations	85
11	curriculum & Its design and Development	65
12	Computer Science	59
13	Knowledge learning system	52
14	Information and Communication Technology	50
15	Design and Development	50
16	Data communication systems	43
17	Distance education	42
18	Higher education	40
19	Virtual learning environments (VLEs)	37
20	Education computing	37

The table clearly shows wide range of themes related to MOOCs as like Connectivism, Online Learning, pedagogies, technology etc. A majority of literature are available on these thematic areas.

5. Conclusions

Study unearths and presents a thematic distribution of literature on MOOCs published from 2008-2015. It is found the gradual increase in the literature on the topic MOOCs and its allied areas. The study presented and included only top twenty key areas based on frequency. However, the keywords based distribution of MOOCs literature is more than 200. The study is limited to a content analysis and distribution of literature on various themes through SCOPUS and human understanding level. The future study may be conducted to presents mapping of all the literature published under some more thematic areas.

References

1. Hood, N., Littlejohn, A., & Milligan, C. (2015). Context counts: How learners' contexts influence learning in a MOOC. *Computers & Education, 91*, 83-91.
2. Law, P. (2015). Digital badging at The Open University: Recognition for informal learning. *Open Learning: The Journal of Open, Distance and E-Learning, 30*(3), 221-234.
3. Longstaff, E. (2015). How MOOCs can empower learners: A comparison of provider goals and user experiences. *Journal of Further and Higher Education, 1*-14.
4. Warburton, S., & Mor, Y. (2015). A set of patterns for the structured design of MOOCs. *Open Learning: The Journal of Open, Distance and E-Learning, 30*(3), 206-220.
5. Christoforaki, M., & Ipeirotis, P. G. (2015). A system for scalable and reliable technical-skill testing in online labor markets. *Computer Networks, 90*, 110-120.
6. Jones, M. L., & Regner, L. (2015). Users or Students? Privacy in University MOOCs. *Sci Eng Ethics Science and Engineering Ethics*.
7. Mazzola, L. (2015). MOOCs and Museums: Not Such Strange Bedfellows. *Journal of Museum Education, 40*(2), 159-170.
8. Ahlberg, C. (2014). MOOCs at Karolinska Institutet University Library. *Insights: The UKSG Journal, 27*(2), 160-165.
9. Utomo, R. G., & Rosmansyah, Y. (2014). MOOCs as an alternative to distance learning model for University in Indonesia. *2014 International Conference on ICT For Smart Society (ICISS)*.
10. Dyer, R. A. (2014). Exploring the Relevancy of Massive Open Online Courses (MOOCs):. *Information Resources Management Journal, 27*(2), 61-77.
11. Ramesh, A., Goldwasser, D., Huang, B., Daume, H., & Getoor, L. (2014). Uncovering hidden engagement patterns for predicting learner performance in MOOCs. *Proceedings of the First ACM Conference on Learning @ Scale Conference - L@S '14*.
12. Bernstein, R. (2013). Education Evolving: Teaching Biology Online. *Cell, 155*(7), 1443-1445.
13. Hofmann, P. D., Dittrich, B. E., Düntsch, B. E., Kraus, D., Gärtner, D. C., & Klemm, D. R. (2013). Modular Applications with Smartphones and Smartpads in Shape, Color and Spectral Measurements for Industry, Biology and Medicine plus Science, Education and Training. *J. Phys.: Conf. Ser. Journal of Physics: Conference Series, 459*, 012010.
14. Wu, K. (2013). Academic libraries in the age of MOOCs. *Reference Services Review, 41*(3), 576-587.
15. Tovar, E., Dimovska, A., Piedra, N., & Chicaiza, J. (2013). OCW-S: Enablers for building sustainable open education evolving OCW and MOOC. *2013 IEEE Global Engineering Education Conference (EDUCON)*.
16. Liyanagunawardena, T. R., Adams, A. A., & Williams, S. A. (2013). MOOCs: A systematic study of the published literature 2008-2012. *The International Review of Research in Open and Distributed Learning, 14*(3), 202. doi:10.19173/irrodl.v14i3.1455

