

Ensuring quality in online education: A review report¹

Dr Ashwani Kharola^a & Pooja Rawat^b

^aPost Doctoral Fellow, Association of Indian Universities (AIU), New Delhi

^b Independent Researcher, Dehradun

aashwanidaa@gmail.com , brawatpooja900@gmail.com

Abstract

This article highlights the benefits and shortcomings associated with online education as a modern educational tool. The need of online learning has been identified as a key factor which can only compensate for increasing enrolments in both elementary and higher education across the world. The study also elaborates several factors which will help in improving quality of online education. The need of policy formulation and recommendations for online learning has also been considered.

Keywords: Online learning, Quality education, Policy formulation, regulation

1. Online education as an alternative to classroom learning

In the last few decades there has been a massive increase in number of enrolments at every education level throughout the globe (Carceles, 1979). This rapid rise in number of students has created problem like fitting these students in classrooms, adequate scheduling of classes, availability of resources etc (Keegan, 1996). Therefore, the need of online learning as an alternative to classroom education has arrived. Online education has been considered as an important growth area in the education sector which doesn't requires more realistic resources for implementation. It is a platform where students with different cultures, fields, countries etc can easily exchange dialogue and knowledge (Fawns et al., 2019). Various e-learning tools have been developed to support and incorporate optimal educational objectives (Benta et al., 2014). There has been a rapid development in number of Massive open online courses (MOOCs) alongwith rise in number of MOOCs platforms (Jordan, 2014). These online learning platforms has shown multiple positive impacts particularly for students of low socio-economic and developing countries where conventional educational facilities are not easily available (Moore, 2013).

Online education platforms have attained popularity due to the fact that they provide more flexible access to resources from any location and at any time. This blended approach of learning has

¹ How to cite this paper: Kharola, A. and Rawat, P. (2020). Ensuring quality in online education: A review report; *PM World Journal*, Vol. X, Issue I, January.

shown a positive response on teaching and learning activities (Garrison & Kanuka, 2004). A study by Wang & Zhu (2019) clearly showed that the students in MOOC based flipped classes performed better compared to students in conventional classroom classes. In addition to above the experiences of students were better in terms of interaction, learning materials and learning outcomes. Some recent studies have revealed that the students who actively participate in online discussions have attained a higher passing percentage compared to those students who were inactive during discussions. Therefore attempts should be made to optimize online learning experience and make it more interactive, attractive and knowledge sharing (Tseng et al., 2016; Cimermanova, 2009). In this regard most of the Universities around the world are incorporating the benefits of Information and communication technologies to improve learning processes via blended learning, flipped classrooms, active learning, online e-learning, problem based learning etc (Bouilheres et al., 2020).

2. Need for online learning modules

The higher education of 21st century needs to be cost effective and provide quality learning as per current market needs to culturally diverse population of the world (Torrissi-Steele & Drew, 2013). Therefore the need for online education as a support tool to conventional classroom learning has risen. Studies have revealed the fact that online learning has its own merits, but it can't be a substitute for traditional classroom learning process (Kamsin, 2005). There has been a number of reasons why we presently need online learning resources as an alternative to classroom learning. Some of the significant reasons include:

- Increasing access of education to remotest location on globe
- Enhancing skills of individuals as per present market scenario
- Optimizing education resources
- Improving quality and capacity of existing education system
- Enhancing education experience to International level
- Making learning process more cost effective
- Creating paperless environment
- Easy handling and storage of teaching materials
- Obtaining wider range of feedbacks and opinions

3. Obtaining quality in online learning

Effective online learning desires a high level of responsibility on part of both students and instructors (Sieber, 2005). It has been analysed that the concept of quality development is still not considered optimally while designing open education processes and MOOCs. The quality of online education is the primary factor on which success of any online learning, education and training program depends (Stracke, 2017). The online courses should be well designed and able

to provide good quality academic exposure to students (Sun & Chen, 2016). Different studies have revealed certain factors which influences the quality of online learning processes (Bangert, 2006). Quality in online learning can be achieved through the following measures:

- Well-designed course content
- Motivated interaction between faculty and students
- Supportive faculty and good quality lectures
- Developing sense of online learning
- Enhancement in technology for better delivery & engagement
- Blended learning i.e. integration of face-to-face and online instruction
- Time on task
- Cooperation among students
- Improving high dropout and low completion rate
- Fair and transparent procedures for handling complaints & queries

4. Policy formulation & Regulations for online learning courses

In accordance with UGC online courses regulation meeting held on 24th May 2018, the higher education institutions can now offer certificate, diploma and degree programs in online mode. Following regulations have been framed by UGC for commencement of such online courses:

- The higher educational institutions will be eligible to offer online programs if they have been in existence for at least 5 yrs and accredited by NAAC with a valid minimum score of 3.26 on a 4-point scale and should be among top 100 NIRF ranking.
- The higher education institute should offer online program in only those disciplines in which it has been already offering same or similar program in regular, open or distance learning mode.
- Online learning programs which require practical or laboratory courses should not be permitted.
- The examinations shall be conducted in proctored mode and in conformity with norms
- The online learning should have minimum four contents: video lectures, e-content, self-assessment and discussion forum.
- Aadhaar and passport shall be used to authenticate the Indian and foreign students
- The learners' engagement will be monitored through participation in discussions, assignments and program involvement.

Apart from above guidelines adopted by the govt. following measures may also be adopted to develop more significant framework for online learning:

- Some significant design framework modules like ADDIE (Analysis, design, development, implementation & evaluation) should be incorporated for developing content of online learning programs (Castro & Tumibay, 2019).
- Efficient measures like Student evaluation of online teaching effectiveness (SEOTE) shall be considered for assessing effectiveness of online teaching programs
- Guidelines should be framed to provide students with all kind of supporting facilities starting from commencing to completion of courses in a healthy and mindful way.
- A rapid response toolkit should be maintained for those students who move to online learning for the first time. The kit comprises of basic tools to maintain communication and support thereby igniting a spark of interest in students.
- Online quality clinics should be established for monitoring, assuring and enhancement of online training programs.

References

Bangert, A.W. (2006). Identifying factors underlying the quality of online teaching effectiveness: An exploratory study. *Journal of Computing in Higher Education*, 17:79-99, doi:10.1007/BF03032699.

Benta, D., Bologna, G., & Dzitac, I. (2014). E-learning platforms in higher education: Case study. *Procedia Computer Science*, 31:1170-1176, doi:10.1016/j.procs.2014.05.373.

Bouilheres, F., Le, L., McDonald, S., Nkhoma, C., & Jandug-Montera, L. (2020). Defining student learning experience through blended learning. *Education and Information Technologies*. doi:10.1007/s10639-020-10100-y.

Carceles, G. (1979). Development of education in the world: A summary statistical reviews. *International Review of Education*, 25:147-166, doi:10.1007/BF00598023.

Castro, M.B.D., & Tumibay, G.M. (2019). A literature review: efficacy of online learning courses for higher education institution using Meta-analysis. *Education and Information Technologies*. doi:10.1007/s10639-019-10027-z.

Cimermanova, I. (2009). E-learning an alternative to traditional learning?. *Acta Didactica Napocensia*, 2(1):1-13.

Dziuban, C., & Graham, C.R., Moskal, P.D., Norberg, A., & Sicilia, N. (2018). Blended-learning: the new normal and engineering technologies. *International Journal of Educational Technology in Higher Education*, 15:1-16, doi:10.1186/s41239-017-0087-5.

Fawns, T., Aitken, G., & Jones, D. (2019). Online learning as embodied, socially meaningful experience. *Postdigital Science and Education*, 1:293-297, doi:10.1007/s42438-019-00048-9.

Garrison, D.R., & Kanuka, H. (2004). Blended-learning: Uncovering its transformative potential in higher education. *Internet and Higher Education*, 7(2):95-105, doi:10.1016/j.iheduc.2004.02.001.

Jordan, K. (2014). Initial trends in enrolment and completion of massive online courses. *International Review of Research in Open and Distance Learning*, 15(1):133-160, doi:10.19173/irrodl.v15i1.1651.

Kamsin, A. (2005). Is E-learning the solution and substitute for conventional learning? *International Journal of the Computer, the Internet and Management*, 13(3):79-89.

Keegan, D. (1996). *Foundation of distance education*. Psychology Press.

Moore, M.G. (2013). *Handbook of distance education*. New York: Routledge.

Sieber, J.E. (2005). Misconceptions and realities about teaching online. *Science and Engineering Ethics*, 11:329-340, doi:10.1007/s11948-005-0002-7.

Stracke, C.M. (2017). The quality of MOOCs: How to improve design of open education and online courses for Learners? In: Zaphiris P., Ioannov, A. (eds) *Learning and Collaboration Technologies. Novel Learning Ecosystems. LCT2017. Lecture Notes in Computer Science*, vol 10295, Springer, Cham. doi:10.1007/978-3-319-58509-3_23.

Sun, A., & Chen, X. (2016). Online education and its effective practice: A research review. *Journal of Information Technology Education*, 15:157-190, doi:10.29845/3502.

Torrissi-Steele, G., & Drew, S. (2013). The literature landscape of blended learning in higher education: The need for better understanding of academic blended practice. *International Journal for Academic Development*, 18(4):371-383, doi:10.1080/1360144x.2013.786720.

Tseng, S.F., Tsao, Y.W., Yu, L.C., Chan, C.L., Lai, K.R. (2016). Who will pass? Analysing learner behaviors in MOOCs. *Research and Practice in Technology Enhanced Learning*, 11:1-11, doi:10.1186/s41039-016-0033-5.

Wang, K., & Zhu, C. (2019). MOOC-based flipped learning in higher education: Students participation, experience and learning performance. *International Journal of Educational Technology in Higher Education*, 33:2-18, doi:10.1186/s41239-019-0163-0.

About the Authors



Dr. Ashwani Kharola

New Delhi, India



Dr. Ashwani Kharola has completed his PhD in Mechanical Engineering from Graphic Era (Deemed to be University), Dehradun, India. He received B.Tech (with Honors) in Mechanical Engineering from Dehradun Institute of Technology, Dehradun and M.Tech in CAD/CAM & Robotics from Graphic Era University, Dehradun. He obtained Silver Medal in M.Tech. Currently he is working as a Post-Doctoral Fellow at the Association of Indian Universities, New Delhi. Earlier he has worked as Associate Professor at Tulas Institute, Dehradun and as Senior Research Fellow (SRF) in Institute of Technology Management (ITM), a premier training institute of the Defence Research & Development Organisation (DRDO), Ministry of Defense, Govt. of India. He has published many National/International papers in peer reviewed ISSN Journals and IEEE Conferences. His current areas of work include Fuzzy logic reasoning, Adaptive Neuro-fuzzy inference system (ANFIS) control, Neural Networks, PID, Mathematical Modeling & Simulation. Dr. Kharola can be contacted at ashwanidaa@gmail.com



Pooja Rawat

Dehradun, India



Pooja Rawat has completed her graduation from Sardar Bhagwan Singh Post Graduate Institute (SBSPGI), Dehradun and MSc from Banasthali Vidyapith, Jaipur. Her areas of interest includes Higher Education policy research and presently she is working as Assistant Manager in a banking organization. She can be contacted at rawatpooja900@gmail.com