

Future of Blended Learning in the Education System

Piyush Dua¹ and Parmal Singh Solanki¹

¹College of Applied Sciences- Suhar, University of Technology and Applied Sciences,
Sultanate of Oman

The blended mode (BM) is an intervention of technology along with traditional face to face classroom teaching and learning system (TLS). The BM has several attributes which are encouraging to adopt it for TLS in present and forthcoming time, such as: (i) it assists the TLS by mixing the synchronous and asynchronous modes of teaching learning (ii) sharing the recorded lecture with absent students and working professionals (iii) by sharing the online contents in the form of video lectures for sustainable interest of slow learners and many more. These attributes are indicating that BM will be the need for academic sector in future to enhance teaching-learning through blending of face to face (F2F and online mode (OM) under normal and abnormal environment.

The execution of BM has revealed that it is a useful tool to boost the skill sets of students which has been assessed within the framework of Bloom's Taxonomy by the authors in case of Electrical Engineering course (<https://www.ijitee.org>). The conducted pilot case study by authors had followed the quality standards defined by course and program outcomes under the umbrella of accredited agency ABET (<https://www.abet.org>). Further it is possible to extend the application of BM effectively to appraise academic activities for other accredited agencies such as the IET (<https://www.theiet.org>) and OAAA (<https://www.oaaa.gov.om>).

The main ingredients of any education systems are F2F, OM and distance education. These ingredients can be mixed in any proportion by using Information and Communication Technology (ICT) to make it as BM which can be delivered in synchronous and/or asynchronous mode. The blending of a course depends upon the nature of delivery and its circumstances. For instance some courses are purely theoretical while several may be embedded with laboratory having different contact hours and credits. Any course can be taught in BM by various ways through mixing F2F, OM, F2F laboratory and virtual laboratory in any proportion such as online class with F2F laboratory or F2F class with virtual laboratory etc. In some cases visual effects can be embedded even in F2F mode to make it blended.

To outfits the BM, numerous platforms and tools are available. Some are paid with perpetual license, like comprehensive learning management system Blackboard (<https://www.blackboard.com>), Lore (<https://www.lore.com>), Myedu (<https://www.myedu.com>), etc. whilst few platforms are open sourced (up to some certain extent) such as Moodle (<https://www.moodle.com>), Google classroom (<https://www.classroom.google.com>), Zoom (<https://www.zoom.us>) etc. At the present scenario these platforms and tools may be expensive but with respect to time when large number of users will adopt the BM, cost of per user license would decrease.

The added advantage of BM is to promulgate andragogy due to its flexible nature which is more convenient for working professional as well as for regular students. The Massive Open Online Courses (MOOCs) platforms have proven the suitability of BM by successfully conducting the courses like Coursera (<https://www.coursera.org>), Edx (<https://www.edx.org>), Udemy (<https://www.udemy.com>), etc.

In spite of having several benefits to the academic community, the BM has certain socio-economic challenges as well. The faster technological development required more adaptive acquaintance of the user. Some platforms are too expensive to afford by small scale educational organizations and users. However, before Covid-19 (<https://www.oaqhe.net>), the BM was a choice but now it is a need and in future it will be a necessity.



Piyush Dua

P.S. Solanki