

Blended learning: a pedagogical alternative to traditional learning in dermatology

Sadia Masood*, Naveed Yousuf**

* Department of Dermatology, Aga Khan University Hospital, Karachi

** Department of Educational Development, Aga Khan University Hospital, Karachi

Nowadays, advanced technology and globalization are randomly changing our views on medical education and educational strategies. Modern technology has now given birth to many new avenues for learning. A few of these approaches include online learning, teleconferencing, computer assisted learning, and web-based distance learning. These terms have helped coin the innovative term “blended learning”, which has entered the training and education field and is gradually gaining popularity. It is now expanding and rapidly changing.¹

Blended learning (BL) is an effective teaching and learning strategy. It is a formal educational strategy in which students learn through the delivery of online content, instruction, and digital media with flexible learning of their control over time, place, and pace. Face-to-face methods are combined with computer-mediated activities.² The term, “blended learning” has been used for around 15 years, but the meaning has been constantly altering. Dermatology is an important subspecialty within the discipline of medicine.³ These days, online learning proved to be a useful tool for dermatology teaching to under- and postgraduates. Specifically, clinical picture-based teaching has been used to enhance the students’ knowledge and diagnostic skills.

Address for correspondence

Dr. Sadia Masood, Assistant Professor
Department of Dermatology,
Aga Khan Medical University, Karachi
Email: sadia.masood@aku.edu

Literature has shown that only technology enhanced learning was not sufficient, as people require experiential learning beside knowledge retention and skills achieved through the blending of technology and face-to-face interaction.⁴ There are several benefits of adopting this approach in the domain of dermatology like easy accessibility, hyperlink functions, updating content, that allow cross referencing to different sites, and direct teacher interaction. These technical advances classically fit into the constructivist learning theory, where learners search and develop their personal knowledge bases. Furthermore learners using the computer-built instruction usually learned more proficiently and established enhanced knowledge retention.⁵

Around the world, the health care education and medical subspecialties are facing the problem of effective educational delivery. It has been observed that lack of encouragement and interest of instructor and learner are the important factors for the failure of typical educational programs.^{5,6} The reasons were traditional teaching means, a boring curriculum, poor qualities of teaching and learning methods, the inability to cope with program requirements, and time management issues. Furthermore, it is also noted that usually weaker students can have less support in large class techniques.⁷ These approaches tend to foster passiveness and dependence by the instructor. Time management is an important issue as with lots of other

institutional responsibilities, students cannot manage their time between service and academics.⁸

In the blended learning model the success of learner motivation is one of the vital factors affecting the learner's performance. Whenever learners recognize benefit to their learning, they will be more motivated and will work hard to attain their future goals. The learners satisfaction rates increase with BL compared to traditional learning, along with easy access, interactivity, and user-friendly design.⁶ This sort of learning improves the learning outcomes, which can be measured in the affective and cognitive domains. Learning outcomes in cognitive domain refers to the academic performance measuring the learners' ability to recall and apply the knowledge while the affective domain involves learners' attitudes, values appreciations and emotions.¹

The effective dermatology teaching strategy contributes to higher academic achievements. That's why advanced information technology can be used excellently as a productive teaching tool in health professional education. Numerous studies have been conducted in this field, and it was noted that technology enhanced learning alone was not enough to get the required results. Skills and knowledge retention is usually achieved through the blending of technology and face-to-face interactions. In the late 1980s the Workers Education Association, Ruskin College, and the Open University collaborated on what defines a blended learning program.^{1,3}

BL is a convenient and retainable educational delivery mode for dermatology because, good quality images can be presented in an outstanding way.⁹ Learners will be able to utilize their time in a better way and can get immediate feedback. The true success and effectiveness of learning is associated with the model where

work and learning are inseparable, and where learning is implanted in the work. This concept is the backbone of the integrated learning theory. There are strong pedagogical opinions for the BL approach. These researchers are confident that blending not only offers the ability to be more well-organized in delivering learning, but also more efficient. They need to follow a systematic learning path that makes knowledge retention easier. The fusion of F2F pedagogy and web-based technology have considerable potential to expedite learner-centered, flexible learning.² Moreover, it enhances interaction between the learner and teacher, as well as, allows them to communicate and collaborate in a more synchronized manner. Students prefer the BL approach when learning dermatology as it provides a greater chance to integrate the theoretical concepts with clinical practice. The active faculty response towards learners is an additional motivating factor.¹⁰

The teaching of dermatological conditions is strongly rooted in images. This is a distinctive characteristic of the field of dermatology. Students can learn to diagnose the conditions by seeing pictures of patients. The more images the students examine, the more they learn and understand dermatological diagnosis and management through direct interaction with their teacher.¹¹ It is recommended that educators adapt their teaching methodologies according to learners' needs and their learning style. While designing a BL educational program, instructors should create materials which could load quickly from different types of connections, understand how the experience reflects, and make constructive changes to create a condition for better BL in the future.⁹

The BL teaching approach motivate students to be more active in the experience of learning instead of being passive learners. It allows for collaborative adaptive learning and changes the

role of teacher just from a disseminator of knowledge to a facilitator. As a result, a combination of face-to-face and online learning creates a more cohesive approach for both learner and teacher. It is appropriate for practice-based disciplines like dermatology.¹⁰

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