LETTER to EDITOR

Learning based on micro learning

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Dear Editor;

Micro learning is the acquisition of knowledge from short, focused modules of information generally involving a single learning objective (1). This type of learning, emphasizing the limitation of the learners working memory, provides the learner with educational content in the form of audio, text, image, video, animation, quiz, game, and multimedia in small pieces. From the perspective of the cognitive approach, by segmenting the information, the cognitive load of the learners working memory is reduced and learning is facilitated for them (2). In order words, micro learning can be considered as one of the important strategies for designing educational messages that can make the teaching learning process more effective.

Micro learning can incorporate numerous learning formats and can be suited to any of the learning domains: cognitive, affective and psychomotor (1). This is despite the fact that the affective domain is considered a neglected aspect of higher education; But by using this learning method, the range of different goals can be used. Micro learning accesses to learning resources which may happen at the time of breaks or gaps in learners daily work/life activities. Since these gaps may take place in many different space locations and moments of time, microlearning is definitely the most typical from of anytime- anywhere learning (2;3) thus; Micro learning can be considered a learner- centered strategy that, in addition to its applicability in formal learning, it can also be used for informal learning.

Although there are many types of the form of presentation of micro learning, their commonality in the content of micro learning is focusing on a definable idea or topic in a short period of time (4). Among the advantages of micro learning are better retention of concepts, better engagement of learners, improvement of motivation, cooperative engagement, improvement of learning ability and performance, availability of learning at any time, and situational learning (5); In other words, this learning method makes learners focus on a small learning unit in a short period of time, and this can improve learning ability (4).

A review of research related to micro learning shows that this method is widely used in electronic learning (e-learning), mobile learning (m-learning), language education, and in general education at the university level (6). The use of this method in medical education has also been researched, which has shown the effectiveness of this method in medical education for nurses (1). But it seems that this presentation method can be used at any time and any place. Therefore, it can be said that this method reduces the cognitive load of the learner by shortening the learning parts and facilitates learning. Cognitive load refers to the amount of cognitive pressure on the learners working memory during information processing (7;8). One of the foundations of cognitive load theory is Dual-coding theory. According to this theory, learning occurs through two types of verbal and non- verbal (visual) representation (9). Based on this, the use of visual and audio channels in the learning process should be used properly; otherwise, it will cause cognitive overload and learning will decrease. One of the cognitive load management strategies is the use of micro learning. So, the use of this method for presentation can be of interest to designers and training providers.

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