

Cultivating self-directed learning skills in the budding doctors: An attempt to transform an 'Indian medical graduate' into a 'lifelong learner'

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Abstract

Medical Education is a dynamic professional entity and the practice trends for the physicians evolve rapidly to reflect advancement in the scientific technology and also, to keep pace with the health care needs of the society. Cultivating self-regulated lifelong learning skills and attitude in the medical graduates is now included as one of the competencies by Medical Council of India. Self-directed Learning (SDL) is a dynamic learning journey in which the onus of learning lies with the student and teacher is the facilitator of learning. This learning experience can be enhanced with the appropriate utilization of Information and computer technology. For effective implementation, the faculty and the students must be sensitized and trained on various modules, strategies, virtue, time and stress management techniques for SDL session. Concurrently, a large body of available literature believes that the self-directed learning is more enjoyable and at the same time, as effective as the traditional methods of education. The key component of this active learning is self-monitoring, self-assessment and reflective writing by the students. The tendency to master SDL skills is an integral link between under graduate and post graduate training and hence, is essential for enhancing professional development. The medical education stake-holders are facing numerous challenges in implementation of SDL sessions and they are still struggling to bring about flawless transitions in the medical education from one phase to another. Nevertheless, this novel learning approach would create more refined physicians who are capable of handling the rapid transformations in the medical policies.

Key-words: Medical education, Self-directed Learning, Competency based Medical Education, life-long learner, Indian Medical Graduate

Introduction:

In the current ever-evolving medical professional era, to keep pace with the health care needs of the society, a continuous change in the medical education curriculum and teaching-learning methods is required. Fostering the attitude of 'lifelong learning' is now included as one of the competency in the graduate medical regulations by National Medical Commission (NMC). 'Lifelong learning' literally means the flexible learning that is carried out by the medical student throughout his career. The teacher-centric methods like didactic lectures, tutorials that have been the

primary method of teaching in medical colleges in India, failed to develop skills and attitudes for life-long learning. However, the health educators firmly believe that encouraging acquisition of the required competencies through active learning approaches is the key step towards development of a lifelong learner. As self-directed learning (SDL) skills are a prerequisite for becoming a good physician, they should be inculcated in the medical students from the entry phase as part of their curriculum.

SDL is described by Malcolm Knowles as the educational strategy where the students, with or without, guidance from the instructor/teacher diagnose their learning needs, formulate the learning goals, choose learning strategy and self-evaluate their learning outcomes (Knowles, 1975).

The need for SDL:

SDL will produce learners who have a continuous quest for knowledge, are capable

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of managing their own learning through critical thinking and information recall to develop better decision-making potential. Moreover, if the healthcare professionals are 'self-directed' from the entry phase, their self-confidence will be boosted and self-discipline will be instilled in them leading to a successful and fulfilling medical career. SDL, as an educational concept got more popular since the implementation of Competency based Medical Education (CBME) curriculum by NMC, in which, dedicated hours have been allotted for SDL in each medical speciality.

Role of the students in SDL:

For being a successful self-directed learner, he/she must be organized, independent, self-motivated, self-reliant, resourceful; capable of making judgments and possess analytical and problem solving skills. The students should be aware of their learning needs, capable of setting the learning goals and choosing learning strategies to achieve the desired results. They should be capable of managing their time effectively and understand the strengths and weakness of their learning and make efforts towards self-improvement (Bhandari et al., 2020).

Role of a teacher in SDL:

Every session of self-directed learning requires adequate planning, mentoring and commitment by the teacher to maintain the learning standards. The teacher assesses the students' readiness for SDL session and sensitizes them to this approach by explaining the purpose and methodology of SDL. The teacher should assess the student's learning abilities and be aware of the areas in which he/she requires special. The teacher should make oneself available and motivate the students for monitoring their own learning progress and take feedback from the students to evaluate the process (Iwasiw, 1987).

Strategies for self-directed learning:

The plan of action for a self directed learner includes identifying their preferred learning style and the learning objectives; choosing effective learning strategy; devising a protocol clearly stating the timing and duration of study and the resource materials, identifying the challenges in learning and overcoming them and monitoring and reflecting on the learning process.

Virtues of SDL:

Self-directed learning is solely based on the principle of Andragogy and it facilitates life-

long learning. This type of learning aids better comprehension and longer retention of knowledge as compared to passive learning methods. SDL produces a sense of accountability, responsibility and assertiveness. It promotes higher order cognitive skills and also, develops self-efficacy in the students. Self-directed learners manage their time effectively and cope with stress in a better way. The students realize their strengths and become more methodical, organized and logical (Hayat & Shateri, 2019).

Shortcoming of SDL & the tentative solutions:

It has been observed that faculty is sceptical to embrace the novel educational concept. They need to be motivated to use self-directed learning methods and made aware about the benefits of SDL. Faculty can be pre-sensitized and adequately trained on this concept. The teachers must be prepared adequately prior to the session to allay anxiety.

Moreover, a few students are unwilling to adopt this student-centred learning strategy. As they feel more comfortable with didactic lectures. The students must be motivated and the benefits of SDL need to be discussed. Elaborative training of the students about SDL is essential to acquaint them of the benefits of this active form of learning. SDL should be adopted in a gradual manner to facilitate the learning in slow- learners/ students. The facilitator must ensure that the learner gradually moves from dependent (Stage 1) to interested (stage 2), to involved (stage 3) to independent self-directed learner (stage 4).

SDL is unsuitable for concept-based topics. The teacher must choose topics carefully after exhaustive discussions among the faculty. The students come from varied background but the teachers' expectations from all the students are the same. The teacher must consider the educational background of the students prior to SDL session and provide proper support to them.

Role of Information and Computer technology in SDL:

The successful implementation of self-regulated learning requires judicious utilization of the information and communication technology. The medicos can explore e-world at their own pace, organize their learning resources, and study individually or collaboratively via the Internet. SDL can be facilitated with the utilization of standard free medical open educational resources which enable the medicos to have access to vast sea of knowledge (like Osmosis, Stanford 25). Creating own learning blogs, twitter

account, and whatsapp study groups provides the most effective framework for passionate self-directed learning (Huang et al., 2019). In Physiology, the innovations like flipped classroom, use of the online sites like Khan's academy and Dr Najeeb's lecture series have revolutionized the concept of self-regulated learning. The students try to solve quiz given at the end of video as a mode of self-evaluation.

Conclusion

The collaborative attempt by the facilitators and medical students will go a long way to develop the independent and self-regulated lifelong learners. Concurrently, a large body of available literature believes that the self-directed learning is more enjoyable and as effective as the traditional methods of education. The tendency to master self-directed learning skills is an integral link between undergraduate and post graduate training and hence, is essential for enhancing professional development. Therefore, the medical educators should facilitate self-directed learning skills from the entry phase MBBS in order to promote reflective and critical approach to practice among the practitioners.

The corresponding author is currently pursuing FAIMER fellowship with SDL as the topic of educational project. She has also published works related to SDL.

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