EDITORIAL

Self-directed Learning: How to Do It?

Charu Mohan[1], Shaifaly M Rustagi[2]

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[1]Department of Medicine, Army College of Medical Sciences, Delhi, India

[2]Department of Anatomy, Army College of Medical Sciences, Delhi, India

Corresponding Author: Shaifaly M Rustagi, Department of Anatomy, Army College of Medical Sciences, Delhi, India, Phone: + 91 8376063069, e-mail: shaifalyrustagi@gmail.com

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According to Knowles, "self-directed learning (SDL) is a process in which individuals take initiative, with or without the help of others, in diagnosing their own learning needs, formulating goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes."[1]

Self-directed learning (SDL) is an active process in which the learner has to plan, select, and be motivated enough to take charge of their learning process. The four key stages in SDL are being ready to learn, setting learning goals, engaging in the learning process, and evaluating learning.[2] Thus, SDL involves critical thinking, self-management skills, social skills, communication skills, analytical skills, and research skills.[1]

With the introduction of the new competency-based medical education curriculum in 2019, designated hours have been allocated for the SDL sessions across all the phases, with the aim of making the Indian Medical Graduate a lifelong learner.

As proposed by Grow, a medical student's learning curve of SDL goes through the following stages. Starting from a dependent learner interested learner involved learner finally, a self-directed learner.[3]

The teacher's role is that of a facilitator of learning rather than a disseminator of content who guides the learner toward the intended learning objectives. Grow suggested that teachers need to help students advance through the stages of increasing self-direction by providing them feedback after assessment.[3] Hence, teachers should be flexible and modify their teaching styles as per the students' level of self-direction, thus enabling them to reach higher levels of Miller's pyramid.

The Process of SDL

The first step is to decide on the topic and clarify learning goals. Subsequently, the student identifies the gaps in her/his learning as to what they already know about the topic and what more they need to know. A student who is well organized, self-disciplined, capable of communicating effectively, and amenable to feedback and self-evaluation is now prepared to begin the process.

In the second stage, the students, with the help of the teacher/facilitator, draft the learning objectives to achieve the goal. Further, the students themselves select the process/path through which they will achieve their learning outcomes. The mode of assessment is also decided by the students at this stage.

The third stage, in which we can engage students in the learning process, may be conducted in the following ways—audio-video lectures, small group discussions, flipped classrooms, technology-enhanced methods, problem-based learning, and team-based learning.

Audio-video lectures are prerecorded voice of a teacher and a presentation with relevant text and images, animations, and videos. Questions can be made to pop up in between the lectures, and the lectures can be made more interesting.

Small group discussions are learning sessions in which groups of 6–8 students, led by a facilitator, discuss the topic. This can be conducted as discussions or mediated activity or can also be done as an independent activity.[4] The discussions include buzz sessions which are brainstorming discussions centering on a small topic within a lesson, and tutorial seminars, where there are discussions in-depth. The mediated activity includes problem-solving sessions and feedback sessions.[5]

A flipped classroom is a type of blended learning where the students are introduced to the content at home and practice working through it in class. Here students are given some prereading material or asked to search for their own material prior to class. This is the reverse of the more common practice of introducing new content in class and assigning homework and projects to be completed by the students independently at home.[6]

Technology-enhanced methods are gaining momentum due to the wide availability of the Internet on mobile devices. Various apps and websites dedicated to medical fields have fostered a revolution in access to educational content. Web-based content like—clinical cases, quizzes, investigations, images, and videos are some of the many ways in which technology supports learners in SDL.[7]

In problem-based learning, the students or learners are provided with a range of games, simulations, or participative exercises like case studies and role-plays. Also, it may include independent activities like laboratory and field projects. These are mainly for skill development.[8]

Team-based method (TBL)—SDL as a learning activity may be enhanced by the use of the TBL because it provides the students with opportunities to apply conceptual knowledge through a sequence of activities that include individual work, teamwork, and immediate feedback. Thus, TBL offers an interactive, expert-led teaching session that allows a large number of students to work within small teams to apply content to specific problems.

The fourth or final stage of SDL is assessment. Once the students have attained the learning outcomes, they are assessed by the facilitator using methods that they had themselves decided during the second stage. This can be done in multiple ways like essay questions, multiple-choice questions, assessment of a skill or a task performed, objective structured clinical examination, case assessments, logbooks, and other innovative methods like creating a crossword puzzle from the terms and concepts learned during the session.[9] Finally, the students must be able to engage in self-reflection and self-evaluation of their learning goals.

This is a brief review of the process of implementation of SDL. SDL is here to stay as an integral part of competency-based medical education. The easy access to information and technology has changed the scenario of SDL with better learning experiences that were not available earlier.

Diligent efforts are required by the faculty and Medical Education units of institutions, along with support from the administration, to achieve the goal of making the Indian Medical Graduate a lifelong learner as envisioned by the National Medical Commission (NMC).

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