MEDWIN PUBLISHERS
Committed to Create Value for Researchers

Journal of Human Anatomy
ISSN: 2578-5079

Self-Directed Learning in Anatomy

Anjali SS*

Department of Anatomy, MGMIHS, India

***Corresponding author:** Dr Anjali S Sabnis, MGM Medical College, Navi Mumbai, Maharashtra, Fax: 02227431094, India, Tel: 022227437811, Email: dranjus2003@yahoo.com

Mini Review

Volume 4 Issue 1

Received Date: August 18, 2020

Published Date: August 25, 2020

DOI: 10.23880/jhua-16000148

Abstract

Exploration of medical science with the advent of technology demands medical doctors with in depth knowledge and skill to face the upcoming challenges promptly. Application of skills needs practice and that requires desire of learning and self-motivation. Medical teachers get involved in creating self- motivation in the students so that self-directed learning will lead to achievement of learning goals. Proper planning, implementation and desire of learning will make the student able to reach the desired objectives. Self-directed learning is a dynamic way of learning where the cognitive ability of the student develops. Self-directed learning is adapted at many institutes as the student achieves desired objectives on its own. In competency based medical education in India separate 40 hours are allotted to SDL in the subject of Anatomy. Syllabus of anatomy is quite vast and students can be trained in achieving competencies through SDL method which makes the topic easy to understand and remember for long time. SDL is student centric method and their involvement is at higher level. In the review various methods of self-directed learning and their outcomes are discussed.

Keywords: Self-Motivation; Desire of Learning; CBME; Anatomy; Skill

Introduction

Vaines explains "Education must aim for a more subtle goal: the facilitation of change and learning…. In our fast changing world, reliance on process rather than upon static knowledge is the goal for education that makes sense" [1]. In India, competency based medical education system composed of theory and practical in all nine semesters which is targeted to create Indian Medical Graduate who would be efficient and confident enough to apply competencies acquired to the clinical conditions as and when required. Preclinical knowledge has to be powerful to link to the clinical cases to make precise diagnosis. In the first proficiency year, Anatomy is one of the preclinical subject in which first M.B.B.S students of novice stage get trained by achieving competencies which tests domains like knowledge, skill and attitude at knows(K), knows how (KH), shows (S), shows how (SH) and does level [2]. It is well known that I hear, I forget…, I see, I remember…., I do, I understand…..Unless and until student perform any academic activity on its own he or she will not able to achieve the defined objective.

One of the goal of Indian Medical graduate is to become lifelong learner [2]. To achieve effective outcome of becoming lifelong learner, students should get motivated from within to learn. Self-directed learning [SDL] is self-driven to reach to the objectives. In the first proficiency year 40 hours are allotted to self-directed learning exclusively. SDL is a dynamic way of controlled learning with self-motivation which aims at gaining quality outcome of learning at paramount level. Self-study is not SDL as it may not achieve fruitful objectives. SDL is wildly accepted across the world as the students achieve the competencies of skill and become able to apply confidently in medical field. As the skills are achieved through self- motivation, self- performance, they become independent and efficient. Different authors have explained SDL in different ways.

According to Knowles, SDL is a dynamic process in which learner reaches out to incorporate new experiences, relates

present situations with previous experiences and recognizes current experiences based upon the process [3]. Candy explained that SDL is an ability to carry out activities that help the students to control their learning [4]. Dirkes stated new concept of SDL that it is a continuous and ranging from teacher direction to individual action [5]. SDL is generally defined as learning on one's own initiative, with the learner having primary responsibility for planning, implementing, and evaluating the effort [6]. Motivation, perceived relevance, planning, experiencing, assessing are the characteristics as per Scobie [7]. As per Tough, SDL is ongoing and responsible process [8] and Knox had an opinion that learner is said to have responsibility for evaluation of outcome [9]. Self-directed learning is a sign of taking responsibility, is a sign of maturity, and is a sign of psychological development [10]. SDL is an important tool for life-long learning, which is an integral part of professional life as a medical doctor; hence SDL techniques are increasingly promoted at an early stage in Medical School [11]. Students require more case or problem-based studies, clinical orientations, innovative teaching programs group discussions and tutorials in regular teaching so as to improve their performance in exams and to make them more self-directed [12].

Methods of SDL and their outcome

Though Anatomy is vast, complex and volatile subject, it forms the foundation for all surgical branches and there is lot of scope to acquire competencies which tests knowledge, skill and attitude. Various authors have studied effect of SDL on learning outcomes in the subject of Anatomy. The learning objectives of a SDL session can be defined by instructor or moderator or teacher or the student. In medical education, SDL is the process in which medical students take the initiative, with or without the help of others (e.g. instructors and colleagues), determine their learning needs, set learning goals, identify resources for learning, choose and implement learning strategies to acquire knowledge and finally evaluate learning outcomes [13]. There are several opportunities for SDL within the curriculum which include the Integrated Learning Programs [14], early clinical exposures [15], clerkship programs, laboratory practical, chart discussions, tutorials, student seminars, e-learning, projects in the community, research projects, prize examinations [16], problem based learning and team based learning. Different methods of SDL were implemented in Anatomy are student project participation [17], problem based learning in dissection [18], doughnut round in gross anatomy and clinical anatomy [10,19], providing resources in radio-anatomy [20], peer assisted tutorial [21] and it was found that students show their total potential by participating in project and felt rewarded [17], students showed positive perception towards the cadaveric dissection [18], dough round sessions proved not only to be an effective method of learning clinical anatomy, they also reportedly improved the confidence and communication skills of participating medical students [10], the students felt that the sessions helped to improve their knowledge and communication skills and they found the sessions to be more enjoyable and valuable than the traditional large group or small group teachings [19], peer assisted tutorial promoted self-directed learning and encouraged the students to take ownership of their learning [21]. Multiple methods of SDL always aim at quality learning which makes student lifelong self-sufficient, confident, independent and prompt to act in challenging situations in medical field.

Adult educators and practitioners with SDL are imprudent due to insufficient theoretical background and the research on SDL found to be mostly quantitative. Lack of an appropriate theoretical base, term's meaning, and unsuitable research paradigms, the research on SDL had become a Standstill [4]. Proper validation of the method of SDL is must to achieve required outcomes. Facilitator is required to make successful SDL in case of student centered learning.

Conclusion

Active learning is fostered in SDL. In different branches of anatomy use of various methods of SDL will be useful for the students to understand the topic and remember for long time.

References

1. Vaines E (1974) Student centered teaching in Sheffield E F (ed) Teaching in the university Montreal: Mc Gill Queen's Univ Press P 162.

2. mciindia.org/CMS/information-desk/for-colleges/ug-curriculum

3. Knowles MS (1975) Self-directed learning: A guide for learners and teachers. New York: Association Press.

4. Candy PC (1991) Self-direction for lifelong learning. San Francisco: Jossey-Bass.

5. Dirkes MA (1985) Metacognition: Students in charge of their thinking. Roeper Review 8(2): 96-100.

6. Premkumar K, Pahwa P, Banerjee A, Baptiste K, Bhatt H, et al. (2013) Does medical training promote or deter self- directed learning? A longitudinal mixed-methods study. Acad Med 88(11): 1754-1764.

7. Scobie R (1983) Situational teaching: fostering self-direction in the classroom. Curriculum Inquiry 13(2): 131-149.

8. Tough A (1971) The adult's learning projects. Toronto: The Ontario Institute for Studies in Education.

9. Knox AB (1973) Lifelong self-directed education. In fostering the growing need to learn. Monograph and annotated bibliography on continuing education and health manpower. Rockville, MD: Health Resources Administration, Public Health Service, U.S. Department of Health, Education, and Welfare.

10. Satyajit S, Hironmoy R (2019) Effectiveness of implementing 'doughnut round' in self-directed learning of anatomy in phase 1 mbbs students. Int J Sci Res 8(12): 75-77.

11. Murphy P, Lee C, Eoin OM, Fergus ED, Colm MPO, et al. (2014) Medical student knowledge regarding radiology before and after a radiological anatomy module: implications for vertical integration and self-directed learning Kevin. Insights Imaging 5(5): 629-634.

12. Saurabh MK, Agrawal J (2015) International Journal of Basic & Clinical pharmacology the opinion of undergraduate medical students on current curriculum and teaching methodology of pharmacology in four medical colleges of India: a questionnaire based study. Int J Basic Clin Pharmacol 4(5): 970-975.

13. El-Gilany AH, Fawzia El Sayed A (2013) Self-directed learning readiness and learning styles among Saudi undergraduate nursing students. Nurse Educ Today 33(9): 1040-1044.

14. Vyas R, Jacob M (2008) DGA. An effective integrated learning programme in the first year of the medical course. Natl Med J India 21: 21-26.

15. Satishkumar S, Nihal T, Elizabeth T, Nithya N, Rashmi V (2007) Attitude of medical students towards early clinical exposure in learning endocrine physiology. BMC Medical Education 7: 30.

16. Kalyani P, Elizabeth V, Solomon S, Anna BP, Valerie U, et al. (2018) Self-directed learning readiness of Indian medical students: a mixed method study. BMC Medical Education 18: 134.

17. Satheesha B Nayak (2016) Student Project in Anatomy (SPA) – Making the First Year Medical Students Responsible and Creative. Journal of Clinical and Diagnostic Research 10(9): 10-12.

18. Abass Alhassan (2018) Perception of Ghanaian Medical Students of Cadaveric Dissection in a Problem-Based Learning Curriculum, Hindawi Anatomy Research International 1-7.

19. Isabel Stabile (2018) Supported self-directed learning of Clinical Anatomy: A Pilot Study of Doughnut Rounds. European Journal of Anatomy 21(4): 319-324.

20. Deepa Bhat (2016) Peer Assisted Tutorial to cultivate self-directed learning practice among first year medical students in Anatomy, Indian Journal of Clinical Anatomy and Physiology 3(2): 120-124.

21. Brookfield SD (1988) Conceptual, methodological and practical ambiguities in self-directed learning. In: Long, H B and Associates 1988 Self-directed Learning: Application theory. Department of Adult Education, Tucker Hall, The University of Georgia, Athens, Georgia.