SYSTEMIC APPROACHES TO TEACHING AND LEARNING A MODULE OF BIOCHEMISTRY [SATL-BC]

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ABSTRACT

In this article, we introduce the application of SATL in the subject of medical biochemistry. The strategy of this method is based on the collection, organization, and presentation of the map of concepts through the interactive system in the module of which the relations between the concepts and issues will be clarified. The main structural element of the SATL is the systemic diagram which bears all the attributes of a closed concept map. The systemic diagrams are created on the basis of the combination of the concepts that students already have and what they acquire through the study of the modules. The construction of systemic diagram helps students to understand the conceptual framework of the subject. Through the application of systemic methodology, students will study not only concepts, principles, and various metabolic procedures that occur in the organism they will also understand the vital role of biochemistry in medicine and how biochemistry principles are applied in everyday professional practices. *[AJCE, 3(1), January 2013]*

INTRODUCTION

Methods and teaching techniques are standard procedures used by the lecturer in his/her interaction with students to introduce teaching materials and teaching activities to reach the goals and teaching objectives (1). For the diversity of the teaching methods, the lecturer should choose the one that makes teaching more efficient, more informative, more varied and more interesting.

There are several strategies that make teaching and learning much easier and understandable; the most important strategy is the systemic one which interlinks the lecturer, the student and the environment objectives. The systemic connections between the elements is displayed in the systematic diagram (Figure 1)

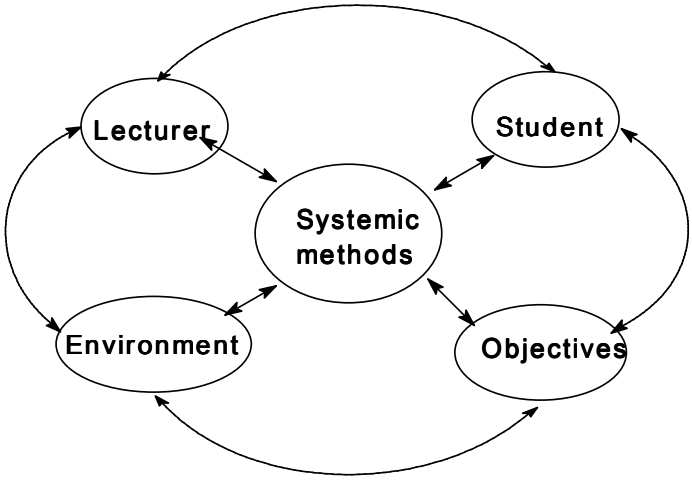

Figure 1: Systemic diagram between the lecturer, the student and the environment objectives.

The factors that affect the selection of teaching and learning methods

- On the one hand, when the lecturer decides to define the method or the technique, he/she should consider students' strongest abilities, knowledge, talent, intuition and personal experience. On the other hand, the lecturer should have confidence in the method or the technique that she/he selects. The lecturer should know for sure that the method he/she

selects will serve the students best. At the end, the method should prepare high qualified generations, capable of responding to the developments of the future society.

- The students enter the auditorium with their own interest, motives, needs, abilities, experiences and culture. The lecturer should consider students' abilities and select the teaching method that will help the students to reach the expected results.
- Teaching should be oriented in such a way that it could reach the important goals and the objectives in class.
- The environment is important to help in the selection of the teaching and learning method. The lecturer always asks the question:"Is this the right environment for the selected method?"

METHODOLOGY

This study presents a method of explaining the module "Water and human metabolism" in the subject of medical biochemistry through systemic diagrams drawing and explaining. The method is applied at the University of Shkoder "Luigj Gurakuqi", (Albania) in the Faculty of Medicine at the Department of Biochemistry with the students of the first study degree (BA), in the subject of medical biochemistry.

Systemic Approach in Teaching and Learning (SATL) methodology is holistic in essence and encompasses delivery of facts, concepts and skills in one package (as displayed in figure 2). Teaching is carried out through communication.

Learning process becomes pleasant if better communication skills of the teacher prevail upon the inherent inertia, associated with the students, while they focus upon a difficult subject.

SATLC technique is a better instrument for making the teacher's job easier, as it amply enhances the communication skills of the teachers.

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