

Book Review

Jelena Stanisavljević & Ljubiša Stanisavljević, „Concept Mapping in Anatomy and Morphology of Invertebrates“, University of Belgrade-Faculty of Biology, 2017.

Bojana Škorc

University of Arts in Belgrade - Faculty of Fine Arts, Pariska 16, 11000 Belgrade, Serbia
University of Belgrade - Faculty of Physics, Studentski trg 12, 11000 Belgrade Serbia
Email: bskorc@yahoo.com

Concept maps are visual graphic construction (teaching) tools, designed to help individuals to explain and explore their knowledge and understanding of teaching (program) content. Concept maps can be applied to many different phases of teaching process: planning and preparation, formative learning; revision/summarizing and assessment.

The book “Concept Mapping in Anatomy and Morphology of Invertebrates” highlights the functions of this educational technology in different stages of education, especially in university education.

The book “Concept Mapping in Anatomy and Morphology of Invertebrates” contains eight chapters. The Introduction is divided into five subchapters. Introductory part identifies and develops the idea of concept maps and their applicability in natural sciences. It introduces the idea of knowledge systematization and conceptualization. The second chapter discusses the idea of concept mapping in biology and analyses its significance for teaching process. Following chapters represent the application of concept mapping to more specific areas of teaching invertebrate zoology, anatomy, and morphology of invertebrates, and in addition, the examples of maps are given. The main characteristics of concept maps are presented as well as their functions in teaching process and impact on higher education. Revision and assessment parts belong to the verification phase of teaching and it is pointed that assessing of concept maps is a highly-required process.

In general, this book is based on the idea of memory mapping and it explores the process of concept forming in the field of biology. Its main purpose is to help students, teachers of biology and other professionals to conceptualize, organize and implement teaching and learning processes.

It is clear that concept mapping and its final product, the map, represent useful teaching tools on all education levels, from basic to proficient. As it is demonstrated by authors and many studies quoted, application of concept mapping significantly improves the teaching and learning processes and is a powerful tool for mastering science.

In this moment, the full significance of this initiative is not recognized and there is not only theoretical but also practical need for introducing it in the education system in Serbia. It is important to support such an approach in the moment when the education system is in the process of reforms, and primary and secondary school children show systematic underachievement in comparison with children from the region (results of PISA follow-up). Such improvements and innovations in education process are not only welcome but necessary. They can bridge the gap between existing and desired education outcomes.

Evidently, didactic models that follow this technology are very important for effective acquisition and reorganization of the system of knowledge. A comparative review of the efficiency of application of the concept maps in different biology program contents gives us insights and information about how and for what content is this technology most efficient. By applying this model, it becomes possible to redesign and change current approaches to teaching process and transform them in a positive way.

From the psychological point of view, authors demonstrated superior knowledge of the topic. The book is well structured, helpful, informative and systematic. All findings are well justified and systematic. The style in which the book was written is very clear and concise.

Taking into account all above mentioned, I suggest with pleasure the manuscript „Concept Mapping in Anatomy and Morphology of Invertebrates“ to be used in the teaching process. I believe this initiative will bring long-lasting, positive results and benefits for teachers, students and all interested professionals who wish to develop and upgrade their skills and knowledge.

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