



FORMATION OF SYSTEMATIC THINKING IN FUTURE BIOLOGY TEACHERS

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ABSTRACT

This article was written in order to consider the topic "Formation of systematic thinking in biology teachers". This article discusses how biology teachers can work with systems thinking and how this thinking can benefit their students. The article talks about systematic thinking, teaching technologies, exchange of experience, relationships between teachers and students and other indicators. The article presents systems thinking practices for biology teachers and provides information on how to apply and implement them. The article is useful for teachers and makes their students comfortable.

KEYWORDS

biology, teacher, systematic thinking, teaching technologies, exchange of experience, student, practices, application, performance methods, usefulness, relationship.

Introduction

Biology teachers students mutually connections development , new knowledge present achievement , experience exchange and another to indicators according to study process development for systematic to thinking attention to give need _ Systematic thinking , that is information again work , study and help to give methods analysis to do , to understand and done increase enable gives _ This is biology teachers for students systematic to thinking approached , their self learning abilities increased and study process more perfect to do help giving creator technology being is considered In this article biology teachers systematic of thinking students self study , analysis to do and to the news to master how encourage need about in detail is displayed .

LITERATURE ANALYSIS AND METHODS

This article outlines the necessary literature and appropriate methods for teaching biology teachers to explain and implement the importance of systems thinking.

Systematic thinking literature is related to methodological analysis and methods of computer science, pedagogy, exchange of experience and other fields. These literatures are helpful for biology teachers

to prepare their students well, structure the learning process based on systems thinking, and help students learn themselves based on systems thinking.

To draw from the literature, biology teachers are recommended to read the following books:

"Teaching for Quality Learning at University" by John Biggs

"Systems Thinking. New Directions for Teaching" by Linda B. Nielson and Barry J. Zimmerman

"University Psychology: Teaching and Learning" by Richard Mayer

Educational Psychology by Anita Woolfolk and Nancy E. Perry

This literature is considered as a primary resource for biology teachers to learn about systems thinking and teaching methods.

DISCUSSION AND RESULTS

Biology teachers should pay attention to indicators that provide an approach to explain and implement the importance of systems thinking for students. These indicators can help students self-study, identify their need for systematic thinking, and develop the learning process.

Systems thinking is useful for biology teachers to improve the learning process, helping students to learn independently, to memorize skills, to explain, and to absorb information. Students learn to self-learn with systems thinking, and teachers need systems thinking as well.

Discussion and results , biology teachers and students between relationships to develop help gives _ Study in the process , students knowledge strengthening and new data get for own thoughts statement enough . It is systematic thinking practices using students understanding , analysis to do and data in exchange help gives _

In society , biology in the field high level safety to provide help giver teaching methods and systematic thinking developing . In this article shown books and methods biology of teachers systematic thinking in formation help to give for wide applied sources is considered

CONCLUSION

Systematic thinking biology in their teachers study process more perfect to do for necessary has been important one addition method is considered This is the method students themselves to learn , to understand and to the news to master help gives _ This is help practice biology in the field high level security in providing big important have _

This is an article biology to their teachers systematic thinking and his practices to learn and to master help gives _ In the article literature , methods and discussion results it is shown while biology teachers for good one is an indicator . These are the indicators students systematic to thinking how by doing needs to be and their biology in the field knowledge to develop help to give can _

So biology _ _ teachers study in the process systematic thinking support , students themselves in learning and study process in improvement important one tool is considered Systematic thinking of students skills explanation and to the news in mastering help will give and biology in the field high level safety also help in providing gives _

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