

## FUNCTIONAL PRODUCT

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### Abstract

This article describes the concepts of function derivatives, Focus on teaching and learning using advanced pedagogical technologies in a practical lesson. The key to pedagogical technology is to achieve clearly defined goals.

**Keywords:** Function, differentiation, pedagogical technologies, advanced technologies.

## INTRODUCTION

The concept of function is one of the most basic concepts in mathematics, through which many processes and events in nature and society. The process of finding the product is called differentiation. Whatever process is described by the function  $y = f(x)$  we are studying, its product  $y = f(x)$  represents the rate of this process from a physical point of view. For example, if time  $t$ ,  $Q$ , is the amount of substance obtained as a result of a reaction at moment  $t$ , then  $Q$  is a function of  $t$ . The product of  $Q$  represents the rate of the reaction. When time  $t$ ,  $Q$  is the amount of electricity passing through a conductive cutting surface per unit time,  $Q$  represents the rate of change of current. When describing the variable temperature of a body under compression,  $Q'$  represents the rate of heating of the product.

The second-order product of the function  $y = f(x)$  is the product of its product,  $(y')'$ . The second-order product is defined by one of the following:

$$y'', f''(x), dy/dx$$

If we think about teaching using advanced pedagogical technologies in the practical lesson "Product of function". The main way in pedagogical technology is to focus on clearly defined goals, to establish regular interaction with the learner, to teach through the behavior of the learner, which is the philosophical basis of pedagogical technology. Interaction should form the basis of pedagogical technology and fully cover the learning process. The method of setting goals in pedagogical technology is determined by the learning objectives, which are expressed in the movement of students and are clearly visible and measurable results. Objectives are set in terms of teaching, explaining, demonstrating, narrating, and so on, depending on the teacher's performance. The tasks that are reflected in the student's actions are reflected in the learning outcomes. The result should be expressed in terms such as quote,

enumerate, tell, select, demonstrate, calculate, which describe the completed behavior of the student. Thus, while the key factor in traditional learning processes is the educator and his or her activities, in pedagogical technology, the activities of students in the learning process come first. Each task is numbered and must have a single result.

Each task should be arranged in such a way that the teacher does not indicate the stages of the lesson, but how the student should behave later. It is known that in the application of advanced technologies, the main focus is on the design phase, the design of the learning process on the basis of such a systematic approach, the possible definition of learning objectives in the form of expected results, encourages guaranteed achievement of planned learning objectives. We assume that the approximate stages of the study of the topic are: 1) the topic and its plan are given; 2) the results of educational activities are mentioned; 3) the topic is briefly highlighted; 4) the sequence of explanation of the topic should correspond to the purpose of the teacher on the basis of the technological project; 5) create problematic situations on the topic questions, attracting the attention of students; 6) emphasis is placed on working with textbooks or handouts in the explanatory process; 7) to allow the student to organize reading and writing of basic concepts from handouts or textbooks; 8) checking the level of study of the topic, asking students oral questions (for example, what is the essence of the concept of analytical geometry?); 9) comment or supplement students' answers, encourage correct answers; 10) examination and evaluation of the acquired knowledge; the questions prepared will be distributed to all students. You will be given a certain amount of time (e.g. 10 minutes) to answer the questions. Once the questionnaires are collected, the questions are checked against the pre-prepared answers. The correct answers are displayed on the screen or posted on the board. Each student checks and evaluates their own knowledge, the assessment is in the rating system, the teacher reacts to the students' answers. High scores are encouraged and low scores are encouraged to be studied without being reprimanded; 11) homework is given in order to further consolidate the acquired knowledge and develop the ability to work independently. The task must be clear, the form of the task (abstract, summary, example and problem solving).

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