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DIDACTIC PRINCIPLES OF GUIDING THEORETICAL KNOWLEDGE FROM STEAM SCIENCE INTO PRACTICE

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ABSTRACT

In this article, the didactic principles that help to carry out the practical orientation of theoretical acquired knowledge in the future engineers of the higher educational institution in the process of organizing training on the basis of the STEAM approach are presented, in which one by one touched on the principles of STEAM education.

KEYWORDS: *STEAM Approach, Aspect, Exact Sciences, Engineering, Principles Of Education, Didactic Principles, Fundamental, Methodological Direction, Integration, Active Techniques, Practice.*

INTRODUCTION

We can see that engineering is being taught from developed foreign countries based on the STEAM approach in the education process in America, Germany, Japan, China. The results of the analysis we will try to supplement these aspects with our own approach, taking into account the fact that the implementation of the fall into practice of theoretical knowledge, the reconciliation of new modern techniques and technologies, as well as the formation of an atmosphere of discovery – a meaningful, methodological and spiritual motivational aspect.

LITERATURE REVIEW

When you say the content of Steam: make corrections to the Necessary Steam Science Program, which is compatible with engineers; make adjustments to the practice of practical standards of the educational material; Allocation of the educational material of STEAM hardware on these specialization; contains occupational, theoretical and practical ranks.

Steam's methodological aspect is understood by the use of various methods, methods and forms of education aimed at strengthening the practical knowledge at the time of obtaining theoretical knowledge.

Scientific novelty of the article

As a result of Steam's spiritual motivational aspect, the test of motivation of motivational aspects by combining the natural knowledge of motivated by practicing motivation, the students are understood in the development of their professional activity that students must fully win their professional activity. [1,2,3].

Our opinion is an approach to the Steam approach to each other, while simultaneous approach to the practical knowledge for engineering knowledge is the One who provides practical knowledge to the practical knowledge, the theoretical knowledge derived from the subjects of Steam approach. The specialization and education of the engineering is the basis of the system and structure of the system. Other principles in the education of the university are combined around this principle and organizes integrity, and it provides the main goal of teaching steam subjects - ensuring the formation of training in the professional activities of the future engineer. We believe that the observance of a number of didactic principles, we believe that Steam Science is one of the conditions for practices of education.

Analysis and results

Didactic principles, which helps to implement theoretical diversity of theoretical knowledge in future engineers of the university, made up of:

1. Science of the content of the educational content;

2. Methodological performance of education;

3. Strengthening the fundamentality of Steam Science.

4. Coordination of methodical systems that connects the theory of education, taking into account the psychological features of students:

the logic and mental acceptance of the structure of the content of the context;

Principle of simple to complex;

the connection of clarity with abstraction;

pushing the method of induction in stating the learning material;

5. Activities in education (describing the level of participation of students in educational activities);

6. Independence describes the participation of students in the educational process;

7. Carrying out Interbank Medical Connection;

We will focus on one about the principles of the Steam Education mentioned above.

1. One of the main principles of higher education is scientific institution. Scientific, the full content of various departments of Steam in the university corresponds to the fundamental science departments, ie: the logical firmness of Steam Sciences of content, integration And others are

understood by concepts. All basic concepts should be proved based on the clear definition and practices, based on the rules of judiciary and logic.

2. The Principia for the educational direction of education must be combined with the Principia of Scientific. When called Steam Science Methodology, the doctrine of steam is the doctrine of science methods or their historical development of research techniques. Methodological direction of education is a means of modeling the connection between the material world by modeling the relevant process and objects with a material world through the material engineers It plans to form a view as.

3. Steam Sciences strengthen fundamentality in education. In higher education, these subjects should not be theorestical significance, but no engineering theory cannot be developed without fundamental knowledge and research. "When calling the fundamental educational process, we mean systematic approach to the analysis of the subject technology to the professional pedagogical issue of the subject" [4] "[4]. It is the result of a fundamental knowledge that is deeply, well-based task and their ability to use them during practical activities. Adoption of some departments of Steam subjects in the educational process:

- to create a clear idea of the concepts of the basic specific sciences and the meaning of their logical structure and the meaning of practical structure;

- In its specialty, it is achieved through the formation of a skills of steam subjects.

4. Focusing on the practice of teaching methods of teaching, taking into account the spiritual unique features of students, is also one of the important conditions for practices. We believe that one of this is the logical structure of science and condition for harmony to the teaching system of the teaching material.

Only logical conclusions and comments are not easily mastered by students, especially students, especially students, and are not ready for axious method. To do this, it is necessary to teach students to provide or reject the assumptions of independent methods and techniques, to formally proof, or reject the assumptions, and in short to the theories of disciplines and engineering depending on the logical practice. Relying on the spiritual aspect of the knowledge of knowledge, then, it is necessary to adhere to the structure of Steam Science Theories. Steam Sciences It is advisable to reduce the topics not dependent on the practice in the program. It is also necessary to submit the departments later. The procedure for submitting various departments of Steam is also related to the principle of complexity from simplicity.

In the field of education, it is necessary to monitor the connection between clarity with absurdly absurdity with accuracy. "At the beginning of the knowledge process, it is necessary to focus less, always maintains applications in the exhibition and focus on determining the students' ability to understand them." [5] [5] Introduction of new concepts should be motivated and less attention should be paid less attention, as this can lead to limiting them.

An important condition for the implementation of the knowledge of students' knowledge of Steam is an important condition - describing activists and independent thinking of their participation in the educational process.

5. When the activity in education is active, the active teaching methods, the problem, the development of the development, the use of a person-oriented education, stratified teaching.

Here is a goal set for the development of students' creative activity, the development of professionalism, research aspirations. In education, the implementation of differentiation and the implementation of individual-oriented education leads to the organization of successful knowledge for students with primary knowledge.

6. Proper planning of independent learning of students is one of the important teachers of the teacher. One of the factors describing the efficiency of modern education is the application of information technology in education. The use of e-manuals and textbooks in the educational process is an important tool in education, which means active and independent education, provides an individual and stratified approach.

7. We also consider the implementation of interdisciplinary interdependence as we should be the condition for us to direct the theoretical knowledge. Teachers of specific disciplines should be imagined that the knowledge gained in mathematics, physics and chemistry should apply to general and specialty subjects, and which specialty should rely on which stealth approach.

We tried to make these steam subjects to each other to each other interdisciplinary binding on a planear model and called Steam Planetar Models.

In the Steam Playetar model, we can see interdisciplinary links (art), Art (art) and Mathematics in Figure 1 in Figure 1 Mathematics, The art, technology and natural sciences are described. Any engineering activity is based on fundamental knowledge and is based on fundamental knowledge.

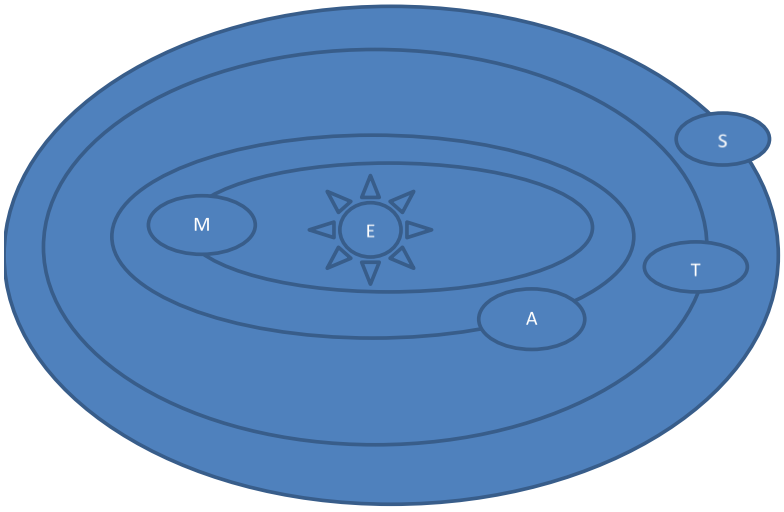

Figure 1. 1.Science (Natural Sciences), 2.Technology (Technology), 2.Et (Art) 4.Egdeau (Mathematics).

CONCLUSION

In place of the conclusion, we must say that the didactic principles that help engineers to carry out the practical orientation of theoretical acquired knowledge through STEAM Science in preparatory higher education organizations, as well as the conditions of the above-mentioned STEAM training principles, allow to apply them in the educational process, to more effectively organize the educational process.

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