

THE IMPORTANCE OF TECHNOLOGICAL EDUCATION AND INTEGRATION OF OTHER SUBJECTS IN IMPROVING THE QUALITY OF EDUCATION

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Abstract: *The article exposes the interdisciplinary integration of technology education and other interdisciplinary integration aimed at improving the quality of education currently through concrete examples of modern didactics of student learning.*

Keywords: *interdisciplinary integration, template surface, fabric consumption, geometric method, knowledge, skills, didactics, approach, dialectics.*

In order to increase the quality of education in our country in recent years, the President of the Republic of Uzbekistan, the Cabinet of Ministers and the relevant Ministries are developing a number of resolutions, decrees and laws. Since it has the skills to return the education system to a new level, improve the quality of teacher training on the basis of advanced international standards, further improve the major of pedagogical education, apply modern knowledge and pedagogical technologies, worthy of socio-economic development of our country. Contributing, training of highly qualified specialists, introduction of advanced foreign experience and educational technologies in the field, ability to use modern pedagogical technologies in the educational process, thorough use of information and communication technologies and foreign languages the training of young professionals has become a modern requirement. Consequently, at the initiative and under the leadership of the President of the Republic of Uzbekistan Sh. Mirziyayev, a new version of the Law "On Education" was developed, which clearly states all the tasks required to improve the quality of education.

It is clear that, one of the ways to improve the grade of education is integrated teaching. Integrated learning allows not only accelerating, systematizing and optimizing learning activities, beside that to master the culture of different fields. It is seen that, the type of culture determines the human mind. That is why integration is so important and necessary in modern education. Interdisciplinary integration plays a key role in integrated teaching. Interdisciplinary integration is, in general, the connection between various disciplines integration.

In this article, we discuss the consequence of interdisciplinary integration in improving the quality of education through the example of the integration of technology and other disciplines.

It is known that the methodological basis of interdisciplinary integration is the integrity of the material world, the unity of theory and practice, the transformation and

development of the universe, society and thought, and the psychophysiological basis of human thinking, that is, thinking. allows to know, broad and deep in scope, in essence, serves as a basis for the formation of personal values to acquire knowledge, skills and abilities in the form of a holistic system. The implementation of interdisciplinary integration not only increases the level of scientific, theoretical and practical training of students, belong that enriches the content of science teaching materials, its coverage and mastery in the educational process, is an effective tool for applying knowledge in practice.

When defining the essence and importance of interdisciplinary integration, the main directions of teachers' activities on the implementation of interdisciplinary integration are highlighted, the tools and methods of interdisciplinary integration are described, several forms of interdisciplinary integration researched. He called interdisciplinary integration "a didactic condition for increasing the scientific level of students' knowledge, the importance of teaching in the development of their thinking, creative abilities, the formation of the scientific world, optimization of knowledge acquisition processes, the formation of cognitive skills and ultimately improving the learning process." as [1 ... 15]. Interdisciplinary integration is a reflection of such dialectical interactions in objective practice in nature in the context of academic disciplines and is studied by modern science, so interdisciplinary integration can be viewed as a science. From the point of view of general and special didactics, we can give the following definitions, respectively:

In the contemporary theory of interdisciplinary teaching, emerging as a form of manifestation of interdisciplinary knowledge, reflecting the general integration of events, creating conditions for the formation of scientific worldview, forming a method of dialectical thinking in a specific educational subject and o. z is a didactic principle that serves as a basis for defining a system of content and process integration in the study of various disciplines through its essence, normative and process functions, and interdisciplinary integration in private didactics is beyond the scope of this discipline. revealing the infinite variety of connections and relationships of a whole system with other surrounding systems or phenomena, controlling the formation and development of dialectical thinking, creating an interdisciplinary structure of educational knowledge, a whole idea of existence without losing the qualitative features of the studied science and manifests itself as a didactic principle that resolves the contradictions between science teaching.

It should be noted that the main shortcomings of the problem of interdisciplinary integration in the education system, the normative aspects of the principle of interdisciplinary integration, the level of integration factors in which some functions of interdisciplinary integration in the study of educational science integration are objectively studied. being done [2]. Scientific experimentation is also being conducted to study the specifics of interdisciplinary integration [3]. These aspects include:

1. The seriousness and significance of interdisciplinary integration in teaching.
2. The main structural components of interdisciplinary integration, their semantic basis.
3. The main directions of pedagogical activity on recognition of interdisciplinary integration.

In order to create interdisciplinary integration, the following criteria should be followed in the selection of leading topics in the content of the subject:

- The relevance and importance of the chosen topic to cover the main ideas and guidelines of the subject;
- High level of generalization and connection of variety knowledge in the content of the subject.

Based on the above criteria, we will consider the integration of the science of technology with the exact sciences in sewing.

It is known that, the cost of fabric is very important in the organization of the cost of clothing, so in the garment industry to reduce the cost of the product, first of all, pay attention to the economical use of fabric. There are a number of ways to determine the amount of fabric you need to wear. If we place the garment patterns rationally on a rectangular piece of paper, we can say that the amount of fabric used for that garment is the sum of the surfaces of the garment patterns and the amount of waste that comes out between the patterns. Therefore, it is important to determine the surface of clothing patterns to determine fabric consumption. In practice, the following are the most commonly used methods for determining the surface area of templates [4]:

1. Geometric method;
2. Method of weighing templates;
3. Calculation method in a photo-electronic machine.

As an example we can take the geometric method. In this method, the surface of each template is divided into small geometric shapes, which are calculated separately. The results are collected and the surface area is determined. This requires knowledge of geometric shapes studied in geometry, in particular, rectangles, triangles, rhombuses, squares, trapezoids, and so on. Once the templates are divided into geometric shapes, it is necessary to determine the surface of each of them. This, of course, requires knowledge of the formula for constricting the surface of geometric shapes.

The method of weighing the surface of the templates requires knowledge of "proportions" in mathematics, because after the templates are cut out of cardboard, their mass is measured on the scales.

The computational method of the photo-electronic machine is a modern method and its realization requires a certain knowledge of information technology.

In the manufacture of clothing from fabrics, it is also necessary to know well the physicochemical properties of clothing in what seasons and under what conditions to use them. Physical properties of fabrics involve: properties related to the ability of materials to absorb moisture, properties related to the ability of materials to conduct air, water, steam, etc., properties that characterize the response of materials to different temperatures, optical properties of materials, electrification, paint strength of materials.

The resistance of fabrics to decomposition under the influence of chemicals and various factors is determined by their resistance to physicochemical factors. Among the physicochemical factors, the most influential factors on materials include the effect of oxygen in the air, sunlight, and the temperature of the substances and solutions in the detergent solution used in the washing process.

Based on studies, it can be said that it is difficult to imagine a process that is not integrated in everyday life, especially in the natural phenomena that take place around us, in all areas of science and technology, development and consumer services. They are substantially the product of the integration of scientific knowledge. This means that integration is a vital need, the scientific worldview, science and technology, manufacturing and consumer services of young people will not develop without this process.

In the action of technology education, the development of modern materials, equipment, technological processes and new directions in the development of folk crafts on the basis of an integrated approach in many respects serves to ensure the creative activity of students.

The skills of analysis, generalization, correlation, classification and systematization, which are part of the basics of the organization of technology education on the basis of an integrated approach, prepare students to develop creative solutions at the inventive level by mastering the basics of new techniques and technologies [5].

The horizontal integration of technology education with science allows students to gain a deeper understanding of what implements and equipment are used in relation to the physical and chemical processes involved in the preparation and processing of objects. In case that, the processing of the object of work is not a separate operation, but a multifaceted process, the presence of successes and shortcomings in their implementation, leads the student to a problematic situation with the development of new solutions.

Motivation of personal actions is one of the decisive components in the organization of creative activity. In turn, the motivation of students in the process of teaching technology is significantly influenced by the content of labor education, which reflects the level of modern development of techniques and technologies, methods of work, the planning of problematic learning tasks.

Thus, the integration of disciplines increases the interest of students in the sciences, increases the level of knowledge, ensures the coherence of educational material. From our perspective, the choice of the content of an integrative subject and the process of systematization is a choice of socio-economic, organizational, production, etc.; selection of information relevant to the current level of development and prospects of science, engineering and production technology of the industry; pedagogical processing of the selected data and its inclusion in educational and normative documents; introduction of integrated material directly into the educational process; determine how the content of the study material is mastered by students and how the requirements of the internship are met; this can be done by finding solutions to identified problems and refining them as needed.

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