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# PEDAGOGICAL-PSYCHOLOGICAL DIAGNOSTIC BASES OF PREPARING STUDENTS FOR PROFESSIONAL ACTIVITY IN TECHNOLOGY EDUCATION

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**Abstract.** The article analyzes the need and sanctity of honest work and profession acquisition in the works of great thinkers and scholars, strengthening the connection with the industrial production sector in the course of teaching technology. In the process of traveling to the world of professions, the paper production history of Samarkand paper and paper production technologies hav been discussed.

**Keywords:** coherence, modeling, paper, vocational guidance, great thinkers of the East, scholars, paper production, daily activities, personal life, work, professional world, integrative approach, scientific activity.

## **INTRODUCTION**

Today, one of the main tasks of general education schools is to prepare the growing young generation for active participation in society.

Vocational guidance is the preparation of vocational plans for pupils, the selection of a profession for the pupils as a professional guidance specialist in the field of profession and labor activity in certain periods, in order to acquire the chosen specialty, it is necessary to give competent advice on which educational institution to continue studying at the next stage. Based on this, it has been determined that it is appropriate to develop the system of directing pupils to the right profession in schools by connecting it to the cluster system introduced in the field of pedagogy on an interactive basis. Current approaches to career guidance require radical change. Vocational orientation should be a necessary condition for a modern person to be fully oriented to the market and for his successful development in the digital space. Within the framework of the "Professional Orientation System" introduced in our country, a number of tasks have been defined, including: to determine interest in the profession and create its database; to conduct special courses for 7th grade pupils once a month on the theme "Travel to the world of professions"; to conduct seminars and trainings on the theme "My future profession" for 8th grade pupils at least once every quarter and guide pupils to the professions they want to take in the future; to provide career guidance to the students who can study in vocational schools, partner institutions for preparation for keying education focused on specific working professions or specialization in the future based on the results of pedagogical and psychological diagnoses of 9th grade students and so on.

In the diagnosis, not only the summarization of educational results, but also the dynamics of their changes are observed, the existing shortcomings are eliminated. Pedagogical diagnosis, which serves to optimize the educational process, is considered an integral part of every planned educational process, it serves to constantly monitor how the pupil learns the material, and to find a solution to the problems in the educational process. With the help of pedagogical diagnostics, difficulties arising in the educational process are studied, and ways to eliminate them are

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established.

### LITERATURE ANALYSIS AND METHODOLOGY

Among the various ways of introducing pupils to the world of work and profession, the science of "Technology" occupies an important place. It is engaged in improving its methodology, strengthening its material equipment, strengthening the connection of the school with the surrounding industrial production, organizing socially useful and productive work, increasing its educational economic efficiency, combining it with education, improvement of preparing pupils for work. Today, the reforms and changes in education are aimed not only at educational, but also at the development of life knowledge in pupils. Vocational guidance is a task of a general education school, which is solved by the entire team of pedagogues. It is necessary to teach young people from a young age how to become a professional. At the same time, pupils not only learn about the world of professions, professional interests, skills, professional health, but also acquire theoretical and practical knowledge during the technology course. The great thinkers and scholars of the East in almost all eras emphasized and glorified honest work, the necessity and sanctity of acquiring a profession in their works, poems and ghazals..

In Central Asia, since ancient times, great attention has been paid to the importance of directing young people to professions and being professional. The book "Avesta", which is one of the written sources for the education of the young generation of our people from ancient times, also writes about hardworking and professional people. In "Avesta" farmers, cattle breeders and hunters who worked hard, created wealth, mastered dry and barren land, paved the way for the development of society by growing milk, cattle, and grain, and ensured its well-being are glorified. Many stories and proverbs have been collected over the centuries that show how much attention our people pay to the education of the young generation. For example, there are many wise sayings such as "a skilled person cannot be despised" or "for a young man seventy skills aren't enough" that they are a clear proof that since ancient time our forefathers have encouraged the young generation to grow up mentally and physically perfect, to become worthy professionals.

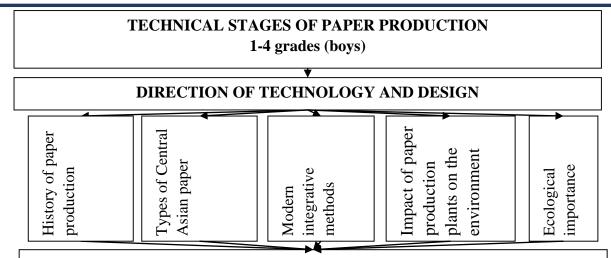
In a number of his works, Abu Nasr Farabi considers the issue of knowledge as a component of explaining the essence of man. He distinguishes between two stages of cognition, emotional and mental cognition, and places great value on the role of the two minds in cognition. Farabi calls people to be knowledgeable, learn the secrets of the profession, work in cooperation, and love work. In the pamphlet "On the Attainment of Happiness" it is said that every person reaches perfection in the process of work and action that is characteristic of his nature. He claims that every human being can reach maturity only through hard work.

Yusuf Khos-Hajib, a great thinker and poet of the 11th century, in his work entitled "Kutadgu Bilig" talks about the duties of the people and the state, the head of the state and citizens, scientists and governors, artisans, farmers and other classes before the people and the Motherland, puts forward asked categories and castes. Scientists make socio-psychological considerations about all groups, categories and classes in the country, about the role and importance of craftsmen in the development of society, worldviews, morals.

### III. RESULTS AND DISCUSSION

Career guidance works throughout technology, but its tasks vary at different stages. In grades 1-4, pupils learn about the technical stages of paper production, its creation processes, methods of working with paper, types, paper folding, geometric shapes, cutting, gluing, making toys of different sizes, creating a landscape composition, making greeting cards.

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The main purpose of the subject "Technology" in teaching these departments consists in teaching schoolchildren a trade, introducing them to the surrounding environment and nature, developing creative and logical thinking skills, forming the foundations of speech and behavioral culture, personal hygiene and health and realizing one's personal potential.

Table 1. A model for studying environmental problems that arise in teaching technology and design and production.

It allows to increase the quality and content of the development of environmental competence of the student in teaching technology. Each theme and laws of technology form the basis of a certain technological process in production. Secondly, it is natural for environmental problems to arise in any field of production. In the education of technology in the general education school system, it is appropriate to analyze each topic from an ecological point of view.

- 1. History of papermaking Paper is a thin material consisting of hydrogen-bonded cellulose fibers, which is mainly made from wood of various species of plant fibers and annual plant cellulose and wood pulp. Paper was first obtained in China in the 2nd century. Sai Lun was able to pass the watery pulp of plant fibers through a net and obtain paper. This method was kept a secret for a long time, it was introduced in Japan at the beginning of the 6th century. In the VI-VIII centuries, paper production spread to other countries in Asia. Paper produced in Samarkand from the beginning of the 7th century to the first half of the 19th century. It was popular not only in Turkestan, but also in neighboring countries. Later, papermaking spread through the Arabs to Iran, North Africa, and Cyprus, and later to Spain, Morocco, and other countries. Before making decorative products from paper, pupils will learn about the emergence of paper, its history, and the ability to work economically with paper.
- 2. Central Asian types of paper the Great Silk Road has made an unimaginable change in human civilization over the centuries and has led to unprecedented discoveries. Samarkand paper has also become the rare commodity most often purchased on the Great Silk Road. In July 751, Chinese warriors invaded Central Asia on the banks of the Talas River near the city of Jambul (present-day Kyrgyzstan). Abu Muslim, the governor of Samarkand at that time, sent his army against the invaders, destroyed the enemy and brought more than 20 thousand Chinese soldiers to Samarkand as prisoners. In order to save their lives, Chinese captive warriors who knew the craft taught local artisans the secrets of paper production.

Samarkand paper production processes:

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1-step	Samarkand papers. Silk is extracted from the husks of the mulberry tree, and then the outer first layer of bark is also extracted.	
2-step	Separated bark is thoroughly dried:	
3-step	Dried bark is boiled in ordinary spring water for 4-5 hours.	
4-step	After it is boiled, it is separated from the boiled water using a special device, and it is ground using a special device made by master craftsmen	
	A mill that grinds tree bark looks like this.	
5-step	Crushed tree barks are placed in special containers and mixed well.	
6-step	Depending on the size of the paper, it is filtered using special molds.	
7-step	The paper taken from the molds is laid out layer by layer over a period of time and pressed through presses	

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8-step	Papers obtained from printing are polished on specially prepared hard materials.	

The great artist-calligrapher Sultan Ali Mashhadi writes about the definition of Samarkand paper: "No matter how hard you try, there is no better Chinese paper. But Samarkand paper is priceless... The writing on it will be fluent and beautiful." The king and poet Zahiriddin Muhammad Babur proudly admits: "Olamda yaxshi kogʻaz Samarqanddin chiqar, Juvozi kogʻazlar suyi tamom Konigildin keladur. Konigil Siyohob yoqasidadurkim, bu qora suvni Obirahmat ham derlar".

In explaining the preparation of Samarkand paper to pupils, not only the secrets of paper production are learned in guiding them to the profession, but also their competences on the fact that our forefathers were the holders of professions that were not left behind by any country or nation in their time, being a child of the independent state of sunny Uzbekistan.

The impact of paper factories on the environment: in the 1st-4th grades of secondary schools, there are topics on the preparation of various decorative products from paper in the technology class. It is appropriate to explain to pupils how paper is prepared before using it.

Currently, the annual need for paper raw materials in the republic is 350,000 tons, of which more than 120,000 tons are for offset and newsprint. Books, magazines, newspapers, textbooks, office paper and other white paper and printed products are produced from offset and newsprint. Foreign paper is mainly used in printing enterprises in our country.

Practical work is being carried out in the republic to organize the production of high-quality paper and cellulose. In this case, foreign experience is being studied and issues of installing modern equipment are being considered. Scientists in the field of pulp and wood processing, managers and specialists of paper manufacturing enterprises, consumers - managers and technologists of printing enterprises took part in the meeting, discussing topics such as the state and prospects of paper production in Uzbekistan, issues of supplying printing enterprises and the consumer market with offset paper, domestic pulp production.

Today, there are paper factories in our country, and the most used material for making and processing paper is wood pulp from soft trees such as spruce or poplar. Depending on the intended use, other materials such as cotton, linen and hemp are also used. Paper ptoduction is carried out in the following stages:

- -Fiber preparation: after the trees are cut, the wood is cut into small pieces which are heated in a tank with water and various chemicals. These chemicals are used to develop pulp;
- Bleaching: Materials such as starch and clay are added to the mixture before the pulp is heated and dried. This will add shine and strength to the paper. Finally, it can be bleached or whitend or bleached with some sort of chlorine. Hydrogen peroxide is also used for bleaching, although it pollutes the product very much;
- Forming and pressing: After the bleaching process, the paper is put on a big roll to press, and the smoothness of the paper surface is obtained;
- Treatment and drying: the last part to learn how to perform the role. It is prepared in large rolls to cut it and dry it completely;

In the conditions of current scientific and technical and social development, the role of the school, which should prepare the young generation for active participation in the construction of society, is at a high level.

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### Conclusion

The importance of the problem, the need to urgently solve a number of practical issues related to the orientation of young people to the profession has attracted the attention of many specialists: pedagogues, psychologists, economists, sociologists and practitioners working in very diverse fields. In this article, we focus on the methods of obtaining paper, methods of using them economically, before processing paper in technology classes "Paper Processing Technology". This sometimes not only causes confuses in the use of certain terms of concepts, but also explains a number of practical issues in setting the goals and tasks of career guidance.

By explaining to pupils the ancient and modern methods of paper production, the impact of paper production on the environment, they develop ecological competence. This will help pupils to develop knowledge, skills and abilities to use paper properly and efficiently without wasting paper.

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