



100008, : (7212) 420077 (7212) 419138 , 22

100008, Karaganda city, Bukhar Zhyrau Avenue, 22  
Tel. (7212) 420077 Fax (7212) 419138

## **FEEDBACK ON THE DUAL SYSTEM OF EDUCATION**

One of the most urgent tasks facing technical and vocational education workers is the training of competitive professionals who can be in demand in the labor market.

Today the shortage of highly qualified specialists occupies a special place on the labor market. The main reason for this situation is the problems of the organization of the educational process and system, i.e. the departure of theoretical education from specific production situations requiring practical skills, knowledge and experience, which should be found in a young specialist. In this situation, the employer will have to struggle with the problem of bridging the gap between theory and practice. In these conditions there is a need for additional training, internship, retraining of young specialists taking into account the specifics of the enterprise, where it is planned to implement the acquired knowledge in the educational process. The dual system eliminates the main drawback of the traditional system of education - the gap between theory and practice.

For this purpose, with the Department of Engineering Heat physics named after professor Zh.S. Akylbayev, Physico-technical Faculty, Karaganda State University named after Academician E.A. Buketov, and Technological implemented elements of dual system of training in the specialty "Thermal Power Engineering", concluded with the enterprise LLP "Karagandaenergocenter.

In the academic year 2022-2023 students of the II year of the specialty "Thermal Power Engineering" of this department began to study under this system. Starting from the 2nd semester, one day a week came to CHPP-1, and the students, who started their practical work, had a growing commitment to their chosen professions, had the impression of a new breakthrough in their studies. Students at CHPP-1 in semester 1 received lectures on the following topics:

1. General information about the combined heat and power plant. Cogeneration plant purpose, principle of operation, scheme.

In the following classes, students were provided with company overalls, familiarized with the safety rules, visited the workshops, saw all the installations with their own eyes and got answers to their questions. Each week they received information about a particular shop:

2. Fuel and transport shop - task of the shop.

3. The Chemical shop - the task and purpose of the shop.

4. Boiler shop - task and purpose of the shop, scheme, principle of boilers operation.

5. Turbine shop - task and purpose of the shop, scheme, principle of operation of turbine units.
6. Shop of control and automation of electrical and measuring installations - task and purpose of the shop, electrical diagrams of the shop, generators, transformers.
7. Water heating boiler house - task and purpose of the shop, scheme of the shop, principle of boilers operation.
8. Harmful waste from the combined heat and power plant to the environment.
9. Technical and economic indicators and calculations of the combined heat and power plant.
10. Conclusion.

The above-mentioned topics were fully addressed by the students. In addition, highly qualified specialists with extensive experience in production shared their knowledge and experience in the field of power engineering, taught the subtleties of their chosen specialties, and increased students' interest in their specialty.

In my opinion, the dual system of training is very useful in solving the personnel problem and eliminating the shortage of specialists in production. I think that this system will reduce youth unemployment in the future and contribute to the fact that young specialists come to production with little experience.

**Deputy Head of Technical and Technical  
Department of CHPP-1  
Karagandaenergocenter LLP**



**Mikenova A.K.**