

ALTERNATIVE ENERGY THE ROLE OF DUAL EDUCATION IN THE TRAINING OF TECHNICAL PERSONNEL

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Abstract:


The role of dual education, features, advantages and disadvantages of dual education in the training of qualified engineer-technical personnel in the field of alternative energy are considered. The dual education system is a flexible and effective mechanism that enables the training of highly qualified specialists required in the activities of modern production enterprises.

Keywords: production enterprises, dual education, effective and flexible mechanism, dual education system, theoretical and practical parts of the program, advantages and disadvantages of dual education.

Introduction

It includes not only higher education institutions, but also industrial enterprises, firms, and organizations. Programs of the dual education system combine "know-how" tested by theory and practice. The meaningful content of the changes is that students receive theoretical part and practical training in two educational institutions at the same time: universities and institutes. The dual system, as a feature that distinguishes it from the traditional system, implies the exchange of theory and practice throughout the entire educational period, which leads to the effectiveness and efficiency of the application of acquired knowledge and skills. The dual education system is different from the vocational education system, most of the training week is devoted to practice at the enterprise, and a small part (1-2 days) is devoted to the university. This system is also used in technical and socio-economic spheres, construction, engineering spheres instructions. The binary system has proven itself well in social management and tourism management. Benefits Direct assessment of the faculty by potential employers. High percentage of employment Maximum approach to production requirements Development of practical skills in solving production problems high level of motivation to acquire knowledge budgeted reducing the burden dual to the continuous improvement of the training of highly qualified specialists in recent decades, the dual education system has become acceptable in the field of information technologies. The practical experience of the introduction of the dual education system in Germany shows that many areas of training of future specialists are regulated by agreement between social partners, regions and the state. The training of specialists in a specific direction is based on the demands and requirements of the personnel market, which allows young people to ensure professional mobility and competitiveness. The





duration of study varies up to 3 years. Trainees (apprentices) who have undergone practical training at the enterprise receive a salary. The system is financed by the state and enterprises. The competence of the state includes training in this enterprise, and the competence of the region includes training in a professional university. The enterprise fully provides the educational process with modern equipment that meets the requirements of technology. Large enterprises and organizations have the opportunity to train in their laboratories and workshops, and in small places they have the opportunity to train at their workplaces. The initial stage of training is directly related to the passage of production practice, and as a result, a graduate of a higher education institution can demonstrate many years of practical experience in the chosen profession to a potential employer. A student under the binary system is considered the most financially independent, since he has a salary, albeit a small one, during his studies. However, it should be noted that he spent less time studying theory than those who studied in the traditional vocational education system. In our opinion, it is necessary to consider the possibilities of financing for dual education in Russia from several sources, without a doubt, the main part of the costs should be covered by the state. The main goal of non-state funding sources should be the creation of the latest educational laboratories, sites, workshops with high-level technical and resource equipment for teaching. In our opinion, the serious shortcomings of the dual education system are the intensive use of lessons in the curriculum. students do not have vacation time, but they are given certain days for vacation. In the binary system of specialist training, we understand certain innovative directions of the organization of higher education, from the employer of educational institutions and industrial enterprises (organizations) focused on the training of specialists in a certain direction. includes a clearly coordinated relationship to the required level of competence. The main principles of the dual education system are as follows: Equality of humanitarian and value orientations, competence-based approach, formation and development of professional activity and social and professional relations.

MATERIALS AND METHODOLOGY

Further development of the educational system to increase the knowledge and skills of graduates of higher educational institutions in order to meet the needs and size of production enterprises for qualified personnel is an urgent issue. In such conditions, introducing the principles of the dual education system into the system of training qualified personnel of higher educational institutions is considered the most effective method.

employers in the content of education of students studying in higher education determines the importance of the dual education system in higher education. In order to increase the effectiveness of such a system for training future engineering and technical personnel, it is necessary for state organizations, employers, and educational organizations to work together. according to the agreement, students spend a certain amount of time at the enterprise and receive a salary.

The developed innovative labor market in Uzbekistan requires the need to review the traditional approaches in the system of professional education. The labor market needs highly qualified engineers and technicians who can perform their duties effectively and responsibly



and can adapt to changing economic conditions. Strict professional criteria require the improvement of the level of training of qualified personnel in various spheres of life.

One of the means of increasing the investment attractiveness and competitiveness of regions by training workers who meet the requirements of high-tech production is the dual education system, the advantage of which is the coordinated interaction of the educational and production sectors in the training of specialists and the high level of graduates employment.

RESULTS AND DISCUSSION

In the process of introducing the dual education system to higher education institutions, a number of problems are encountered. These problems include the fact that work programs aimed at bachelor's training do not match the sequence of seasonal work in production enterprises; the educational organization cannot always teach in accordance with the curriculum. The first of the main difficulties in personnel training is the insufficient level of preparation of the enterprise for training, namely the lack of training places in the enterprises; the need to increase the price for the manufactured product; the lack of funds for education in order to attract students to education; (lack of equipment, inadequate funding, etc.).

As a result of training specialists on the basis of dual education, it is important to note that it is important to "ensure the organization of a specific educational approach for the student". In the implementation of dual education, the educational process relies on a group of students, as well as the use of distance education in order to individualize the educational process for the use of an individualized system of personnel training for dual education, and in this, network educational mechanisms. based on implementation.

In order to successfully implement dual education in the higher education system, it is proposed to develop a dual education model based on cooperation between participants in the educational process [9].

The main elements of this model are:

- legal components;
- conceptual components;
- dual education implementation program for higher education organizations;
- personnel component.

Each of the proposed elements mutually acknowledges the other. In this case, the conceptual component is represented by technological, methodological, personal-resultative levels, mechanisms, and the activity of several conditions of the student's motivation for teaching.

The goals of introducing the "dual education model" are as follows:

- To increase the investment attractiveness of the regions, to improve the model of training of working personnel, taking into account the real needs of the economy for qualified personnel;
- Development of professional standards for business and related professions;
- Development and modernization of educational programs in accordance with the requirements of professional standards;
- Changing mandatory requirements for the organization and content of educational programs;
- Development of a mechanism for independent evaluation of workers' qualifications;
- Optimizing taxation to attract businesses to finance worker training.



Tasks of the organization of dual education are as follows:

- interlinking educational processes of educational institutions with the conditions of development in the enterprise (organization);
- organizing the practical part of education related to production in enterprises (organizations) and the theoretical and educational-practical part in educational institutions by turning students into participants of labor activity;
- increasing the investment attractiveness of the regions and improving the training of middle-level personnel taking into account the real needs of the economy;
- development of conditions and models of mutual cooperation of enterprises (organizations) and educational institutions;
- formation of competencies by implementing educational programs in harmony with work;
- improving educational programs based on the requirements of employers and technological updates in them;
- financing the implementation of personnel training and educational programs;
- improvement of forms and methods of cross-industry cooperation between enterprises (organizations) and educational institutions;
- to further expand the participation of enterprises (organizations) in the assessment of graduates.

The dual system of training in professional education is considered not only as a pedagogical alternative, but also as a form of education successfully adapted to the conditions of the market economy, directly and indirectly influencing the development of professional pedagogy in different countries.

CONCLUSIONS

Dual education in institutions of higher education is an effective method aimed at improving the quality of education. Through this method, the university equips its students with work-related knowledge and skills and prepares them to successfully operate in national and international job markets. It has been shown that the main providers of dual education are used to teaching the skills required by the companies working with the students. Thus, dual education is based on the strengthening of the practical orientation, which is based on the analysis of the educational processes of the higher education institution and production in the preparation of bachelors. This form of education allows to harmonize the cooperation between higher education institutions and enterprises, and in the training of professional personnel, bachelors take the theoretical course and professional training directly in the workplace, and their highly qualified acquisition of knowledge is ensured and they have the opportunity to expand their functional responsibilities.

Dual education is an effective way to improve the quality of education. The implementation of the mechanism of mutual cooperation between educational institutions and enterprises by affecting the balance of demand and supply of labor force is related to the improvement of the quality of personnel training, employment and employment of graduates. helps to improve the situation and develop human resources. The mechanism of dual education helps to develop the



graduate's professional competencies, to form an active life position and to form a responsible person who is able to work effectively.

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