NOVATEUR PUBLICATIONS
JournalNX- A Multidisciplinary Peer Reviewed Journal
ISSN No: 2581 - 4230
VOLUME 8, ISSUE 2, Feb. -2022

ENSURING INTERDISCIPLINARY COHERENCE IN THE TRAINING OF FUTURE PROFESSIONALS

Mamashayev M. A.
Trainee Teacher, Namangan University of Engineering and Economics
e-mail: mmamashayev89@gmail.com

Mamashayeva M. M.
Senior Teacher, Namangan State University
e-mail: masturamamashayeva24@gmail.com

ABSTRACT:

This article describes the possibility of achieving the formation of professional competence of future professionals by providing interdisciplinary and interdisciplinary integration in the field of mechanical engineering.

Keywords: interdisciplinary and interdisciplinary relevance, membership, professional competence.

INTRODUCTION:

Today, in the field of mechanical engineering education, special attention is paid to the development of the ability to make accurate decisions in production situations in the training of future professionals. This task is based on interdisciplinary interdependence and coherence so that they have access to information on any of the subjects in their curriculum.

It is desirable to find new ways to achieve interdisciplinary integration in improving the quality of training of future engineers and technologists. At this point, it is necessary to have sufficient knowledge of their methodological basis in order to analyze the issue of ensuring interdisciplinary coherence in the acquisition of fundamental, in particular, professional knowledge, skills and competencies. The relationship between the humanities, socio-economics, mathematics and the natural sciences, as well as the general engineering sciences, is a multifaceted problem. Therefore, a theoretical, methodological and practical approach to this problem is required.

The integration of the foundations of professional knowledge, skills and competencies in various fields provides the basis for the social justification of changes in science, education, engineering, technology, manufacturing and the economy.

In practice, the technological and pedagogical approach to the integration, systematization, design of interdisciplinary knowledge is not sufficiently decided. This situation is partly explained by the fact that a number of problems inherent in the methodology of engineering pedagogy have not been resolved positively.

Today, the field of science and technology is also developing. One of the main mechanisms of this direction is machine technology, which is inextricably linked with the production process. There is a saying among our people, "It is better to see once than to hear ten times." In this regard, in the process of teaching general and specialized sciences in the field of mechanical engineering education, it is effective to take future specialists to more manufacturing enterprises and train them using innovative technologies there. After all, the level of mobilization of the sensory organs of a person serves as a decisive factor in the mastery of learning materials. It is especially

important to consider and perceive when mastering new material.

Therefore, this type of organization of educational processes is based on the creative thinking of future professionals, intellectual thinking, active learning, independence of thinking, the need to independently enrich their knowledge, analysis of all processes, generalization, logical conclusions based on professional knowledge, skills and abilities. great help in removing**.**

There is a big difference between the process of training in educational institutions and the process of training in a manufacturing enterprise. This is because the teacher must make special preparations for the topic to be organized in the production enterprise, and in it:

- Clearly define the content of the topics covered in the production enterprise and the methodology based on educational technologies;
- Have a thorough knowledge of the subject and master this knowledge;
- Before bringing future specialists to the production plant, it is necessary to acquaint them with the internal procedures and safety rules of the production plant, to give them the necessary understanding of how to behave in the production plant and how to prepare for it.

The teacher should pay special attention to the normative documents, drawings, diagrams, audio and technical means of the production enterprise, emphasizing that future professionals understand and understand their structure, working principles and technologies for making quality products.

This is the principle of demonstration and comprehensibility of didactics, which allows future professionals to remember the information in the database with understanding of its essence and significance. Once the future professionals return from the manufacturing facility, there will be an opportunity to further consolidate the professional knowledge they have acquired through writing reports or abstracts based on what they have seen there. As a result, it is possible to ensure continuity in the formation of professional skills and competencies by applying the knowledge acquired by future professionals in practical and practical training in manufacturing enterprises.

The following results can be achieved on this topic at the production plant:

- Future specialists strengthen their professional knowledge acquired in the process of education, enrich them with new sources;
- The technical thinking and independent thinking skills of future professionals will be expanded;
- Future specialists will be able not only to study the structure and principle of operation of equipment used in production, but also to get acquainted with the types of quality products currently produced in them and future export projects.

In order to know the level of effectiveness of the topic covered in this manufacturing enterprise, test questions will be answered by future professionals. Test questions are the knowledge gained at the production plant, ie the structure of the equipment there (internal and external structure of the parts); based on the composition and quality of products produced at the manufacturing enterprise. As a result, interdisciplinary coherence and continuity are ensured.

Our main problem is to ensure the integration of general and specialized disciplines with other disciplines in order to increase the effectiveness of education in the field of engineering technology, for which we have created a synchronous structure of

disciplines on the theme "**Metal and its alloys**" (Table 1).

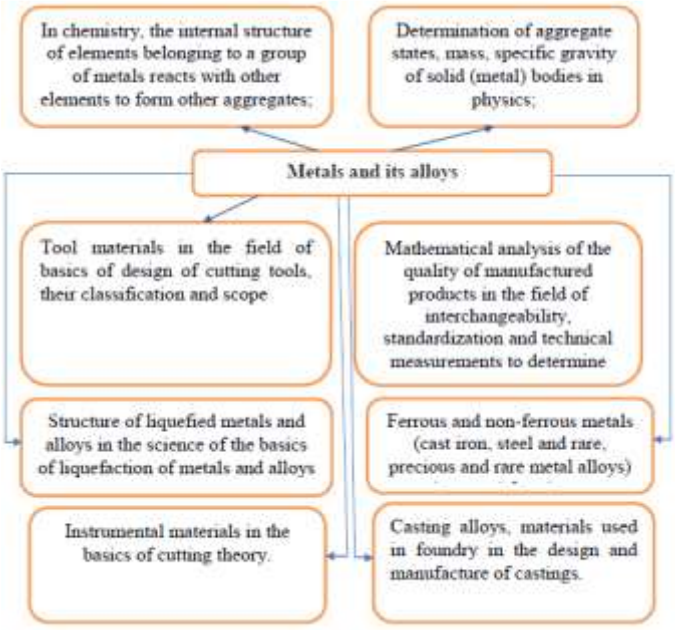

Figure1. Synchronous Structure of Sciences

Thus, through a practical analysis of the educational process in the manufacturing enterprise and the synchronous structure of the disciplines, we can see the interdisciplinary and interdisciplinary continuity in the areas of engineering technology education. This, in turn, ensures the integration of the content of education, as well as the formation of professional knowledge, skills and competencies in future professionals. It increases the interest of future professionals in science, encourages them to think independently, draw logical conclusions, and further expand their scientific thinking, resulting in a further increase in the professional competence of future professionals.

REFERENCES

1) Rakhmonova V.Q. Ensuring interdisciplinary continuity in the field of education in mechanical engineering. Teacher. Nukus. 2014. - 68-p
2) Muslimov N.A. Theoretical and methodological bases of professional formation of a teacher of vocational education. Dis… Doc. of Ped. Sciences-Tashkent. 2007. -101-p
3) Kodirov N. Problems of the globalization of information culture in the current time //Ştiinţă, educaţie, cultură. – 2020. – T. 4. – C. 272-274
4) Kadirov N. M. Social and physical experience of information and information culture //Scientific Bulletin of Namangan State University. – 2019. – T. 1. – №. 3. – C. 165-170.
5) Kodirov N. M. Transformation and globalization of information media //Scientific Bulletin of Namangan State University. – 2019. – T. 1. – №. 12. – C. 83-93.
6) Nodirbek Kodirov Mamasoliyevich. (2021). Current issues of formation of information culture in youth. https://doi.org/10.5281/zenodo.5770626.