MEANS AND METHODS OF FORMATION OF PROFESSIONAL COMPETENCE OF FUTURE INFORMATION TECHNOLOGIES

Saidov Jasur Doniyor o‘g‘li¹, Mavlonov Sherzod Hazratkulovich¹, Normatova Malika Norkulovna¹, Baxodirov Muzrob Doniyor o‘gli¹

¹Gulistan State University

Abstract: This article analyzes the process of effective use of methods and tools aimed at the formation of professional competence in the training of teachers of computer science and information technology, professional competence, qualification requirements for modern professionals.

Keywords: Competence, professional competence, modern specialist, Insert method, traditional lesson, professional training, professional activity.

Introduction. Today, education is improving in all respects, is organized in accordance with modern requirements and is highly effective. The quality and effectiveness of education is determined only by trained personnel. On this basis, it is advisable to approach the preparation of cards on the basis of modern requirements. The concept, study, place and importance of a competent approach. The term competence is a term widely used in the modern literature to cover issues such as education, staff selection, performance appraisal, educational success, professional orientation, and so on. Today, it is considered undefined in terms of meaning. In the 1970s, it appeared in many Western European countries, where competence became a new area of professional training. The term “competence” refers not only to the acquisition of individual, technical or experimental knowledge and skills, but also to the set of abilities and skills that can serve as a basis for the further development of the individual. However, this idea is expressed differently in all European countries. In Germany, for example, since the 1980s, the phrase “professional competence” has been used to describe a goal that must be achieved during elementary vocational training. This training course consisted of a combination of interdependence, technical complexity and general knowledge,
which allowed the graduate to continue working in different workplaces. This general skill cannot remain unchanged, it must evolve, because the requirements and conditions of the world of work also change in the interests of the individual and society. [1]

**Literature analysis and methodology.** The problems of training teachers and specialists in higher education institutions have been covered in a number of publications by national and foreign experts. The issues of formation of the future teacher and specialist in the process of higher education have been studied in the researches of M.Abdullajonova, O.A.Abdulina, A.A.Akbarov, H.A.Abdurahmanova, S.V.Safonova, N.A.Muslimov. Pedagogical scientists H.Abdukarimov, N.Azizkhodjaeva, A.Aliev, Yu.A.Akhrorov, AAVerbitsky, RHJuraev, BRJuraeva, J.G.Yuldashev, who studied the professional skills of the teacher, SMMarkova, GMMakhmutova, AAHamidov, FRYuzlikaev.

Competence - the ability to do something effectively, to perform according to the standards used in a particular profession.

The following types of competencies are available:

- Behavior (individual)
- Technical
- General
- Special
- Primary (threshold)
- Performer
- Differential

1. Behavioral competence - a competence that characterizes the individuality of a person in the performance of their professional duties.
2. Technical (professional) competence - is a competence that is directly related to the results of labor, standards of professional performance.
3. General competence - is the competence that characterizes all people engaged in a particular profession.
4. Special competence - means the competence required for the effective performance of specific professional duties.
5. Primary competence - the basis, the basic competencies necessary for the employee to perform the assigned professional tasks.
6. Executive competence - is the competence that determines the quality of the result achieved.
7. Differential competence is a competence that helps to differentiate effective performers to one degree or another.

Use of teaching methods and tools aimed at developing competence in the teaching of computer science and information technology.

In developing the model on the basis of the requirements for the personality of the teacher, the following conditions set out in the State Education Standards of Higher Education were adopted as a basis [10]:

- areas of activity of the teacher: education; management
- types of pedagogical activity: teaching; methodical; educational; organizational; scientific (leadership); staffing; entrepreneurship; expertise and others.
- pedagogical institutions: preschool education; general secondary education; secondary special, vocational education; higher education; postgraduate education; extracurricular education; education authorities. The content of the requirements for the teacher's personality was substantiated and each of them was described.

The information provided should be relevant to the content of the lesson, as well as assignments and tasks that provide students with the necessary skills and competencies, determine the amount of information that students need to master, presented in a certain logical system, must conform to the principles of continuity and continuity, and finally be able to respond to the principle of structure. It is also important that the information is relevant to the students' level of preparation.

The tools of modern information technology include: computer, scanner, video camera, LCD projector, interactive whiteboard, fax modem, telephone, e-mail,
multimedia, Internet and Intranet networks, mobile communication systems, database management systems, artificial intelligence systems.

Teaching methods are multifaceted. That is why there are so many classifications. In these classifications, methods are grouped by one or more characters.

1. Traditional classification. A source of knowledge is taken as a general sign.
   - Practical: Experiment, Exercise, Independent work, Laboratory work.
   - Exhibition: Illustration, Observation.
   - Oral: Explanation, Narration, Conversation, Lecture.
   - Working with books: Reading, Quick Review, Quotation, Narration, retelling, Summary.
   - Video method: Preview, Exercise.

2. There are currently three major groups of teaching methods:
   - Methods of organizing and implementing educational activities;
   - methods of control and self-control of learning activities;
   - methods of stimulating and motivating learning activities;

As you know, the main task of the subject "Computer Science and Information Technology" is to acquaint students with some general ideas of modern information technology, the practical application of information technology and the role of computers in modern life. However, given the didactic principles, it is important not only to give students a solid scientific explanation of the facts, but also to use a variety of interesting teaching methods.

Today, one of the main goals is to educate students to think independently. The solution to this problem depends in many ways on the use of interactive teaching methods. First of all, let's define the concept of "interactive". The word "interactive" comes from the English word "interact." "Inter" means mutual, "act" means to work, to work. Such methods are designed to reach everyone in the audience, requiring collaboration. The essence of interactive teaching is to organize the learning process in such a
way that all students are involved in the learning process and have the 
opportunity to think freely, analyze and think logically. 
In addition to pure learning objectives, the following aspects are important for interactive learning organizers:
- Understand the abilities of others in the process of student interaction in the group; - the need to interact with others and need their help;
- Development of competitive mood in students.
Therefore, using interactive methods, there are two key functions that need to be implemented in order for a group to be successful:
- the condition for solving the problem of learning with a pragmatic aspect of teaching;
- Addressing educational issues (assisting team members in collaborative work, developing behavioral norms).
An example of an interactive method is the Insert method. This method is designed to work with new text and includes:
1. Read the text with a pencil.
2. Make special notes in the text as you read:
  + I know that;
  - I didn't know that;
  ? I wanted to know this perfectly;
3. After reading the text, the following table is filled: Table of insert technology

<table>
<thead>
<tr>
<th>I knew that</th>
<th>I didn't know that</th>
<th>I want to know perfectly</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>–</td>
<td>?</td>
</tr>
</tbody>
</table>

**TECHNOLOGICAL MAP OF TRAINING ACTIVITIES**

<table>
<thead>
<tr>
<th>Stages and timing of work</th>
<th>Activity content</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Introductory phase of the topic</td>
<td>1.1. Says the name of the topic, the topic plan, the purpose, and</td>
</tr>
<tr>
<td></td>
<td>They listen, they record. They</td>
</tr>
<tr>
<td>(20 minutes)</td>
<td>demonstrates it through a slide. 1.2. Introduces key words and phrases related to the topic; for independent work list of publications. 1.3. Introduce the methods and tools used during the course, assessment criteria</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>2. Main stage (50 minutes)</td>
<td>2.1. Explains the main theoretical aspects of the topic by showing and interpreting slides using Power Point 2.2. To reinforce the topic, the groups complete a two-part diary 2.3 Describe the procedure for organizing the educational process in accordance with the plan and structure of the report. 2.4 The teacher reinforces the topic with the students using the “Why” scheme. will be filled. 2.5 Using the “brainstorming” method, a new topic is reinforced</td>
</tr>
<tr>
<td>3. Final stage (10 minutes)</td>
<td>3.1. Answers students' questions on the topic, makes a final conclusion. 3.2. Students' grades will be announced according to the evaluation criteria. 3.2. Gives a task for independent work: &quot;Resume&quot; table</td>
</tr>
</tbody>
</table>

**Discussions.** The essence of the educational process consists of three interrelated factors: teaching, upbringing and development. Many publications on the subject were analyzed. The views and research of scientists have been studied. The methods
and tools they recommended were analyzed. On this basis, based on the theme and purpose of the lesson, the organizer of the lesson was organized to be effective and acceptable for the listener.

**In conclusion**, the process of covering each subject and topic, first of all, focusing on the formation of high-level knowledge and high professional competence of the student, will help them to develop into high-potential and competitive professionals in the future. First of all, it is a key factor in the development of society. After all, the training of highly qualified teachers will, first of all, ensure the development of talented young people in the future.

**References**

3. Abdukodirov A. A .. et al. Information technology .: Textbook for academic lyceums and vocational colleges. / Abdukodirov A.,
4. AA Abdukadirov, AG Hayitov, RR Shodiev "Information Technology" T. - "Teacher" - 2002