

Methodology for Developing Personal Competences That Require the Integration Of E-Learning Platforms and Application Packages

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Abstract: The article reflects information about the division of competence into several types by scientists. At the same time, the process of working with the electronic textbook platform developed by the author and about it are presented. Software packages in the electronic textbook and what to pay attention to in the process of working with them are presented, and the types of software packages used in professional and creative activities are presented.

Keywords: Electronic textbook, competence, special competence, basic competencies, software packages.

Introduction: There are various approaches to classifying competencies. In particular, N.A. Muslimov and M.B. Urazova classify competencies from the perspective of vocational education into the following types:

- Special Competence – mastering one's professional activity at a sufficiently high level and being able to plan further professional development.
- Social Competence – mastering collaborative professional activities, cooperation, and social responsibility for one's work outcomes.
- Personal Competence – the ability of an individual to independently reflect and develop, and to resist professional deformities.
- Individual Competence – the ability to independently apply and develop individuality within the scope of the profession, professional-personal growth, the ability to organize independently, and to rehabilitate independently.
- Core Competencies – the knowledge, abilities, and skills necessary for an individual to adapt and perform productive activities in intercultural and interdisciplinary contexts.

In our opinion, competencies related to achieving success include: planning, organizing activities, analyzing outcomes, and competencies related to

working with people, such as managing relationships, working in a group, and influencing others. These competencies are particularly specific to personal competence.

Y.S. Zair-Bek has identified the following types of methodological competencies:

- Goal-oriented Competence: The definition of the goal and the problem of goal-setting is a crucial part of the entire pedagogical activity. The ability to set correct goals is linked to the outcomes of pedagogical work.
- Content-related Competence: The scope of technological education content provided at each stage of general education. It includes the minimum required level of students' preparation within the specified content scope and the maximum possible academic load for each academic year.
- Monitoring Competence: The assessment of educational quality involves determining the outcomes of the educational process. Simultaneously, quality refers not only to the educational effectiveness but also to the content, conditions, and processes that ensure the result.

Professional Competence – the knowledge, skills, and expertise required for performing professional activities at a high level.

Psychologist-scholars offer different definitions of the concept of professional competence. According to T.M. Sorokina, "Professional competence is the readiness of pedagogues to carry out professional activities both theoretically and practically and their ability to solve pedagogical tasks at various levels." M.I. Lukyanova emphasizes that psychological-pedagogical competence is a combination of the teacher's unique qualities, high professional readiness, and the ability to interact effectively with learners in the teaching and educational process.

Professional competence involves not only acquiring specific knowledge and skills but also mastering integrative knowledge and actions within each independent field. Furthermore, competence requires continuously enriching professional knowledge, understanding new social demands, searching for and processing new information, and applying it in one's work.

Professional competence is evident in the following situations:

- In complex processes.
- When performing uncertain tasks.
- When using conflicting information.
- In unexpected situations, a professional with competence can:
- o Continuously enrich their knowledge.

- o Assimilate new information.
- o Deeply understand the demands of the time.
- o Search for new knowledge.
- o Apply it effectively in their practical work.
- Here is the translation of your text into English:
- In several studies, the professional competence specific to pedagogues and its distinctive features have been explored. Research conducted by A.K. Markova and B. Nazarova can be mentioned in this regard. In her research, F.R. Muradova notes that the professional competence of a pedagogue consists of several components. Considering the presence of professional education programs in higher educational institutions focused on teaching informatics within practical programming courses, the conclusion was made that it is necessary to identify the qualities specific to professional and personal competence.

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Not every prepared multimedia product meets these requirements; furthermore, the student's personal interests may differ from the direction proposed by the teacher. In this case, the student may create a software product that explores a topic of their choice, using their own capabilities.

- Researchers and scholars note, "In our case, we possess the skills of using culture, art, production, tourism, and software. We live in a software culture."

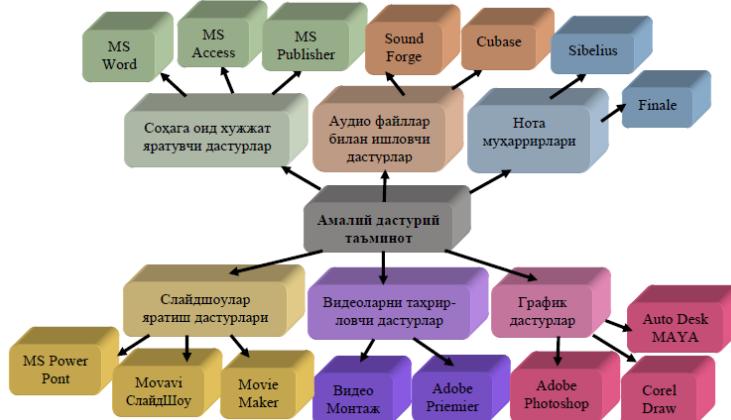


Figure 1. Classification of Software for Developing Personal Competence in Students

Taking this into account, studying software tools used in all aspects of life and forming knowledge and skills regarding the capabilities of these programs at the most basic level is the highest goal set by the scholars who contribute to the development of this field. Thus, we explore the possibilities of creating multimedia products. In higher educational institutions providing informatics education, the following types of knowledge, skills, and competencies related to software are formed in the "Practical Programming

Package" course.

Below are some relatively popular software products for different forms of information. Based on pedagogical technology, a website has been developed for students at higher educational institutions to develop personal and information-communication competencies. The website provides an individual learning trajectory for developing information-communication competencies through the "Practical Programming Package" course. Independent work,

laboratory exercises, and subject-specific tasks for students have been created on the adpk.uz website.

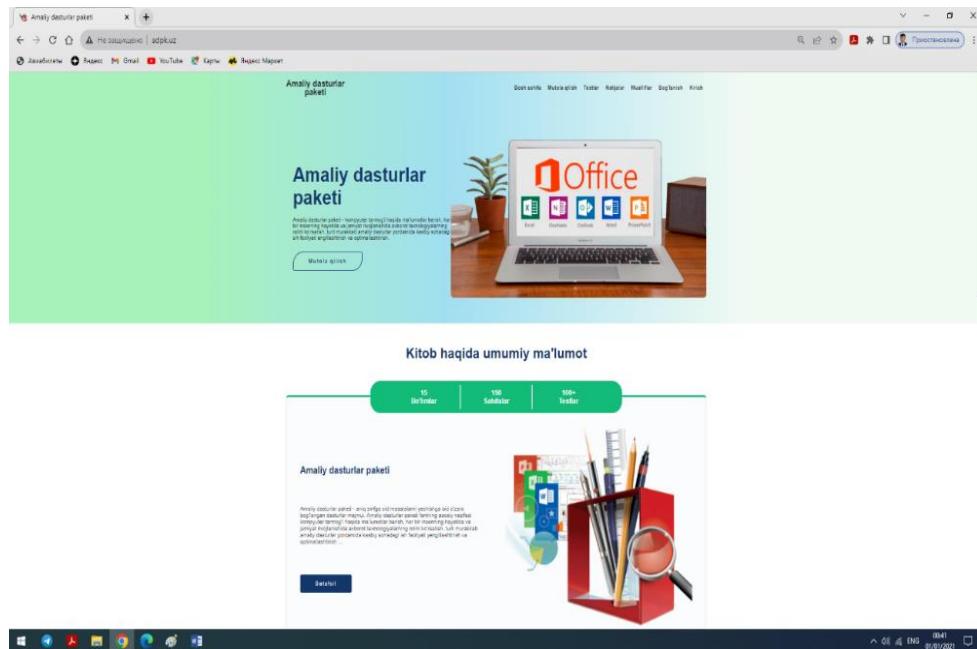


Figure 2. "Practical Programming Package" e-textbook page for electronic books.

Based on the generalization of pedagogical-psychological and organizational-methodological

conditions for the research, a model was developed that reflects this process in a unified manner.

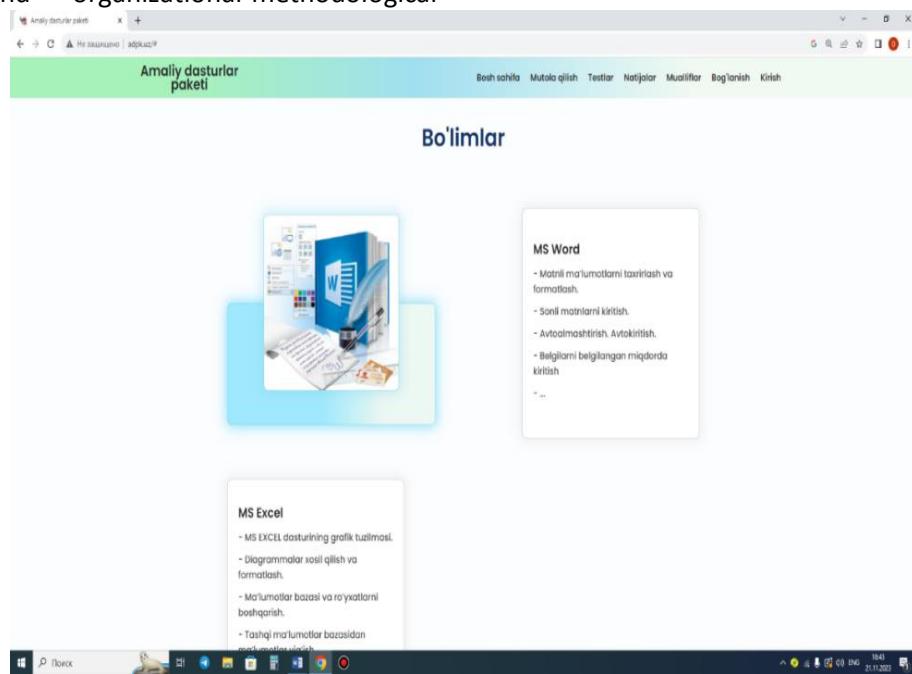


Figure 3. Practical Programming Package e-textbook section page.

On the section page of the "Practical Programming Package" e-textbook, the user can enter the desired

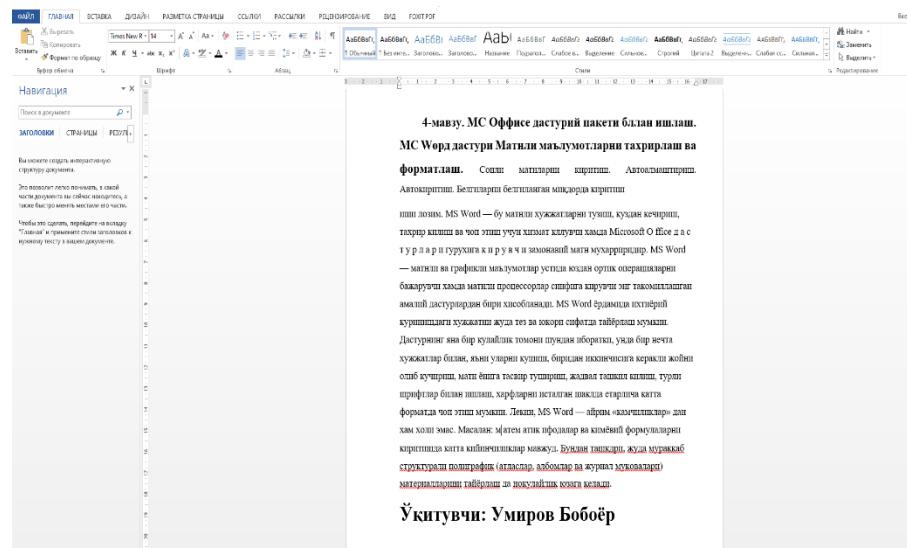


Figure 4. Features of the Word text editor.

Using MS Word features, students can create simple and complex structured documents related to any field, format them, add tables, process them, and save them. They will also learn tools for reviewing documents, adding hyperlinks, checking texts for spelling errors, organizing tables of contents, and writing citations. The capabilities of this text editor can be seen in some of the following actions:

- Checking the spelling and grammar of the text.

- Working with tables, selecting their borders and internal colors.
 - Drawing images.
 - Creating, saving, editing electronic documents, etc.
 - Editing messages received from email inboxes and other features.

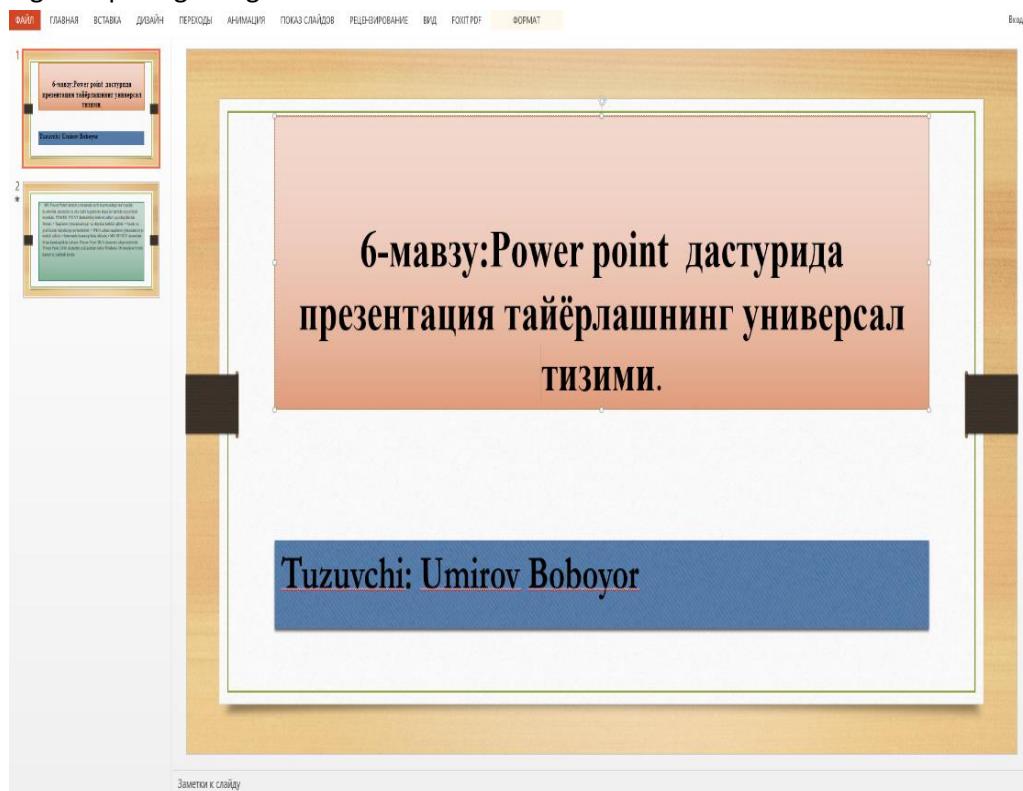


Figure 5. MS PowerPoint program interface.

MS PowerPoint is a program widely used in professional activities, offering excellent tools for

working with multimedia files. This program allows users to create slide shows, turning simple images or

photos into beautiful films. It also permits the use of clips as materials for creation. With this program, users can create video clips. The program has a simple interface [91, 5-b.]. During the design and data entry stage, the first step is to create a new blank presentation. When starting PowerPoint, a new presentation typically consists of a single blank slide. If not, the "Create" command in the File menu should be selected. As a result, a new file creation panel will appear. From this panel, the "New Presentation" command is selected. After this, a new blank slide will appear on the screen, and on the right side, the "Slide

Layouts" panel will appear.

Programs that create subject-specific documents – In the field of arts and culture, it is advisable to use MS Office editors for preparing documents. This panel contains over 20 different layout options. Layouts can consist of various objects. For example, a slide can contain text and an image, text and a graph, text and a table, and animations, among others. In general, a slide can hold various objects in addition to text, images (pictures), and graphics, such as tables, various types of charts, photos, animated objects, audio and video data, and other information.

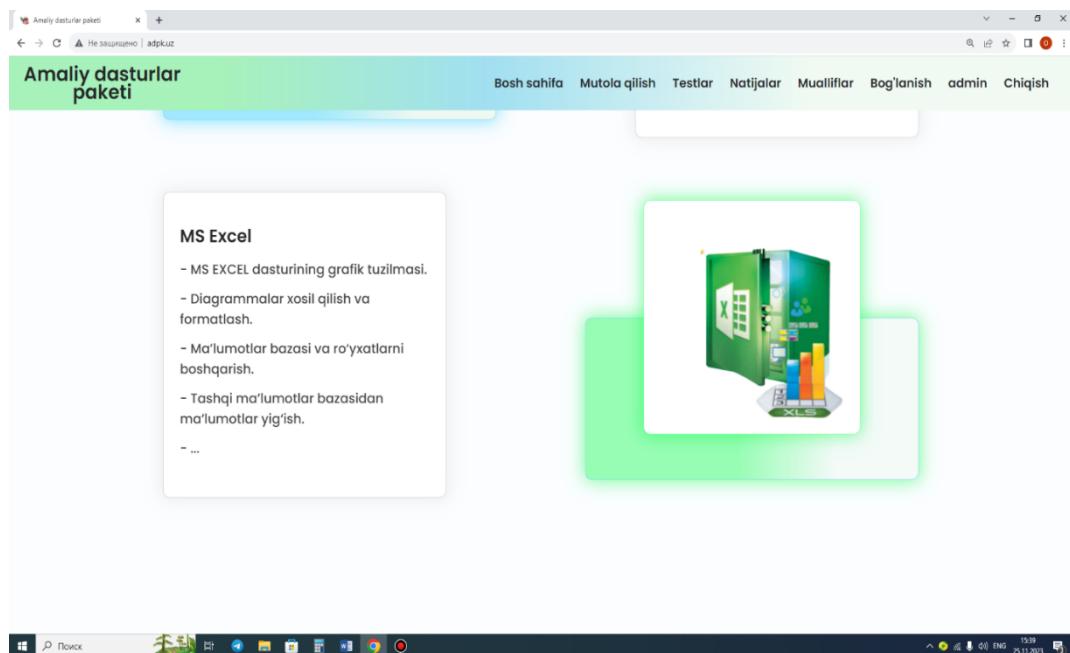


Figure 6. “Practical Programming Package” e-textbook Microsoft Excel page.

The following data processing capabilities are available in Excel:

- Working with basic mathematical and logical functions.
- Using statistical functions such as regression

analysis or dispersion analysis methods.

- Utilizing sorting and classification functions to work with data in tables.
- Using various functions that allow for optimization and modeling.

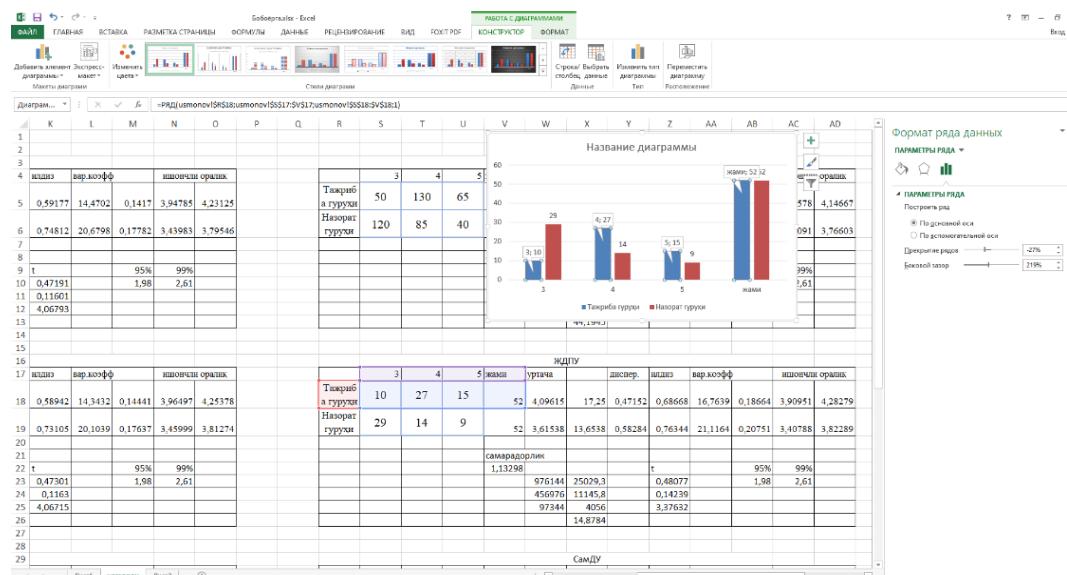


Figure 7. Creating a chart in Microsoft Excel.

Microsoft Excel (sometimes called Microsoft Office Excel) is a program developed by Microsoft for working with electronic spreadsheets on Microsoft Windows, Microsoft NT, and Mac OS, as well as Android, iOS, and Windows Phone platforms. It provides tools for economic-statistical calculations and graphical capabilities. In the Mac OS X platform, Microsoft Excel is an essential program for specialists working with tables, charts, and various graphics.

CONCLUSION

Student-centered learning primarily changes the paradigm of education. Until now, the prevailing education system focused on teaching, while in the current era of information society, the priority has shifted towards learning and teaching. The essence of personal qualities reflecting professional competence in the field of informatics has been discussed.

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