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## THE MAIN PRINCIPLES OF PEDAGOGICAL DESIGN IN THE DEVELOPING FUTURE INFORMATICS TEACHERS' COMPETENCE ON CREATING INTEGRATIVE APPLICATIONS

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ABOUT ARTICLE					
Key words: Integrative applications, pedagogic				Abstract: In this article, you can find information	
design,	mechanism,	didactic	terms	and	about terms of usage of necessary mechanisms to
technology.				improve future informatic teachers' skills on	
					creating the integrated apps and didactic
<b>Received:</b> 19.01.2024				conditions, which are improving informatic	
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#### **INTRODUCTION**

The effectiveness of teaching depends on the teacher's arousing the student's interest and focusing all his attention on the learning process. The use of integrative applications is of great importance in improving this efficiency, that is, there are important principles for developing the competence of future informatics teachers to create integrative applications. Among these principles, the study of the basic principles of pedagogical design is included. This includes learning about the methods and principles of curriculum design, which will allow students to acquire the necessary knowledge and skills to create interactive applications.

Another important principle is to focus on practical education. It allows students to work with real projects and helps them develop their skills in creating interactive applications. Also, students need to know how to evaluate the effectiveness of their work and make the necessary changes to improve the results.

Another important principle of competence development is the development of creativity and innovative thinking. Students should learn to come up with new ideas and solutions and be ready to

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search for new solutions to create interactive applications. They also need to be ready to adapt to changing conditions and requirements.

Finally, an important principle is developing communication skills. It helps students to effectively communicate with colleagues and customers, to get to know their requirements and needs, and to find optimal solutions for creating interactive applications.



# Results obtained on the basis of the mechanism of improving the skills of future informatics teachers in creating integrative applications

It is necessary to use the following mechanisms to improve the skills of future informatics teachers in creating integrative applications.

First of all, students need to be taught programming and application development and how to integrate different technologies into a single application. They need to understand how to build applications that work effectively with other software and systems.

Secondly, students should be given the opportunity to observe experienced developers at work and learn how they create integrative applications. This will help them gain practical skills and experience in building applications.

The third mechanism is the usage of modern technologies and tools to create integrative applications. For example, the use of application development environments that allow the integration of different technologies quickly and efficiently. The fourth mechanism is conducting workshops and training on the creation of integrative applications. This allows students to discuss their questions and concerns in the field and receive guidance from experienced developers.

Generally, improving future informatics teachers' skills on creating integrative applications is an important task that requires the use of various mechanisms. For this, it is necessary to provide students with knowledge of programming and application development, give them the opportunity to observe the work of experienced programmers, use modern technologies, and conduct seminars and trainings.

The competence of future informatics teachers to create integrative applications requires knowledge of the use of pedagogical methods and technologies created to improve the educational process, and the use of integrative methods and technologies in the transformation of information into practice by students.

Improving the skills of future informatics teachers in creating interactive applications requires creating appropriate didactic conditions. Here are some basic conditions to consider:

1. Using technology: Ensure that prospective computer science teachers have access to the necessary technological resources such as computers, software and internet access. They must have appropriate programming environments, interactive development tools, and platforms for creating interactive applications.

2. Hands-on experience in practice: creating practical opportunities for future computer science teachers to gain hands-on experience in creating interactive applications. This can be achieved through practical exercises, projects and application development scenarios. Offer access to development environments and platforms where they can experiment and apply their knowledge.

3. Instruction from experienced teachers: appoint experienced mentors who can guide and assist prospective computer science teachers in developing their competencies. Mentors can give advice, share best practices, and provide feedback on their interactive app projects.

4. Collaboration and peer-to-peer learning: Encourage collaboration among future computer science educators by facilitating group projects, discussions, and peer learning. Communicating with peers allows you to share knowledge, solve problems and gain different perspectives, improve your skills.

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5. Integration of theory and practice: ensuring the integration of theoretical and practical aspects of creating interactive applications in the curriculum. Prospective computer science teachers need to understand basic principles and concepts and apply them in real-world scenarios.

6. Pedagogical education: offering pedagogical training aimed at integrating interactive applications in teaching. This training should cover instructional design principles, assessment strategies, and student-centered approaches to effectively use interactive applications in the classroom.

7. Opportunities for continuing professional development: providing opportunities for future computer science teachers to engage in continuing professional development related to interactive application development. This may include seminars, conferences, webinars and online courses focusing on the latest technologies, tools and best practices.

8. Evaluation and feedback: evaluating regularly the success and competence of future informatics teachers in creating interactive applications. Provide constructive feedback and guidance to help them improve their skills and overcome gaps in knowledge or practice.

9. Reflective practice: Encouraging prospective computer science teachers to engage in reflective practice by reflecting on their experiences developing interactive applications. Help identify areas for self-evaluation, self-reflection, and improvement.

10. Research and Innovation Culture: educating the culture of research and innovation among future informatics teachers. Encourage the study of new technologies, methodologies and approaches in the creation of interactive applications. Support research projects and partnerships to encourage experimentation and innovation. By ensuring these didactic conditions exist, future computer science teachers can develop their competencies and effectively create interactive applications that enhance the learning experience of students.

Teachers with this competency must know how to use and integrate multiple disciplines and disciplines to help students translate information into practice. Such teachers are also capable of creating integrative applications to support students' experiences, interests, and goals.

Teachers with this competency will also be able to help students create unique and engaging integrative applications. This is done with the use of scientific and technological methods and technologies, which include the mastering and learning of students.

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