Motivation management plays a leading role in personnel management and labor economics, as it determines employee activity and performance. In general terms, motivation is seen as a mix of internal and external factors that drive people to act, shape their behavior, and guide them toward achieving both personal and organizational goals. The study of motivation has a long history and reflects a gradual shift in scientific approaches to understanding the role of people in business. In the early stages, economic concepts prevailed, according to which material incentives were considered the main means of increasing labor productivity. Within the framework of classical management approaches, work was viewed as a standardized process, and financial remuneration as the main factor in an employee's interest in work [2].

Staff motivation is an important factor in increasing productivity, developing teamwork, and achieving the organization's strategic goals. The chosen approaches to motivation affect team cohesion, employee initiative, and the results of their joint activities. Traditional approaches focus on meeting basic needs, financial incentives, and stability, while modern approaches focus on professional development, autonomy, and staff engagement. Combining these approaches makes it possible to create an effective motivation system that aligns the interests of employees with the goals of the enterprise and enhances management effectiveness [3].

Thus, staff motivation is one of the determining factors of management efficiency and enterprise performance. Systematic assessment of motivation levels allows for the timely identification of employee needs, adjustment of incentive tools, and alignment of staff interests with the organization's goals. The use of modern approaches and a combination of different methods of motivation assessment contributes to increased labor productivity, strengthened teamwork, and the formation of a stable professional environment.

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УДК 811.111

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INNOVATIVE TEACHING METHODS IN THE FIELD OF COMPUTER SCIENCE

У статті досліджено особливості впровадження інноваційних методів навчання у сфері комп'ютерних наук. Проаналізовано роль цифрових технологій, проєктно-орієнтованого навчання, проблемного підходу та змішаного формату освіти у формуванні професійних компетентностей майбутніх фахівців. Визначено переваги інноваційних освітніх технологій, зокрема підвищення ефективності засвоєння знань, розвиток практичних навичок і формування soft skills. Окреслено основні проблеми впровадження сучасних методів навчання та перспективи їх подальшого розвитку в умовах цифровізації освіти.

Ключові слова: *інноваційні методи навчання, комп'ютерні науки, цифрові технології, проєктне навчання, змішане навчання, професійні компетентності, цифровізація освіти.*

The theses examine the implementation of innovative teaching methods in the field of computer science. The role of digital technologies, project-based learning, problem-based approaches, and blended learning in the formation of professional competencies of future specialists is analyzed. The advantages of innovative educational technologies are identified, including improved learning effectiveness, development of practical skills, and formation of soft skills. The main challenges of implementing modern teaching methods and the prospects for their further development in the context of educational digitalization are outlined.

Keywords: *innovative teaching methods, computer science, digital technologies, project-based learning, blended learning, professional competencies, digitalization of education.*

The rapid development of information technology has had a significant impact on the modernization of higher education, especially in the field of computer science. The digital transformation of society requires universities to re-examine traditional teaching methods and adapt educational programs to the needs of modern professions. Traditional lecture-based teaching is no longer sufficient to ensure that students acquire the practical skills required in the contemporary information technology environment. Therefore, implementing innovative teaching methods has become a necessary condition to improve academic efficiency [1].

One of the major directions of innovation in computer science education is the integration of digital technologies into the learning environment. Learning management systems (LMS), cloud platforms, virtual labs, and collaborative tools create an interactive educational space. These technologies improve teaching flexibility, accessibility, and student engagement. Digital skill cultivation and theory-driven teaching innovation are important components of modern computer science education.

Project-based learning is considered one of the most effective innovative methods in computer science education. This method focuses on solving real-world or simulated problems through practice. Students can work independently or in teams, such as designing software applications, developing algorithms, or analyzing data. Studies have shown that project-based learning can significantly increase students' learning motivation and practical abilities [2]. Furthermore, project-based learning methods can promote computational thinking and interdisciplinary integration, which are crucial for modern IT professionals [3].

Another important aspect is the application of interactive and problem-based learning methods. These methods require students to analyze complex situations, propose solutions, and evaluate different strategies. Innovative teaching practices supported by continuous professional development for teachers help improve teaching effectiveness [1]. The integration of information technology with project-based learning strategies can enhance students' analytical and teamwork skills [4].

Distance learning and blended learning models have also become an integral part of contemporary education. They provide flexibility and ensure continuity in the learning process. However, successful implementation of these models requires appropriate digital infrastructure and methodological support. Systematically integrating digital tools in computer science education helps to develop students' technical and soft skills, thereby increasing graduates' competitiveness in the job market.

While innovative teaching methods offer many benefits, they also face challenges in implementation, such as limited technological resources and the need to constantly update the curriculum. However, research confirms that the use of innovative teaching methods can significantly improve students' learning outcomes and professional competence [2].

In conclusion, innovative teaching methods are an important component of modern computer science education. The systematic application of innovative teaching methods can enhance knowledge acquisition, foster the development of practical skills, and prepare students for a rapidly changing professional environment.

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УДК 811.111

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URBAN VERTICAL FARMING: CAN MODULAR GREENHOUSES ENSURE VEGETABLE SECURETYIN FRONTLINE CITIES

У публікації розглядається вертикальне фермерство в умовах міста як інструмент забезпечення продовольчої безпеки під час кризових ситуацій. Основну увагу приділено модульним контейнерним теплицям, що дозволяють цілорічне вирощування овочевих культур у контрольованому середовищі за допомогою безґрунтових технологій. Наведено приклади практичного застосування, зокрема вертикальну ферму у бомбосховищі в Дніпрі. Результати демонструють, що такі системи можуть підвищити стійкість міських продовольчих систем навіть за обмеженого доступу до традиційних ресурсів.

Ключові слова: *фермерство, міське фермерство, вертикальне землеробство, аграрний сектор,безґрунтові технології, продовольча безпека, модульні теплиці.*

This publication examines urban vertical farming as a tool for ensuring food security in Ukraine cities under crisis conditions. Special attention is given to modular container-based greenhouses, which allow year-round vegetable production in controlled environments using soilless technologies. The study highlights practical applications, including a vertical farm established in a shelter in Dnipro. Results demonstrate that such systems can enhance urban food resilience even under limited access to traditional agricultural resources.

Key words: *farming, urban farming, vertical farming, agricultural sector, soilless technologies, food security, modular greenhouses.*

The majority of cities are reliant on external sources for goods necessitating external deliveries to meet all their needs. This will expose them to possible supply disruptions when it comes to delivering goods. In periods of calamity, especially during Warfare, the provision of fresh produce is drastically hindered and complicated due to Limited availability and a decline in agricultural production, making the urban agriculture more important as a means of localizing food production within the city [2].

Vertical farming is a type of urban agricultural practice where growing plants in multi-tiered systems indoors with the aid of controlled environmental technologies (CEA) and therefore do not use traditional soil based systems [2]. The plants are grown using hydroponics and/or aeroponics in these soilless technologies [1]. Vertical farming makes the most out of scarce space, conserves water, and the best thing is that it makes crops all through the year irrespective of the weather outside the farm.