

**.SPECIFIC ASPECTS OF DEVELOPING STUDENTS'
PROPHYLACTIC COMPETENCE BASED ON THE STIR (STRATEGY,
TECHNOLOGY, INTERACTIVITY, REFLECTION) INTENSIVE MODEL IN
THE HYGIENE DISCIPLINE.**

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Abstract: *This article explores the unique features of using the STIR (Strategy, Technology, Interactivity, Reflection) intensive model in teaching hygiene to medical students, with a focus on developing their prophylactic competence. The study analyzes how strategic planning, innovative technologies, interactive learning, and reflective practices contribute to deepening students' understanding of hygiene and preventive medicine.*

Keywords: *STIR model, hygiene education, medical students, prophylactic competence, interactive learning, reflection, educational strategy, preventive medicine, medical education technology.*

In the modern era of medical education reform, there is a growing emphasis on developing preventive competencies among future physicians. One of the key disciplines contributing to this goal is hygiene. When integrated with the STIR (Strategy, Technology, Interactivity, Reflection) model, hygiene education becomes a dynamic, student-centered process aimed at nurturing professional and personal development. This article highlights the didactic and methodological advantages of applying the STIR model in hygiene education.

1. Strategy: Purposeful Educational Design. The strategic component of STIR focuses on setting clear educational objectives that align with students' future roles in healthcare. In the context of hygiene education, this includes fostering awareness of epidemiological trends, risk management, and health promotion strategies. Well-planned lessons incorporate case-based learning and problem-solving exercises, allowing students to develop decision-making and analytical skills essential for preventive practice [1].

2. Technology: Enhancing Digital Literacy and Simulation. Modern hygiene education increasingly relies on technological tools such as virtual labs, digital health platforms, and simulation-based training. These technologies enable students to experience realistic scenarios related to infection control, sanitation practices, and outbreak response. The use of technology also fosters digital health literacy, a necessary skill in today's technology-driven healthcare environments [2].

3. Interactivity: Active Student Engagement. Interactive learning transforms students from passive recipients of information into active participants. In hygiene education, this means engaging students in discussions, peer-to-peer collaboration, and role-playing exercises focused on real-life health problems. Interactivity boosts motivation, improves retention, and builds communication skills that are critical for delivering effective public health messages [3].

4. Reflection: Developing Self-Awareness and Professional Growth. Reflection is a key element in helping students internalize knowledge and assess their learning experiences. Structured reflective activities in hygiene education encourage students to evaluate their responses to public health challenges, consider ethical dimensions, and

identify areas for improvement. This not only enhances critical thinking but also nurtures professional responsibility and empathy [4].

5. Integration and Outcome. When the STIR model is holistically applied, it creates an educational environment that supports the development of prophylactic competence through both theoretical knowledge and practical experience. Students learn to connect academic content with clinical practice, preparing them to act effectively in community and clinical settings [5].

Proper planning of hygiene lessons based on the “STIR (Strategy, Technology, Interactivity, Reflection)” model has a positive effect on the level of education and development of physical culture skills in students. Organizing physical education classes in educational institutions in a new way, based on advanced foreign experiences, is highly effective in raising students to be healthy and, along with their physical and mental development, in making them competent professionals. Also, physical education is a pedagogical process aimed at forming physical and volitional qualities in students, improving them mentally and physically, and is considered one of the important components of the social education system. Raising young people to be healthy. The issue of ensuring the development of children and adults has been one of the main ideas of our national pedagogy, folk oral literature, and the works of thinkers. Therefore, their study, analysis, and implementation in the education system is one of the main tasks.

The specific aspects of developing students' preventive competence in hygiene science based on the intensive model "STIR (Strategy, Technology, Interactivity, Reflection)" are as follows:

1. Strategy

a) Planning and goal-oriented approach: Effective planning of curricula and methods in teaching hygiene science, guiding students to acquire a high level of preventive competence.

Effective planning and selection of methods in teaching hygiene is essential for guiding students towards preventive competence. This process includes the following key aspects:

Effective Curriculum Planning: Clear objectives and outcomes should be set for teaching hygiene. The curriculum should cover all the main aspects of hygiene, disease prevention, sanitation, and public health. The curriculum should provide students with comprehensive and systematic knowledge [6].

Selection of methods and technologies: For effective teaching of hygiene, it is necessary to select appropriate pedagogical methods and technologies. Here, interactive teaching, simulations, practical exercises aimed at developing skills, online learning platforms, and distance learning methods can be widely used.

Orienting students to a high level of preventive competence: During the study of hygiene, students should not only acquire theoretical knowledge, but also have the opportunity to apply this knowledge in practice. This competence includes knowledge aimed at preventing diseases and maintaining health. Each stage of the educational process should guide students towards achieving this competence.

Measurement and analysis to achieve results: At the end of each learning process, students need to evaluate their knowledge and skills. It is important for teachers to analyze students' progress, measure their preventive competence, and make appropriate adjustments.



MODERN EDUCATIONAL SYSTEM AND INNOVATIVE TEACHING SOLUTIONS

This planning and goal-oriented approach leads students to a high level of competence in hygiene science and enables them to successfully prepare for professional careers.

2. Technology.

a) Use of innovative technologies: The technological component of the STIR model, for example, uses simulation, virtual learning platforms, and interactive technologies to train students in practical skills in hygiene and disease prevention.

Application of innovative technologies:

The use of innovative technologies in the process of studying hygiene and preventive diseases creates opportunities for students to learn effectively. The technological component of the STIR model (Strategy, Technology, Interactivity, Reflection) plays an important role in developing students' practical skills in the field of hygiene. With the help of these technologies, students learn effectively and interactively, applying theoretical knowledge to practice [7].

The implementation of the STIR intensive model in teaching hygiene plays a vital role in the formation of students' prophylactic competence. Each component of the model—Strategy, Technology, Interactivity, and Reflection—contributes to a comprehensive and student-centered learning experience. This approach not only enhances students' theoretical knowledge but also fosters critical thinking, practical application, and reflective learning. As a result, future physicians are better equipped to promote public health, prevent disease, and respond effectively to modern healthcare challenges. Integrating STIR into medical education is therefore an effective tool for shaping skilled and socially responsible healthcare professionals.

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