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# PROFESSIONAL COMPETENCE – THE UNITY OF THEORETICAL AND PRACTICAL TRAINING

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#### **Abstract**

In the study of urology topics, 165 students from the main group and 147 students from the control group participated in the experimental process. To determine the effectiveness of education, the 'Brainstorming' pedagogical technology was used. According to the analysis, 57% of students in the control group and 87% in the main group found the topic and its relevance interesting, 68% of the control group and 84% of the main group were satisfied with the questions posed while mastering the material, and the ability to analyze the obtained results expanded to 67% in the control group and 87% in the main group.

**Keywords:** Students, education, topic, new technology, efficiency.

### Introduction

In the modern education system, innovative processes are actively implemented, primarily associated with the use of digital technologies in all areas of human activity, aimed mainly at improving the quality and efficiency of education. In this regard, students' professional innovative activities acquire a fundamentally new meaning. The essence of innovative activity lies in the fact that any innovation in the field of education is realized through the teacher. In other words, transforming students from passive objects to active subjects of the learning process primarily depends on the teacher's professional competence.

Professional competence in medical practice refers to the ability to effectively solve real problems and tasks in the field of family medicine. It includes mastery of modern diagnostic technologies, methods of psychological and medical correction, the ability to use various tools, continuously improve one's professional level, develop creative ideas related to innovative technologies, and apply advanced foreign experience, new literature, and information in practice.

## **Purpose of the Research**

To evaluate theoretical and practical knowledge in the field of urology using pedagogical technologies.

# **Object and Methods**

To determine the effectiveness of education in studying urology topics, an experimental process involved 165 students from the main group and 147 from the control group. The 'Brainstorming' pedagogical technology was used. In this method, students express their thoughts orally or in writing in response to the teacher's questions. Written answers are given on visible paper cards and attached to the board. When used correctly, this method teaches students to think freely, creatively, and non-standardly.

## **Results:**

Under the 'Brainstorming' method, both groups of students were presented with questions on the topic 'Functional Anatomy and Physiology of the Kidneys and Urinary Tract'. Students were asked to answer the following questions:

- 1. What is the structure of the nephron, the functional unit of the kidney?
- 2. Describe the anatomy and physiology of the ureter.
- 3. Describe the anatomy and physiology of the urinary bladder.
- 4. Describe the anatomy and physiology of the testis and epididymis.

Based on these questions, students tried to expand their thinking and reasoning. In the control group, 87 (59.1%) students gave good answers, and 60 (40.8%) gave satisfactory ones. In the experimental group, 147 (89.1%) gave good answers, and 18 (10.9%) gave satisfactory ones.

Table 1. Effectiveness of the 'Brainstorming' Technology Organized by the Teacher (%)

NADAGA MODO	Control	group	Main	group	2	
INDICATORS	(N=147)		(N=165)		$\chi^2$	P
	abc	%	abc	%		
Correct formulation of questions	86	58,5	138	83,6	24,25	<0,001
Clarity of questions	57	38,7	84	50,9	4,62	<0,05
Formation of practical skills	77	52,3	148	86,9	53,83	<0,001
Correct analysis of acquired knowledge	68	46,2	127	76,9	31,28	<0,001
Scientific analysis of answers	33	22,4	154	93,3	162,67	<0,001
Ability to express one's opinion	26	17,6	146	88,4	157,52	<0,001

Table 2. Students' Attitudes toward the Effectiveness of the 'Brainstorming' Technology (%)

Nº		Control group	Main group	$\chi^2$	P
	INDICATORS	(N=147)	(N=165)		
1	Was the topic and its relevance	57	87	22,32	<0,001
	interesting?				
2	Were you satisfied with the questions	68	84	7,02	<0,01
	asked when mastering the material?				
3	Was the allotted time sufficient for	59	77	7,44	<0,01
	responses?				
4	Were the obtained results satisfactory?	52	75	11,41	<0,001
5	Were you satisfied with the teaching	46	78	21,73	<0,001
	technology?				
6	Did your ability to analyze results expand?	67	87	11,29	<0,001
7	Did your oral and written communication	68	84	7,02	<0,01
	skills improve?				

According to the results of the analysis, in the questionnaire on training with the "Brainstorming" technology, 57% of the students in the patient group and 87% of the students in the main group were interested in the topic and its interest. in nazopath group 67%, expanding to 87% in the main gupux student.

## **Conclusion**

Based on the peculiarities of urology topics, the targeted application of interactive methods and innovative technologies positively influenced students' scientific curiosity, practical activity, and professional interest. The ability to correctly analyze results increased from 67% in the control group to 87% in the main group.

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