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**ANALYZING THE CAUSES AND CONSEQUENCES OF PROBLEMS OR  
SITUATIONS USING THE "FISHBONE" INTERACTIVE TEACHING  
METHOD DURING EDUCATIONAL SESSIONS**

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**Abstract:** *This article examines various methods and techniques for applying educational technologies using interactive methods in seminars and practical classes in the discipline "Methodology for Developing Educational and Combat Qualities" within the organization and implementation of military training educational processes. Additionally, the article explores the foundations for enhancing critical and analytical thinking in students, forming evidence-based opinions on military topics, and strengthening communication and confident speaking skills.*

**Keywords:** *Military education, problem, cadet, student, skills, debate, fishbone, difficult situation, theoretical, practical classes, military mobilization, interactive methods, stage, objective, specialty, educational combat, qualities, development.*

## INTRODUCTION

In modern military service conditions, training physically and mentally highly qualified military specialists who can successfully fulfill their duties in various combat situations and locations is a crucial task. Moreover, alongside professional knowledge and skills, special attention is being paid to developing educational and combat qualities that constitute an essential component of effective military leadership activities. The competency-based approach in education, aimed at forming a complex of knowledge, skills, and abilities, offers great opportunities in training pre-conscription military education cadets and students. This approach creates a foundation for establishing effective pedagogical conditions that help develop educational and combat qualities in pre-conscription military education cadets and students. It is well known that one of the important factors in the country's development in ensuring national peace and state progress is improving the system of developing educational and

combat qualities and cultivating a fighting spirit among pre-conscription military education students. Consequently, the content, essence, and effectiveness of education and training continue to improve.

In pre-conscription military education, various methods (fishbone) are widely applied in the discipline "Methodology for Developing Educational and Combat Qualities" to enhance students' readiness for combat actions.

### **LITERATURE REVIEW AND METHODS**

The "Fishbone" method presented in the above-mentioned forms is an interactive method that develops students' skills in analyzing the causes and consequences of a problem or situation, critical and logical thinking, providing evidence, substantiating one's opinion, and evaluating opposing views. Through this method in pre-conscription military education, students analyze strategic approaches to military issues and learn to defend their opinions.

**Objective:** To analyze the causes and consequences of a problem or situation.

**Application:** In identifying problems arising in military mobilization.

The step-by-step application procedure of this method is presented below:

#### **Stage 1: Problem Identification**

- At the beginning of the lesson, the instructor or students together identify the main problem.
- This problem is designated as the "head" part of the diagram, i.e., the fish's head.
- Example: "Failure to complete combat tasks on time"

#### **Stage 2: Determining Main Categories (Directions)**

- The main factors that may cause the problem are identified (usually 4-6).
- They constitute the main "bones" of the diagram.
- Example: personnel (people), equipment (armament, resources), organizational work, training quality, environment (external conditions).

#### **Stage 3: Identifying Causes for Each Category**

- Causes related to each direction are written under that direction.
- These causes become the "small branches" of the fish bones.
- Example:
  - Personnel: insufficient training, lack of discipline, low leadership ability.
  - Equipment: malfunctioning weapons, communication devices out of order.

#### **Stage 4: Identifying Consequences and Analyzing the Problem**

- By analyzing each cause, conclusions are drawn about how the main problem arose.



- The "root cause" is identified among the causes.

#### Stage 5: Developing Solutions

- Based on the analysis, proposals are made to eliminate existing causes.

- At this stage, working on solutions together with the group strengthens motivation.

#### Advantages:

- Enhances critical and analytical thinking;

- Forms evidence-based opinions among cadets and students on military topics;

- Strengthens communication and confident speaking skills;

- Compares alternative solutions in military matters.

#### 2. "Fishbone" (Cause-and-Effect Diagram)

Objective: To analyze the causes and consequences of a problem or situation.

Application: In identifying problems arising in military mobilization.

The step-by-step application procedure of this method is presented below:

#### Stage 1: Problem Identification

- At the beginning of the lesson, the instructor or students together identify the main problem.

- This problem is designated as the "head" part of the diagram, i.e., the fish's head.

- Example: "Failure to complete combat tasks on time"

#### Stage 2: Determining Main Categories (Directions)

- The main factors that may cause the problem are identified (usually 4-6).

- They constitute the main "bones" of the diagram.

- Example: personnel (people), equipment (armament, resources), organizational work, training quality, environment (external conditions).

#### Stage 3: Identifying Causes for Each Category

- Causes related to each direction are written under that direction.

- These causes become the "small branches" of the fish bones.

- Example:

- Personnel: insufficient training, lack of discipline, low leadership ability.

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#### Stage 5: Developing Solutions



- Based on the analysis, proposals are made to eliminate existing causes.
- At this stage, working on solutions together with the group strengthens motivation.

Advantages of the "Fishbone" Method:

- Teaches systematic analysis;
- Ensures active participation of each participant through group discussion;
- Enables rapid identification of factors causing problems in military situations;
- Forms decision-making and strategic thinking skills.

In pre-conscription military education, various tools (didactic, technical, practical, and theoretical) are widely used in the discipline "Methodology for Developing Educational and Combat Qualities" to form and develop cadets' and students' readiness for educational and combat actions.

### **CONCLUSION**

In conclusion, it can be stated that through these interactive educational tools—fishbone—the following combat qualities are formed in cadets and students: speed of thinking; independent decision-making; physical and psychological stability; teamwork; skills for proper action in military situations.

In the process of enhancing educational and combat qualities among pre-conscription military education cadets and students at higher education institutions, special attention should be paid to selecting effective teaching methods when organizing educational sessions, particularly practical classes. The correct selection of teaching methods guarantees achievement of several positive results:

- Forming interest and motivation among cadets and students for in-depth mastery of military science fundamentals;
- Developing their educational and cognitive activity;
- Developing students' ability to think critically and creatively independently;
- Improving the effectiveness of teaching military science fundamentals by students and helping to enhance the quality of military science education.

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