

USE OF BRAINSTORMING FOR FORMATION OF FOREIGN LANGUAGE COMPETENCE OF FUTURE ENGINEERS

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Now there is an urgent need to teach not language but verbal communication, so it is necessary to master foreign language communicative competence. To use English in future careers, students of NTUU "KPI" at the 3–4 courses study "English for professional purposes". In this course the students train communicative competence that allows them to chat about professionally oriented issues. At the third year of studying they are introduced workshops for discussion. **Workshop discussion** – dialogue communication process in which there are the skills of joint participation in the discussion and resolution of problems of theoretical and practical thinking of the future expert [1].

The effectiveness of such seminars can be enhanced through the use of elements of **brainstorming**.

Brainstorming technique appeared in the United States in the late 30s, and finally took shape and became known to the wider community with the release of A. Osborn's book "Applied imagination" [2] in 1953, where principles and procedures of creative problem solving had been disclosed. So, Alex Osborn is the founder of this method. His theory is based on the fact that people are often reluctant to express unconventional solutions to problems because they are afraid of condemnation from the friends, colleagues, bosses, etc. A. Osborn in his technique excluded assessment or censures of ideas categorically at an early stage of their origin.

The principle of brainstorming is to bring together some original thinking people, put them in front of the actual problem and encourage them to express as

many solutions as possible, no matter how surprising and even unexpected they may seem. All the proposals are recorded without their assessment. Then censors take up the case. Their goals: to sort proposals according to their feasibility and expected performance, discard unsuitable proposals and choose perspective ones. Then implementers act to outline specific practical steps for the proposed solution.

There is a stereotype that brainstorming is used exclusively by people of creative professions in the field of advertising and marketing. But as practice shows, brainstorming can be used wherever you need to make every effort to solve a particular problem. We use this method in science and engineering. This technique allows you to find a quick and effective way out of any situation. To conduct a brainstorming session you have to create two teams of 4 – 5 students:

- participants, offering new options for solving the problem;
- the commission (the critics), treating with the proposed solutions.

There is individual and collective brainstorming. In this paper we discuss only the collective brainstorming.

The basic rules of brainstorming:

- 1) It is necessary to ban criticism of ideas, even if they are uncommon. All team members should not fear that their ideas will not be accepted by the team.
- 2) It is necessary to liberate your mind to serve the most fantastic and unrealistic ideas in which it will be possible to find a core of good sense in the future.
- 3) There should be no restrictions on the number of ideas. Let each participant express his boldest proposals aloud.

A properly organized brainstorming session includes three mandatory steps:

I. Definition of the problem. The preliminary step. At the beginning of this step, the problem must be clearly stated. It is held the selection of participants of the storm, the determination of the lead roles and the distribution of other participants, depending on the given problem and the chosen method of brainstorming.

II. Generation of ideas. The main stage, which largely depends on the success of the brainstorming session. Therefore it is very important to follow the rules, which were discussed above.

III. Grouping, selection and evaluation of ideas. This step is often overlooked, but it allows critics to identify the most valuable ideas and give the final result of a brainstorming session. At this stage, in contrast to the second, the assessment is not limited, but rather encouraged. The success of this phase depends on how the "same" participants understand the criteria for the selection and evaluation of ideas.

Using brainstorming in the learning process can solve the following problems:

- incitement of students' creativity;
- link theoretical knowledge with practice;
- actuation of students' educational activity;
- formation of students' linguistic competence;
- formation of students' ability to focus mental efforts on solving the actual problem;
- formation of life and professional skills;
- setting influence between students, teaching team work, showing tolerance to any point of view, respect everyone's right to freedom of expression, respect for his dignity.

After a brainstorming session, each student feels that he has invested part of himself to the implementation of a large project. Moreover, brainstorming gives students "food" to talk for the next weeks. This has a positive impact both on the motivation and the effectiveness of learning.

References:

1. Головенкин В.П. Педагогика высшей школы/В.П. Головенкин. – К.: НТУУ «КПИ», 2003. (Электронная версия)
2. Osborn A. F. Applied imagination: Principles and procedures of creative problem solving/A. F. Osborn. – 3 rd. ed. New York: Charles Scribner's Sons, 1963. – 417 p.