

RESEARCH WORK WITH THE STUDENTS. BRAINSTORMING AS A METHOD FOR SOLVING PROBLEMS IN THE SOCIAL SPHERE.

Abstract: The research work is essential for all students because it is aimed at their complex personal development in terms of mastering specific skills and competencies. It determines their individual prosperity. In this paper is presented research work with students in the specialty Social Activities at Konstantin Preslavsky – University of Shumen, Bulgaria. Brainstorming is realized on the social problem "children bearing children" as they are explicated extremely important for the functioning of the Bulgarian society conclusions. During the presentation and analysis of this research was given detailed characterization of the method Brainstorming.

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The research work is essential for all students because it is aimed at their complex personal development in terms of mastering specific skills and competences, for example: motivation for improvement; self-reflection; creative approach to the realization of personal and social problems; aspiration to professionalism; criticism to the world; knowledge about the society and the universe as a whole and others. According to N. Dimitrova “The main task of university education is to form creative people, witch to be able to self-education and innovation activities. Therefore, during the training of students apply acmeological approach to reach its peak of development” [4, pp. 127-132]. Through the research work they become more active and interested in learning since they are given the opportunity to apply what they have learned from lectures.

The modern university education should be developed as a unity of study and research. The research process at universities necessarily mean the involvement of students in it because: this increases the level of their professional skills; provides an opportunity for inclusion in the process of knowledge creation; forms attitudes of excellence, etc. No less important consequence of students' participation in this kind of research is the development of their motivation to continue their education in higher levels of higher education - master's and doctoral. N. Dimitrova says “Motivation to learn is internal necessity, ensuring the realization of a particular behaviour and achievement of targets in advance in the learning process” [5, p. 95]. The research work determines their individual prosperity. At the same time it is an indicator of the development of university education and directions of its development.

In the context of the written so far in this material is presented a research work with the students in the specialty Social Activities at Konstantin Preslavsky – University of Shumen, Bulgaria. The participation of students is pre-determined by the learned at previous years from them disciplines Sociology and Social Studies. Moreover, with a view to solving the problem raised were selected

students of the third year of training at their specialty, which means that they can integrate into their discussion and knowledge from other disciplines of the course of their training so far. As a research method is selected Brainstorming, which is presented and justified further.

Moreover, it is understood as brainstorming about the word has different interpretations. In one of the English-Bulgarian dictionary says that it means *mental disturbance* [1], and in another - ideas in a working group [2].

According to N. Dimitrova brainstorming as a heuristic method is applied to summarize, systematize and reinforce knowledge. She writes: “Brainstorming as a heuristic method is applied summarize, systematize and reinforce knowledge. It is important in the learning process, because ideas are born in relation to rapid solving problems. This is a method for generating ideas that develops creativity” [6, p.31].

According to M. Yankova [14] „this method allows collective ideas to be generated, resulting in higher results in terms of quantity and quality...“.

In any case, this means mental storm associated with the clash of ideas, which crystallized a common solution to a problem. In practice Brainstorming is often also called *thought shower* [7].

It is accepted generally Brainstorming to be perceived as a way of decision-making by placing the issue before a group of people who are not professionals in the field in which the specific problem. This gives a lot of interesting and creative solutions, which are frequently associated with even higher costs and restructuring.

The brainstorming stimulates brain activity in order to generate new ideas. This type of decision is effective because it uses the potential of more than one person, they see and hear different perspectives, thoughts globally over the problem since each team take it as a problem and refracted through the prism of their views. This is a very motivating factor in any social organization, and the more often used as a way and method for decision-making, the more significant will feel it [3].

Undoubtedly the best sides of the brainstorming are: the solutions to problems can be found quickly and with little cost; the proposals and the ways of solving problems are unusual; it can get a clearer picture of the problem; the working environment supports the creative process; the responsibility for the results is distributed among all participants.

For creator of the **classic brainstorming** is considered the psychologist Alex Osborn (1888-1966), who puts at its base using the brain to radically solve problems by creative group. In 1942, he presented the publication „How to Think Up” [12], in which he describes the technique of brainstorming. In the process of his work A. Osborne noticed that the people standing on the lower hierarchical levels, with interesting ideas, do not share the ongoing meetings. Is why he begins to promote flexibility and freedom of speech. This way of discussion he called brainstorming. But at the same time he realized that people do not speak at meetings because they are afraid of opinions and criticism from other participants. Is why the first rule A. Osborne introduced has been a ban of the criticism during the discussions [9], [12].

After gaining significant experience in the brainstorming for a dozen years, A. Osborn published his book „Your Creative Power” [12], and the apotheosis of his work associated with the brainstorming was in 1953, when he leaves his scientific work „Applied Imagination” [9], which describes the principles and procedures of the creative thinking.

*Besides the classic brainstorming, formulated by Alex Osborn, in the theory and the practice are well known and its **modifications*** [3], [7]: negative brainstorming (destructive method); imaginary brainstorming, brainstorming in writing. Variations of this type of brainstorming are: brainstorming 6-3-5; Brainstorming through cards; brainstorming by writing game; forced brainstorming by writing; brainstorming by sketching; visual brainstorming and others. To varieties of the brainstorming belong *nominal group technique* and *electronic brainstorming*. It excels classic brainstorming and nominal group [7].

With students in the specialty Social Activities was realized classic brainstorming. In the center of the discussion was the social problem "children bearing children". The students can choose the topic for research work by Brainstorming. Their wish is dictated by social reality in Bulgaria – terrifying is that in the XXI century in the prevailing Roma communities girls on too young age - from 11 to 15 years, enter into a matrimonial relationship (mostly celibate), bearing children, and this is justified by the Roma tradition.

The goals set by the brainstorming aimed at creating skills of students: generate ideas; bravely to substantiate their ideas to the group; show creative imagination to a problem; respect others' opinions, formulated as an idea; express any idea, even if it is weak; formulating creative solutions posed a problem for discussion.

The realized brainstorming involves three stages:

1. Preliminary stage.

The requirements for this stage are: staging and precise wording of the problem; determination leading the discussion; determination of recording ideas on the board.

In formulating the problem are given guidance from supervisor of research students to turn to the history and roots of the problem can analyze, create new outlook, a new vision for its resolution.

2. Generate ideas – an essential stage for the success of the whole brainstorming.

Important requirements met at this stage: hearing all ideas, without imposing any restrictions – as a larger amount thereof, as the quality is a creative solution to the problem; a complete ban on criticism and expression of superlatives on the proposed ideas until, which does not expose all those; All suggestions are welcome - unusual, original, absurd, including analogies; inciting extravagant and exaggerated ideas; combining, improving, developing, modifying or combining ideas; conflict prevention and non-imposition of leaders; equal participation of all all participants.

3. Grouping, selection and evaluation of the ideas.

The requirements are met at this stage are: selection of the most valuable ideas from the brainstorming; formulation of the final result.

Realized procedures in conducting the brainstorming

1. Separation of participants into two groups: First group: generators of ideas - all formulate ideas on the topic; showing characteristic of this type of work raise the emotionality; Second group: analysts / experts - record and remember everything that say generators while maintaining silence to speech and the last idea.

2. Saving the formulation of the all ideas on the board.

3. After finishing the giving of all ideas of generators, analysts / experts analyze them impartially. Selects the best-grounded ideas with the prospect to be working well. Analysts offer their own. At the same time they give a positive evaluation of all ideas without exception, highlighting the most valuable in them.

4. Finalization of the brainstorming, by formulating appropriate psychological exclusion from topic to avoid further tension and disturbance.

5. A decision on next brainstorming roles of analysts and generators to be exchanged.

As a result, generated and analyzed ideas related to the problem of "children bearing children" by way of the brainstorming crystallize the following **future decisions aimed at overcoming the problem of "children bearing children":**

1. Strict control of compliance with the Bulgarian legislation of all citizens of the country, without exception, which is currently being done to the Roma ethnic community. This is particularly refer to article 6, paragraph 1 of the Constitution of the Republic of Bulgaria, who writes: "Marriage may conclude a person who has completed eighteen years." The compulsion by some

- Roma parents for their children to live in the marital cohabitation under 18, even as a tradition to be criminalized.
2. To apply to the full extent the entire arsenal of existing legal provisions in the Constitution of the Republic of Bulgaria, the Law on Child Protection, the Criminal Code and others against parents who have allowed early marriages of their children and against men who are consumers of such partnerships.
 3. With all respect for the traditions of the Roma community of early marriage partnerships must be created law that prohibits birth under the age of 18, under which, if it be allowed in any way, the parents of these children to carry legal responsibility. The excuses with the traditions lead to the failure of civil liabilities under Bulgarian legislation.
 4. In connection with unreasonably high population among the Roma community, with legislative measures to limit the birth rate in the Roma families to 2-3 children. Where possible the number of children is necessarily linked with the employment of parents, as well as their degree of literacy. The aim is to learn, adapt and implement the Chinese experience in limiting the birth rate.
 5. At the same time to provide for legislative measures in this direction, not to pay social benefits of underage mothers as significantly early birth is a specific "business" of Roma.
 6. Urgently are required radical and effective measures for the education of all risk communities on family planning and children's rights. Providing health education for Roma related to early marriages and births. Develop programs on sexual health education for young people in and out of school.
 7. Implementation of social and economic measures to solve the unemployment problem among Roma. Poverty gives rise to lower human passions and reactions, such as the phenomenon of "children bearing children".
 8. Activation of non-governmental organizations, but under strict monitoring by the state or municipalities, funds with which they operate, as many of the organizations working on the problems of minorities are not using our resources target.
 9. Differentiated training of students from Bulgarian universities in specialties Pedagogy, Social Work, Psychology, Medicin, National Security and others. to work in the Roma community. Target preparation of such specialists of Roma origin.
 10. Inclusion of Roma going according to the European Framework Convention for the Protection of National Minorities – on the one hand, to encourage the specifics of Roma customs, culture and way of life, not a slave to unification, but on the other hand, these people should be encouraged in every way to "open up" and perceived values of the Bulgarian society, and the European Community, i.e. to be closer to the European type of value system.^{8/}

Besides the specific conclusions and generalizations related research problem, follow those relating to research their growth. After their actual participation in the the research work students deeply realize charge of specialized research:

1. Perceive it as part of professional activities with science.
2. Recognising that specific research work has been deeply connected with other specific activities: theoretical and research works; coordinating the team and allocation of specific tasks to perform each of its members; analysis and summary of the information gathered; presenting the results of theoretical research process.
3. Understand that research is clear interdisciplinary and is directly related to their acquired knowledge in the learning process.

All this creates a prerequisite for their future productive participation in professional and scientific activities. And these are the most important goals of modern university education.

Brainstorming opens up the problem for man and his freedom. M. Yankova writes on this [15]: “The problem for man, for his freedom and the possibilities for its development is essential during the New Times.” But this may already be the subject of another article.

References:

1. *English-Bulgarian dictionary*, Sofia, 1994, p.72
2. *English-Bulgarian and Bulgarian-English dictionary*, Sofia, 1999, p. 280
3. *Brown, V; Paulus, P.*, A simple dynamic model of social factors in group brainstorming. *Small Group Research* 27: 91–114, 1996
4. *Dimitrova, N.*, Independence work of university students as acmeological problem in learning process (Advantages and diasadvantages) *International Scientific Online Journal – ISSN 2367-5721 Issue 1, September 2014*, www.sociobrains.com, pp. 127-132
5. *Dimitrova, N.*, The motivation for effective study of technical and technological information assimilation. *International Scientific Online Journal – ISSN 2367-5721 Issue 4, December 2014*, www.sociobrains.com, pp 94-99
6. *Dimitrova, N.*, Didactic technology for applications of interactive methods in technological education as an element of akmeology. *International Scientific Online Journal – ISSN 2367-5721 Issue 5, January 2015*, www.sociobrains.com, pp. 27-33
7. *Furnham, A., & Yazdanpanahi, T.*, Personality differences and group versus individual brainstorming. *Personality and Individual Differences*, 19, 73-80., 1995
8. *Gallupe, R. B., Dennis, A. R., Cooper, W. H., Valacich, J. S., Bastianutti, L. M. and Nunamaker, J. F.*, Electronic Brainstorming and Group Size, *Academy of Management Journal*, Vol. 35, No. 2, pp. 350-369, 1992
9. *Osborn, A.*, *Applied Imagination: Principles and Procedures of Creative Problem Solving*. New York, Charles Scribner's Sons, 1953, 1959
10. *Osborn, A.*, *A Short Course in Advertising*, C. Scribner's sons, New York, 1921
11. *Osborn, A.*, *How to Think Up*, McGraw-Hill, 1942
12. *Osborn, A.*, *Your Creative Power*, C. Scribner's sons, New York, 1948
13. *Osborn, A.*, *Wake Up Your Mind*, C. Scribner's sons, New York, 1952
14. Yankova, M., S. Ilieva, *Bazovi znanja po futurologia*, izdatel: Universitetsko izdatelstvo "Ep. Konstantin Preslavski" Shumen, 2014, ISBN 978-619-201-006-5
15. Yankova, M., *Dimensions of Humanism as a Value*, *SocioBrains*, www.sociobrains.com, Issue 8, April 2015, pp. 62-67, Publ.: Smart Ideas – Wise Decisions Ltd. (Veselina Nikolaeva Ilieva), Bulgaria, 2015, ISSN 2367-5721 (online).