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The Collective Activity of Schoolchildren in Cooperation Groups as a Step Towards Social Interaction

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ABSTRACT

To understand the essence of learning in cooperation and effectively use it in the educational process, the teacher must take into account the fact that the application of this pedagogical technology requires a particular preparation stage, at which the teacher needs to master the methodology of forming small groups of cooperation for the training to be fruitful and motivate students to master the subject.

Collaborative learning is a more complex form of organising students' activities, as opposed to individual and pair work, because in addition to achieving academic results, students have to learn to work in a team, i.e. to master a set of social skills. Any team is a fusion of different characters and temperaments, habits and preferences. Joint activity is not complete without conflicts and disagreements, the resolution of which is carried out in conditions of conflicting interests and motives of its participants. The long-term and successful work of the student group can be ensured by its competent formation. Considering the criteria highlighted by the authors of the article will allow the teacher to create cooperation groups that can successfully complete any teamwork, achieve the highest results in realising the intellectual capabilities of each member of the group, and minimise interpersonal conflicts.

Well-formed cooperation groups are the basis for long-term friendly contacts between students. Working as a single team contributes to the formation and improvement of social skills necessary for each student to make a successful career in the future, become a worthy citizen and a full-fledged member of society.

Keywords: Social interaction, Collective activity, Social cooperation skills.

1. INTRODUCTION

The goal of any training is a high level of knowledge or skill, and the way to achieve it is determined by the organisation of the educational process, namely, how students interact with each other and the teacher to cope with the tasks facing them [1, p. 15]. A "small group" is traditionally the focus of attention of psychologists and educators and is defined as an association of interacting persons who are in direct contact with each other [2, p. 85]. As shown by long-term studies of domestic and foreign scientists, such as V.K. Dyachenko [3], Ya.L. Kolominsky [4], D. Johnson, R. Johnson, E. Johnson-Holubek [1], k. Rogers [5], R. Slavin [6]and others, collective work is extremely fruitful. However, to

achieve certain successes and set goals, creating a team and motivating it to work cohesively and effectively is necessary.

Collaborative learning is "perhaps the most perfect and reliable tool of all that modern pedagogy possesses" [1, p. 63]. It is based on the principle of cooperation and collaboration. The teacher only needs to know what form of cooperation should be asked in a particular case. Thanks to the use of this socio-pedagogical technology, the activity of the educational process are ensured, a high level of mastery of social skills is achieved, a stimulating effect is exerted on the development of the personality of each student, which undoubtedly makes learning in cooperation the essential tool of social pedagogy.

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The cooperation group is not just a "sum of individuals" [1, p. 67]. The technological process of organising group work consists of many components, among which the division of students into groups for teamwork is distinguished. Not every group can be called a collaboration group. There are traditional groups, pseudo-groups, high-class groups studying by the principle of cooperation. There are many approaches to the formation of the groups themselves. It is not uncommon for students to join groups independently, following their preferences, i.e. decide who will work and interact with whom. As a rule, excellent students tend to work with excellent students, "ordinary people" with their kind, underachievers create their own "teams". Girls always want to work with girls, boys with boys, children of the same nationality, also prefer to stick together. However, as practical experience shows, such groups are able to achieve very modest success than those formed by the teacher following the developed criteria. And only an experienced, methodically practised teacher is able to create a workable small team because he is always interested in the academic success of his students and the personal well-being of each of them.

This work aims to identify and consider the main criteria for forming basic groups designed for learning in cooperation, with the possibility of predicting the development of students' interpersonal relationships and ensuring more effective teamwork.

2. STUDY RESULTS

Numerous studies in the field of pedagogy and child psychology indicate that the composition of the group members determines the vital activity and work efficiency of all its members. A teacher who follows the principles of learning in cooperation, among other requirements, should approach the issue of forming a cohesive and effective working group with all seriousness. In this regard, of particular importance is the need to consider several criteria for the creation of cooperation groups, namely:

- 1) The number of the group. This criterion directly depends on the specifics of the training task and various circumstances, for example, the time allotted for its implementation. The best option is considered to be a group of up to four people. A large group is a set of personalities, characters, temperaments, habits. The larger the group, the higher the requirements for the quality of interpersonal relationships. Smaller groups are more convenient to organise and manage, more mobile and cohesive.
- 2) Heterogeneity. As practice shows, the most outstanding academic successes are achieved by heterogeneous groups, i.e., students of different nationalities and gender, levels of development, and attitudes to educational activities are gathered. In

heterogeneous groups, discussions arise, during which non-standard thinking and different approaches to solving the problem are manifested, ultimately contributing to the formation of more solid knowledge, skills, and abilities of students.

- 3) The level of training. In his work "Cooperation in training", V.K. Dyachenko notes that "the acquisition of classes with the same age composition of students in the 16-17th centuries led to a radical transformation of the entire education system. The transition from individual learning to group learning, which consisted of students of the same age and approximately equal preparedness, was necessary and beneficial to the dominant classes... The ideal class for a teacher is a class in which all students want to study; students are homogeneous in terms of training, and the fewer of them in the class, the better" [3, p. 103]. However, as experience shows, under the condition of homogeneous interaction, students compete with each other; in their desire to achieve their goal, they accept a partner as a competitor, each likens their level of capabilities to the level of capabilities of their team members. In conditions of heterogeneous interaction, the failure of one, as a rule, acts as a kind of incentive, spurring the mental activity of the other, mobilising him to search for original, independent solutions [7]. At the same time, the "strength of weakness" effect is triggered, in which not only a strong student has a positive impact on a weak one, but also a weak one on a strong one [8]. In a heterogeneous group, any success any advancement is encouraged. Children with a low level of learning have an incentive to study. There are fewer losers in such groups, and more capable students can help their comrades, which benefits both [9].
- 4) Psychological compatibility. This criterion includes the nature of students' relationships, their sympathies and antipathies, and their willingness to cooperate. The most effective for studying interpersonal preferences is the children's projective technique of Rene Gilles [10], which aims to study the characteristics of a child's behaviour and his relationships with other people (friends, classmates, teachers, parents, etc.). Here is an example of the sociometric technique "Two houses", which aims to identify the student's circle of meaningful communication, the features of interpersonal relationships in the group, and identify sympathies and antipathies to peer group members. They explain to children that there are a lot of toys and sweets in a beautiful house and those who behave well will live in it, but in an ordinary house there is nothing of this, and it is for those who misbehave and act dishonestly. The child is invited to settle to the houses the classmates and him/herself (Fig.1)

This method of studying the social fitness of a child can be quite helpful and help avoid joining a small group of children who have a feeling of antipathy to each other. The climate in the group is favourable if the relations



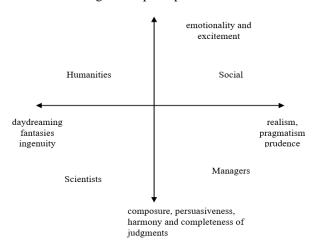
within the established community of students are positive and friendly. Children are ready to help each other, constructively settle emerging conflicts, rejoice in the success of everyone. The socio-psychological climate of a group is a dynamic field of relationships affecting the well-being and activity of each group member and



thereby determining everyone's personal development and the development of the group as a whole [11].

Figure 1 "Two houses" test.

5) Setting the type of activity (Fig.2). This criterion is of particular importance in determining the socio-type of each student. There are 4 types of socio-type attitudes formed according to the principle of the intersection of



the Jungian scales "logic-ethics" and "sensory-intuition" [12].

Figure 2. Setting the type of activity

- a) The "managers" socio-type. This attitude is characterised by a combination of sensory and logic features (realism, pragmatism, prudence, composure);
- b) the "social" socio-type combines the signs of ethics and sensory (pragmatism, emotions and excitement);
- c) the "humanitarians" socio-type this attitude is formed based on intuition and ethics (elevation of feelings, dreaminess, emotionally subtle experience);
- d) the "scientists" socio-type this attitude based on intuition signs and logic (ingenuity, persuasiveness, harmony and completeness of judgments) [12]. This criterion for each of the socio-type group of students involves the use of specific teaching methods, considering the orientation to the type of activity:

- for "managers" business games, theoretical classes;
- for "socials" collective and game teaching methods;
- for "humanitarians" any methods of education of a "comprehensively developed personality with various forms of self-expression";
- for "scientists" problem-discussion methods, developing games.

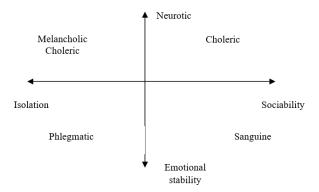
To create cooperation groups, it is vital to consider the socio-type of students as much as possible. It is desirable that there be either a social or a scientist in the cooperation group, but to combine a scientist and a social means to create a conflict situation [13] since commitment to fundamental science always goes against worldly wisdom, and reason always prevails over emotions. Scientists are researchers; they have welldeveloped analytical thinking, can make non-standard decisions, their interests are diverse, their knowledge is fundamental. For them, a theory is important, which necessarily precedes practice. Their minds are occupied with the search for truth and the opportunity to test their ideas and scientific assumptions in practice. For socials, on the contrary, theoretical knowledge should be kept to a minimum. They prefer to get information from communication. Socials are extremely emotional, active, cheerful and democratic. The children propensity to a particular type of activity must necessarily be considered when distributing social roles within the group (moderator, expert, analyst, designer, etc.). Collaborative learning is a complex form of learning, as a result of which students acquire interpersonal communication skills, learn to perform various social roles, which has a beneficial effect on the process of a child's painless entry into the sphere of complicated and ambiguous social relations in the future.

6) Consideration of temperament. Another important criterion is to consider each student's temperament since students have to interact with different partners when studying in cooperation.

In psychology, 4 types of human temperament are known: choleric, sanguine, phlegmatic and melancholic, including the concepts of rationality - irrationality, extroversion - introversion (Fig.3). Extroverted choleric children have a strong, mobile nervous system. As a rule, their arousal processes prevail over inhibition processes; they like game moments and creative tasks, they are not afraid to take on the role of a leader. Melancholic introverts with a low-activity type of nervous system are slow at work, often unsure of themselves and the correctness of their actions, so they gladly give up leading positions and prefer to be "led". Phlegmatic people are also introverts; they are sedentary and inert; they react dimly to external impressions, live in a world of their images, thoughts and experiences [8]. Sanguine



people are emotional and social extroverts. A group may not work together if it includes children of incompatible



temperaments or if children of the same temperament (for example, phlegmatic) have gathered in the group.

Figure 3. Types of human temperament

Per the dominant functions, the Swiss psychologist, psychiatrist and philosopher, the founder of analytical psychology Carl Gustav Jung divided all psychological types into two classes: rational (thinking and feeling) and irrational (intuition and sensation) [14]. Thus, choleric and sanguine are irrational, so they are able to perform tasks in a group that contain an element of spontaneity, requiring ingenuity, observation, and flexibility of mind. Melancholics and phlegmatics, on the contrary, are rational. They can be assigned tasks that require consistency and consistency, assuming or allowing order.

7) The channel of information perception. Visual, verbal, kinesthetic and digital are distinguished by the channel of information perception, i.e. the dominant organ involved in the perception of the surrounding world by a person. For visuals, it's typical to perceive the information through images in graphs, diagrams, drawings, and photographs. In addition, they have very well-developed imagination and visual memory. Therefore, such a group member perceives textual information best and remembers it in an illustrated and schematic, non-linear form. In contrast to the visual, the auditory assimilates information through the organs of hearing in the process, for example, listening. A kinesthetic person, as a rule, learns about the world around him through the experience of personal communication with him. Preferring practical actions to theory, he believes he should participate in everything, relying more on his feelings and perception. Recently, another group of people with a perception type based on logic has been singled out - digitals or discrete [15, p. 789]. Digitals usually have an analytical mindset, strict logic and consistency of presentation are essential for them. They are unsociable, sensitive and quite vulnerable.

3. DISCUSSION

Throughout the history of social psychology, small groups have been the subject of numerous empirical studies and pedagogical experiments. There are many approaches to the formation of cooperation groups. For example, D. Johnson and R. Johnson suggest dividing the class into triads based on the test results. Thus, the teacher will be able to create a group in which there will be students of different learning levels, thereby equalising the chances of all groups. E.S. Polat expresses the idea of expediency, depending on the specifics of the educational task being solved, to create homogeneous groups, but with the condition that the teacher will work with a group of weak students him/herself and pay them the maximum attention. In the future, weak students should still join heterogeneous groups. To be noted, the approach in which the teacher asks the student himself to determine which of his classmates he would like to work with and then creates a group based on the child's personal preferences.

As for the size of the group, most specialists accept three people as the lower limit of the size of a small group. The dyad is not considered as a small group. The number of contacts usually determines the upper boundary. Three forms 6 contacts, four already have 12, so the possession of social skills is vital. The smaller the group, the more "living space" each member has, the fewer the risks in interpersonal relationships.

A small group of cooperation is a social education, interaction between individuals within a group, as a rule, is organised based on joint participation in activities, characterised by shared goals, motives of behaviour and interpersonal interaction in the process communication. Let's agree with the psychologist A.A. Leontiev that communication is a "multi-storey structure" in the form of a sequential chain of actions "activity-interaction-communication-contact" [16, p. 17]. Learning in cooperation is social, since students, carrying out educational interaction in the process of teamwork, perform various social roles, in the distribution of which it is vital to consider the socio-type and temperament of each member of the group. Social roles are assigned considering the abilities of each individual and the opportunity to make a more significant contribution to the common cause. It should be noted that the process of socialisation proceeds mainly under the influence of group experience and in situations of cooperation.

The study of pedagogical experience and the research results in pedagogical psychology allowed us to conclude that group work has several undeniable advantages. Every teacher is interested in the efficiency of the student team in achieving the highest academic results. However, students are often not ready to work in a group, and teachers are not ready to organise group work. Since



cooperation groups function within a specific organisational model, the selection of criteria for the formation of such collectives can have a positive effect both on the composition of the group, which represents a set of individual characteristics of all members and characterises the group as a whole and on its structure, as a combination of connections that develop in the group between individuals.

4. CONCLUSIONS

This study aimed to identify and characterise the main criteria for forming basic groups of students intended for learning in cooperation and ensuring effective teamwork. As a result of the analysis of scientific and methodological literature, as well as practical pedagogical experience, the authors identified and described the following criteria for the creation of cooperation groups: group size, heterogeneity, level of training, psychological compatibility, orientation to the type of activity, consideration of temperament, the channel of perception of information. The listed criteria in the organisation of teamwork allow its participants to achieve excellent results in social interaction, to achieve a high level of development of interpersonal and interethnic relations. A properly formed group is designed to ensure long-term, stable partnerships between its members, constructively resolve conflicts arising on intellectual grounds, achieve academic success, work and study as a single team, which ultimately leads to productive social interaction not only within the educational process but also in future professional and social life.

REFERENCES

- [1] D. Johnson, R. Johnson, E. Johnson-Holubeck, Teaching methods. Training in cooperation. Translated from English by Z.S. Zamchuk. St. Petersburg: Economic School, 2001, 256 p.
- [2] Psychology. Dictionary [Psihologiya. Slovar'] / Under the general ed. A.V. Petrovsky, M.G. Yaroshevsky. 2nd ed., revised and add, Moscow: Politizdat, 1990, 494 p.
- [3] V.K. Dyachenko, Cooperation in learning: About the collective way of educational work: Book for teachers [Sotrudnichestvo v obuchenii: O kollektivnom sposobe uchebnoj raboty: Kn. dlya uchitelya]. Moscow: Prosveshchenie, 1991, 192 p. DOI: http://pedlib.ru/Books/5/0304/5 0304-103.shtml#book_page_top
- [4] Ya.L. Kolominsky, Social psychology of relationships in small groups [Social'naya psihologiya vzaimootnoshenij v malyh gruppah], AST Publishing House, 2010, 448 p.

- [5] K. Rogers, A look at psychotherapy. The formation of a person, Moscow: Progress Publishing Group, Univers, 1994, 480 p.
- [6] R. Slavin, Research on Cooperative Learning: an international perspective. Scandinavian Journal of Educational Research 33(4) (1989) 111-123.
- [7] T.I. Zabrodina, V.A. Kurina, L.F. Muryasova, S.Yu. Shirokova, Joint activity and development of the creative potential of the personality of the future specialist [Sovmestnaya deyatel'nost' i razvitie tvorcheskogo potenciala lichnosti budushchego specialista], Prospects of science and education [Perspektivy nauki i obrazovaniya] 5(53) (2021) 139-153. DOI: https://doi.org/10.32744/pse.2021.5.10
- [8] Alexey N. Ilyin, Elvira A. Ivanova, Elena A. Kaptelinina, Vasil N. Farrahov, Ontological essence of gifted person leadership [Ontologicheskaya sushchnost' liderskoj odaryonnosti], XLinguae, Vol. 11 Issue 1, January 2018. DOI: https://doi.org/10.18355/XL.2018.11.01.05
- [9] U. Glasser, Schools without losers. DOI: https://www.studmed.ru/view/glasser-u-shkolybez-neudachnikov b72ed65155a.html?page=5
- [10] Rene Gilles' methodology. DOI: http://testoteka.narod.ru/pm/1/05.html
- [11] I.N. Popova, Actual problems of teachers working with children in difficult life situations [Aktual'nye problemy pedagogov v rabote s det'mi, nahodyashchimisya v trudnoj zhiznennoj situacii], Prospects of science and education [Perspektivy nauki i obrazovaniya] 4(52) (2021) 64-79. DOI: https://doi.org/10.32744/pse.2021.4.4
- Nussipova, [12] Gulnara Galiya Kurmangaliyeva, Sarkulova, Zhazira Manifa Oshakbayeva, Bakhytzhan Orazaliyev, Dasa Porubcanova, Gabriela Gabrhelova, Freedom as a concept and as a property of the subject XLinguae, Vol. 14 Issue 3, June 2021. DOI: https://doi.org/10.18355/XL.2021.14.03.19
- [13] E.V. Bystritskaya, E.L. Grigorieva, O.V. Reutova, I.A. Sedova, M.V. Lebedkina, Mechanisms of social adaptation of first-graders to study in a multiethnic school [Mekhanizmy social'noj adaptacii pervoklassnikov k obucheniyu v polietnicheskoj shkole], Prospects of science and education [Perspektivy nauki i obrazovaniya] 2(44) (2020) 296-307. DOI: https://doi.org/10.32744/pse.2020.2.23
- [14] E.Yu. Kleptsova, A.V. Vlasova, Typological approach of C.G. Jung: the experience of empirical



confirmation [Tipologicheskij podhod K.G. YUnga: opyt empiricheskogo podtverzhdeniya], Scientific and methodological electronic journal "Concept" [Nauchno-metodicheskij elektronnyj zhurnal «Koncept»], No. 6, 2017. DOI: https://e-koncept.ru/2017/170124.htm

- [15] D.D. Mukhortova, Visuals, audials, kinesthetics [Vizualy, audialy, kinestetiki], Young Scientist, International Scientific Journal [Molodoj uchyonyj, Mezhdunarodnyj nauchnyj zhurnal] 12(116) (2016) 787-789. DOI: https://moluch.ru/archive/116/31787/https://yandex_ru/turbo/vsepromozg.ru/s/teoriya/audial-vizual-kinestetik
- [16] A.A. Leontiev, Pedagogical communication [Pedagogicheskoe obshchenie], M, 1996, p. 17.