

THE FORMATIVE VALUE OF COOPERATIVE LEARNING IN CONTEMPORARY EDUCATION

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Abstract: The European Commission states in numerous documents regarding contemporary education, that for a durable learning, the today's school curricula should focus on developing competences. In order to achieve those competences, educators should change the way they teach, by using a more inter-active, experiential and cooperative strategy. One efficient solution is using the Cooperative Learning Strategy (CL), a relatively new way of organising the students' learning activity, characterised by the accent on students' social interaction and cooperation in solving the given tasks. As any strategy, CL has advantages and disadvantages, but it can become a winning strategy if, when organising it, we respect some principles as: Positive Interdependence, Group Uniformity, Face to face interaction, Members Equality, Individual and Group Responsibility, Development of social habits, Team-work evaluation.

Keywords: Key-Competences, Learning Strategy, Cooperative Learning, Positive Interdependence

1. Competence based learning

In 2018, The European Commission has published **the Proposal for Competence for Sustainable Learning**, replacing the 2006 Recommendation. The changes introduced in the new document are based on the technology that has gained increasing importance in our lives and the growing influence of the non-formal education sector. The European Commission document shows that "Key competences are those competences that all individuals need for personal fulfillment and development, employment, social inclusion, and active citizenship. They are composed of knowledge, abilities and attitudes and go further than the academic notion of knowledge".

One of the key competences presented in the document is the **Personal, Social and Learning Competence**; it refers to three specific aspects:

- personal - includes self-consciousness and physical and mental well-being;
- social - covers interpersonal interactions and how we work with others;
- learning - the focus is on sustainable learning strategies and career management skills.

This competence is the key to the social success of students, both in the school environment and in the broadest one, of social interactions. We are in the age of inclusive education, of education for all, but does our education system contribute significantly to the development of pupils' social competences? It raises serious questions as to how the classroom is built, as a learning environment, with the students sitting in the benches, one behind the other, and the teacher in front, addressing everyone frontally. The hierarchy based on prizes and school competitions all focus on student competition, not on cooperation and on the development of interaction skills.

The European Pillar of Social Rights states as its first principle the right to quality and inclusive education, training and lifelong learning. The lack of the necessary skills to successfully participate in society and the labor market increases the risk of unemployment,

poverty and social exclusion (2018, p. 3). Thus, developing students' interaction competences and social skills is an important part of today's education.

2. Competition vs. Cooperation

Traditionally, the school environment has been imposed as an environment of student competition, based on the belief that students are in need of comparing / reporting to others in order to evolve. Even the purpose of the evaluation processes was to hierarchize pupils, to give them an extra-motivation in their desire to climb the hierarchy and become the best. But many times, in this sinuous way of personal achievement, the others become obstacles, so animosities and a hostile environment were created in the classroom.

"The competition designates a simultaneous search for the same goal by two or more interdependent actors, so that the likelihood that one of them will achieve its purpose increases while the likelihood of the other person decreases" (M. Milcu, 2005, p. 46). The main idea of this definition illustrates the drama of the competition: there are winners and losers. Or, in a learning environment, the goal of the school is that all students succeed, not to select some of them, and to take away any chance of others.

We could affirm that there is:

- healthy competition - when reporting to others leads you to be more motivated (see the example of sports competitions); this type of competition would be a factor for mobilizing, activating or enhancing students' psychological resources, motivating, developing self-esteem and self-confidence.

- destructive competition - competition becomes toxic when exacerbated and becomes a purpose in itself.

Competition has some positive effects on the motivational level, but it can be reproached that it is most often a factor that causes aggressive behavior and conflicts in groups. It also causes poor interaction among colleagues, lack of communication, distrust, frustration, insecurity, anxiety, it is harmful children less intellectually gifted (that is why it is recommended that it be used in children with similar cognitive levels).

Comparing the current, postmodern educational model with the traditional one, we observe a change in the optics: the postmodern approach to education involves focusing the activities on the relationships established in the classroom environment, as the main factors of personal development of each member and thus the source of success. The role of the teacher, regardless of his specialty, will be to provide a learning-friendly climate, that enables the active involvement of students in their own training and stimulates cooperation. If in modernity the essence of learning was "action", now it becomes "interaction", postmodernism valorizing the formative valences of the group of students.

Numerous studies have proven the benefic effects of inter-action on learning, as well as on developing pupils' personality. Among those:

- the promoters of Active School and Non-directive Pedagogy (M. Montessori, O. Decroly, È. Claparède, A. Ferrière, R. Cousinet, È. Durkheim, J. Dewey etc.) have emphasized, since the last century, the role of the social factor in the child's personality's development, as well as the need to reconsider the peer-group, as a factor of individual change.

- the socio-constructivist perspective on learning, represented by the research of: M. Deutsch (1949,1978, 1998, 2000), W. Doise and G. Mugny (1998), W. Doise, J-C. Deschamp and G. Mugny (1996), J-M. Monteil (1997), S. Moscovici (1998), D.W. Johnson, R.T. Johnson and co. (1989, 1991, 1993, 1998, 2009), A. de Peretti, J.-A. Legrand and J. Boniface (2001): learning is produced in social context, not merely by casual interactions, but by interpersonal relations, with modelling force, that generate change and evolution.

W. Edwards Demming (the initiator of the Top Quality Management concept) considered that 85% of an individual's behavior is determined by the **context** in which it

manifest itself. Applied to the study of the cooperative learning, Demming's observation suggests that the way students interact with each other is determined by the type of group to which they belong to, especially by the characteristics of the interactions in this group.

Mainly, in a classroom activity, as in any type of learning activity, there are three types of patterns or models of interaction:

- a.) competitive patterns - the individuals are competing: the result is oriented on settling a winner and more losers:
- b.) individual pattern – each student acts by himself, without paying any attention to other's activities and work:
- c.) cooperation pattern - the success of one individual is conditioned by the success of all the members of the group that share the same goals.

These three types of interaction are necessary in a learning activity, but they generate different attitudes and associated behaviors:

- a.) The competition can motivate and generate the need to be ahead, but in the same time it can be unproductive because some of the students will wish for others to fail, this being the only way they will be successful;
- b.) The individual performances are the ones that count – there is no accent on relations with others; therefore are lost meaningful opportunities of re-defying one's knowledge and understanding, value system, by reference to others;
- c.) Cooperant interaction, properly structured, promote positive interdependence between students. The difference from competition and individualisation is set by the fact that, instead of wanting the others to fail or working alone, without caring for other students achievements, the cooperant group wants and helps in achieving its members success.

Cooperative learning scholars, R.T. Johnson and D.W. Johnson (2009) and M. Deutch (2000) consider that there is positive competition, if properly structured, when: the emphasis is placed on the effective completion of the task through the cooperation of team members. In this way, the participation in the contests is positive, giving self-confidence, providing social support, and gaining the joy of participating in the competition.

Over the past two decades, the Cooperative Learning promoters, P.C. Abrams et al. (1995), J. Putnam (1997), D.W. Johnson, R.T. Johnson and E.J. Holubec (1993, 1998) insisted that social skills are not innate, but learned, being as important as the cognitive skills.

There were proposed different terms for illustrating the collaborative work in groups: Cooperative Learning; Collaborative Learning; Collective Learning; Mutual Learning; Team Learning; Group Study; Circular Study. (Davis, G. B., 1993);

We prefer the term „Cooperative Learning Strategy”. This strategy includes a set of teaching methods that involve organising the class in small groups, usually formed of 4 – 5 students. The purpose of this organisation is to make the students responsible both for their own and their classmates learning processes and results.

The theoretical grounds of Cooperative Learning can be found in the works of three great researchers:

- Vygotsky (1988) “The Proximate Development Theory” – “ the distance between the actual development level and the next one is determined by the fact that the child passes from the stage of independently solving the problems to another one, in which the solving process is oriented by an adult or by cooperating with more capable individuals, of the same age”;
- Wittrock (1978) “The Cognitive Restructuration Theory” – when a person teaches or explains something, that person is learning the subject in a more efficient way. Actually, by trying to make the study material more understandable to others, the material becomes more clear, more structured to himself.

➤ Deutsch (1949) “The Purposes Structuring Theory” - identifies three ways of establishing the purposes of a group: individually, cooperantly, competitively. Deutch considers that the cooperate approach is the most efficient one.

Starting from the Ionescu, M., Bocos, M., (2001) definition, stating that „Cooperative Learning is a didactic method based on organising, according to well established operational objectives, a collective work based on complementarity, oriented towards assuring the social aspects of learning. It regards developing the interpersonal communication habits, the interactions, social competences and behaviours of the students”, we will note it’s main characteristics:

- CL is a set of instructional strategies - by the fact that it efficiently combines methods, didactic means, instruction forms (usually involving groups, sometimes associated with individual and frontal activities);

- it is based on making 4 or 5 students groups; the group members have the same tasks and purposes; the accent is on student-student interactions;

- the primary objective of the group: solving the task (by Cooperative Learning) is reinforced by another objective, equally important: developing the psycho-social side of each student (the formative level of learning).

3.1. The Principles of CL

Cooperative Learning will become a winning strategy if some **principles** will be respected:(after Johnson D.&Johnson R., 1991)

1. *Positive Interdependence* -In the Collaborative Learning situations, the students have two main responsibilities: to learn the study given material and to make sure that all group members have learned that material. In this way, the students feel that they depend on each other, understanding that their personal success depends on the other’s success. The Positive Interdependence exists when students feel they are responsible for their colleagues success, when individual efforts are coordinated by the ones of the group, in order to solve the learning tasks. Some ways of realizing positive interdependence will include:

- positive interdependence of goals – the group could learn or prepare only one material or project, respecting the condition that every group member realizes his own objective (for example rewards, praises);

- positive interdependence of group resources – the group will share the resources: one piece of paper, one pen, one book, one map, so on;

- positive interdependence of rewards – the students will get bonus-points if every member has fulfilled his task and has collaborated efficiently;

- positive interdependence of students’ individuality – the students will chose a group name, associated to one symbol;

- positive interdependence of the roles – each group member will choose a role: the one that reads the tasks, the one that writes them, the one that encourages the others, so on.

2. *Group Uniformity* -Researches have proven that homogeneous groups are more efficient that the heterogeneous ones.

3. *Face to face interaction* - CL involves maintaining a positive face to face interaction between group-members. This type of interaction facilitates both intellectual exchanges between students (discussing problems, finding solutions) and social influences (friendship, cooperation, mutual help).

4. *Members Equality* - Each contribution will be considered valuable, each group member will have equal rights with the others. For example, each member will on turn be the group leader.

5. *Individual and Group Responsibility* - Each group member will be responsible both for his own results and for the other’s. This way, he will be directly interested to help the other team members, in the benefit of the whole group.

6. *Development of social habits* -As social integration is one of the main challenges of education, CL emphasizes the role of social habits practice and development. By this strategy, the students will learn to solve the tasks together, to communicate, to respect divergent opinions, to take decisions based on common agreement.

7. *Team-work evaluation*- The purpose of the Team-work evaluation is to clarify and improve each member's contribution towards achieving the group's goals. The main focus of this evaluation is: the way the group functions and the right measures to improve or correct it.

The teacher's evaluation will be followed by the students evaluation, concerning the strengths and the weaknesses of their activity and the solutions to improve it.

Those principles are well-summarized in M. Deutsch's work (1990, p.123) which shows that "any process of cooperation is characterized by:

- open and honest communication of relevant information between the participants;
- focus on highlighting similarities and minimizing differences among group members;
- the positive attitude of each member of the group towards every group member, the focus on the given tasks."

3.2. The formative value of Cooperative Learning

According to Watson, (1996) (quoted by Oprea, 2003) the CL has as main advantages:

- the pupils are more stimulated to carry on their tasks because of the presence of their peer group;
- the group resources (memory, garnering, attention resources) are more rich than the individual ones;
- there are great chances that among the group members there is one able to find the problem's solution;
- incidental mistakes are compensated: despite their occurrence, „the general results of group will be more precise than that of a single individual”.
- „the Black Staines” are corrected. „It's easier to recognise the others' mistakes than our own”;
- the process of bringing forward new ideas is stimulated as a result of cumulative interaction, „because every group member develops the other's ideas”;
- everyone can learn from the others' experience. There are many proofs (Bandura and Walters, 1963) that one of the most common and most efficient way of learning is by observing the others' problem solving activities.

Basically, the purpose of adopting a CL strategy is to reduce the authoritarian role of the teacher and to increase the role of team work, in an student centred learning activity.

Though, there are some researchers that note some disadvantages of this strategy in organising the learning activities in the classroom. Between them, Ion Ovidiu Pânișoară (2003, p.135) enumerates:

- educational interaction methods (therefore CL also) are great “time consumers”;
- using activities that involve students' group interactions predispose to a certain degree of un-coordination, conflict and random of situations;
- there can appear phenomena of non-participation of all students or the opposite: the tendency of monopolising the discussions;
- the limitation of solutions that the group itself, without any outside help, can offer, limitations related for example to poor group resources.

To these negative aspects, the quoted author adds one more, that he treats in a special chapter of his book, that is the *Groupthink Phenomenon*. The *Groupthink* supposes that the thinking mode of the group members will be subordinated to the needs of the group, usually

competition oriented. Pânișoară presents some symptoms of groupthink: the invulnerability illusion (characterized by excessive optimism), unconditioned trust in the group's morality, exceeding the individual morality, looking at the opponents in a stereotypic way (as good or bad), pressure into conformity, the illusion of unanimity (an apparent consent that seems to be validating all group decisions), some group members take the role of *mind guards* (they protect the group of some informations that might undermine the group's efficiency or morality).

These disadvantages of CL can be controlled or eliminated if the following requests are respected:

- **the teacher** motivates the students for team-work, underlying the importance of the approached theme and the advantages of team unity in solving it;

- **the working task** is socially relevant, built up from problems with wide applicability, that require active students participation;

- **the group has the optimum size** (4-5 members) and the **team is heterogeneous**, wishing that each member has the opportunity to learn from the others and the opportunity to give something in return, to bring his contribution in the fields he is more specialized;

- **distributive attention and permanent control** of the teacher all during the students' activity.

At the class level, we would say that the benefits of collaborative learning are as follows:

- in terms of school performance: more effort to succeed, implicit better outcomes for all students (traditionally labeled "very good", "mediocre", "weak"), inner motivation, the students are better engaged in solving the given tasks, they learn to use the time, resources and divide the work, it develops critical thinking;

- from the point of view of interpersonal relations: deeper and warmer relations among students by enhancing the team spirit, appreciating and valorizing the multiethnic diversity by developing the empathy and cohesion at the level of the group of students;

- from the point of view of personal identity: strengthening self and self-identity, developing social skills, improving self-image, developing the capacity to cope with adversity and stress.

4. Conclusions

One of the pillars of contemporary education (J. Delors, 2000) is *learning to live with others*. This pillar refers to the ability to communicate, to peacefully resolve conflicts, to collaborate in solving problems, tasks be integrated in the pro-social competence.

The approach of competitive patterns in the school environment, although preferred over time, can no longer be a valid solution in the contemporary reality. Although the competition has certain value in motivating students, it creates a difficult atmosphere in the classroom environment and affects the good relations between students. Individual success is related to the others in the class, whom the competitor perceives as rivals. In the long run, the school produces graduates who have communication difficulties, do not know how to work in teams, have negative feelings about others, and who will always overcome others.

True competition should be between the one who learns and himself, education being a way of personal becoming, in which each must overcome his condition and develop so as to reach his maximum potential. On this path of learning, collaboration with others can bring real benefits: learn from and with colleagues, create stable and harmonious social relationships, form teams, each gets support and moral support in difficult moments, and victories are of the whole group's.

The talent and mastery of the teacher will be proven in the judicious combination of the two instructional strategies, competition and cooperation, so that the didactic act is a quality one, for the benefit of each student in the class.

BIBLIOGRAPHY

- Berce C., (2005), *Introducere în problematica învățării prin cooperare*, în *Preocupări actuale în științele educației*, coord. Miron Ionescu, Ed. Eikon, Cluj-Napoca;
 - Bourhis, R. (2002), *Stereotipuri, discriminare și relații între grupuri*, Polirom, Iași;
 - Cooper, Gary.G (1989), *Improving Interpersonal Relations*, Windwood House Limited;
 - Duck, Steve (1995), *Friends for Life – the Psychology of Interpersonal Relationships*, Sage Publications Inc;
 - Fisher, B. Aubrey (1994), *Interpersonal Communication – Pragmatics of Human Relationship*, Mc Graw-Hill Inc.;
 - Flueraș, Vasile, (2005), *Teoria și practica învățării prin cooperare*, Ed. Casa Cărții de Știință, Cluj Napoca;
 - Johnson D.&Johnson R., (1991), *Learning Together and Alone: Cooperative, Competitive and Individualistic Learning*;
 - M. Deutsch (1998), *Șaizeci de ani de studiu sociopsihologic al conflictului* în Stoica Constantin A, Necolau A, *Psihosociologia rezolvării conflictului*, Polirom, Iași;
 - Pânișoară, Ion-Ovidiu, (2004), *Comunicarea eficientă. Metode de interacțiune educațională*, Polirom, Iași;
- web resources:**
- Proposal for a COUNCIL RECOMMENDATION on Key Competences for Lifelong Learning (2018), at <https://ec.europa.eu/education/sites/education/files/recommendation-key-competences-lifelong-learning.pdf>